ABSTRACT

Title of Document: MOBILE PHONE USE BY YOUNG ADULTS IN
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This study explored the use of mobile phones among young adults in India. The study

used the theoretical frameworks of uses and gratifications approach from media studies, social-

cognitive domain theory from human development literature and social construction of

technology (SCOT) from Science and Technology studies. The main objective of the study was

to examine the use of mobile phones to fulfill communication, media and age-related needs by

young people in India and to investigate regional and gender differences.

The study was conducted in two phases using a mixed-methods approach. In the first

phase, in-depth interviews were conducted with 30 college-going young adults (18 – 24 years) in

Mumbai and Kanpur in December 2007 and January 2008. In the second phase, a survey was

conducted with 400 college-going young adults (18 – 24 years) in Mumbai and Kanpur.

The qualitative analysis of the data showed that young people in both the cities used cell

phones for a variety of communication, news and entertainment needs. Additionally they

considered cell phones as personal items and used them to store private content, maintain privacy

and have private conversations. Further, the analysis showed that they used cell phones to negotiate independence from parents and to maintain friendships and create friendships with members of opposite sex. The quantitative analysis of the data revealed that young people in the two cities used cell phones differently due to the differences in their lifestyles and socio-cultural factors. Additionally, the study found there were only a few gender differences in the use of cell phones by young people, mainly in the use of cell phones for entertainment purposes, negotiation of independence from parents and in forming friendships with members of opposite sex. Finally the study concluded that young people in India mainly use cell phones for private communication and needs.

MOBILE PHONE USE BY YOUNG ADULTS IN INDIA: A CASE STUDY

By

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DEDICATION

To Prof. Reese Cleghorn

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CHAPTER 1: INTRODUCTION

"It's (cell phone) a lifeline. Lifeline because see, you need to be in constant touch with your parents and outside world….in cell phones you can access news, in any corner of the world, you can reach with cell phones, with just a palm in your hand. So cell phone is like a lifeline to you, it gives you all the information related to business, sports." – Aditya, 18-year-old, male college student in Mumbai

"I view cell phones as God, such a little gadget and you carry around in your pocket and you can chat, you can click pictures, you can send pictures and SMS, you can store everything in your (cell phone's) memory. It's like everything. It's really important....I can say that I love my cell phone, whether the screen is broken or whatever….the first thing in the morning is my cell phone and the last thing before I go to bed is my cell phone, cell phone, cell phone, cell phone." – Shweta, 18-year-old, female college student in Kanpur

The above quotes by college-going young adults in India clearly indicate that cell phones play a crucial role in their life and they use them for a variety of communication and media-related activities such as accessing news, listening to music and taking pictures. The growth of mobile phones in India and in particular their popularity and use by young people in India has been the object of international and national media attention in the past few years. In 2004, British Broadcasting Corporation (BBC) reported that "youth drives India's mobile phone revolution" (Ahmed, 2004).

Cell phones have grown at an unprecedented rate in the Indian subcontinent in the past few years. The Telecom and Regulatory Authority of India (TRAI, 2008-09)

reported that over the last year, cell phone subscriptions have grown almost 50 percent—from 261 million to 506 million. Mobile phones came to India in the mind-1990s, when the Indian government liberalized the economy to let Western companies and products enter the Indian market (Fraunholz & Unnithan, 2006). Initially due to high costs, mobile subscriptions were very few and the service was mainly adopted by business executives and professionals. However, in January 2000, the government introduced a new policy called NTP99, which replaced the high-cost, fixed licensing regime with a lower cost licensing structure leading to a drop of over 90% in cellular tariff rates (Fraunholz & Unnithan, 2006).

The lowering of costs, which encouraged price wars among the cellular operators, and their promotion as fashionable technology has led to a massive boom in the mobile phone subscription levels, especially among the younger population (Fraunholz & Unnithan, 2006). A couple of years ago, Motorola, a well-known cell phone company, launched its "MotoYuva" range of cell phones. The term "MotoYuva" stands for "Motorola for youth". "Yuva" means youth in Hindi (Mukherjee, September 24, 2008).

In 2007, a leading Indian news magazine, *India Today*, reported that 70% of urban youth between the ages of 18 and 30 years owned a mobile phone, but only 23 percent of them owned a PC or a laptop (Bamzai, 2007). The *India Today* survey found that young people use mobile phones mainly for communicating with family and friends. News reports have suggested that young people use cell phones as personal entertainment devices for listening to music, downloading ringtones or wallpapers, playing mobile games and receiving sports updates (Gupta, April 25, 2005).

In addition to the personal communication and entertainment activities, young people are also using cell phones as public communication medium to engage and collaborate on social and political issues. For example, in the aftermath of Mumbai attacks, in November 2008 when a group of terrorists bombed the city of Mumbai, youth activists organized a protest at the Gateway of India in Mumbai using cell phones and social networking websites. It was estimated that almost 20,000 people showed for the "0312 Walk for Peace" (Thomas, 2008, December 5). Another example of how young people are using cell phone for political issues is in the war-torn Kashmir valley, where young people use their mobile phones to circulate short videos clips through mobile phones and YouTube clips highlighting atrocities against people in Kashmir by the security forces (Khaleej Times, December 10, 2008).

Media and government institutions are also using cell phones to reach out to young people. News and entertainment companies are engaging young audience by incorporating text messaging into television programs. For example, the "Indian Idol," a reality talent hunt music show targeted at young people, asks audience to send votes for their favorite contestant via text messages. During the 2009, Indian general elections, Indian political parties launched text messaging campaigns to reach out to young voters. In addition, they hired Bluetooth kiosks in malls, where people could download pictures, messages and ringtones. The news organizations developed election packages to distribute information about local political candidates through cell phones. The police used cell phones to send safety updates during elections. The citizens used mobile phones to persuade people to go out and vote and monitor election irregularities (Wax, April 7, 2009; Mishra, April 15, 2009).

In addition to their growing role in public communication activities, mobile phones are also becoming important for news, particularly user-generated news also known as citizen journalism. Mobile citizen journalism can be defined as "citizens posting media directly from a mobile phone to the Internet or other mobile phones, and an online public (Verclas, 2008)." One of the defining moments in the use of mobile phones for citizen journalism was witnessed during the Mumbai attacks, when terrorists entered the port city of Mumbai (via the sea) and launched coordinated attacks on different locations in the city. Two terrorists hijacked a police van and started throwing hand grenades at people on the streets, a couple of them opened gun fire at a local train station, and a few of them took over a Jewish synagogue. Within a couple of hours, Mumbai was transformed into a battleground and no one knew the exact locations of the terrorists or how many terrorists had entered Mumbai. Finally, two terrorists took over two prominent hotels, The Taj Palace and The Oberoi Trident, and kept the guests and staff as hostages for three days until the Army commandos fought them (Sengupta, 2008).

The Indian mainstream media was caught flat-footed and unable to quickly arrive at the scene of action and start reporting from there. Even if they arrived in time, they could only report from one or two locations, but the people who were caught in the cross-fire of the terrorist attacks were able to instantly send updates about their current situation to family and friends via text messages on their cell phones. It was the ubiquitous cell phones that saved the lives of many people, who used their phones to communicate and exchange information and track what was happening real time during the terrorist attack.

Instead of walking into crosshairs of the terrorists' guns, many of them were able to dodge the bullets and return to the safety of their homes.

Cell phones played a crucial role in reporting about the Mumbai attacks to the world. The victims and eye-witnesses at the scene of the crime sent text messages from their cell phones to Twitter, a social messaging utility, where anyone could read their messages (Beaumont, 2008). Mainstream global news media tracked the story in real time by following live Twitter updates and using pictures of the attacks posted by bloggers (Beaumont, 2008). Television news channels conducted cell phone interviews with guests who were trapped inside the hotel. In one instance, terrorists called India TV to convey their demands and the reasons for launching the attacks (Sengupta, 2008).

Although the popularity of mobile phones among young people and their use for public communication activities and citizen journalism is not unique to India, it warrants empirical attention because India is the largest democracy in the world, with a population of over billion people (CIA, 2009). More than half of India's population is under-25 years of age and mobile phones are the only medium that reaches more than half the Indian population (TRAI, 2008-09). As their significance for public communication and journalism is growing, it is imperative to understand their use by young people, who are their largest consumers. What are young people in India really using mobile phones for – personal or public communication or for news or entertainment or for citizen journalism? These are some of the questions that this case study attempts to answer. The next section describes the purpose of the study and defines the key terms used in this study.

Purpose of the Study

The main objective of this case study is to examine the use of mobile phones by young people between the ages of 18-25 living in the two cities of Mumbai and Kanpur in India. The following discussion first provides a background on India and the two cities of Mumbai and Kanpur. It then provides a description of young adults and a description of young adults in Mumbai and Kanpur. It then provides a definition of gender used in this study. Then it provides a background on mobile phones in India and the definition of mobile phones used in this study.

India

India is a vast country divided in 28 states, nine union territories and 593 districts (www.censusindia.gov.in). In each of these states, people speak different languages and practice different cultural customs and practices. For example, there are at least 29 languages and over 200 dialects spoken all over India. Thus, cultural variations exit within India. Therefore, there are likely to be differences in the use of mobile phones within different parts of India. For this study, two cities, Mumbai and Kanpur, were selected to see if the individuals living in these cities located in two different regions use mobile phones differently.

I chose the two cities of Mumbai and Kanpur for a variety of reasons. First, it was convenient for me to do research in these two cities because I have family with whom I could stay during the course of my research and who could help me find interviewees. Second, I have had the experience of growing up and living in these two cities, so I was

quite familiar with the differences in cultural environment in both these cities. For example, in Kanpur, it would be rare for a young unmarried couple to go out on a date unless their families approved of it or to go out partying late at night with a group of friends. On the other hand in Mumbai, it is quite common for young people to party late at night in one of the numerous night clubs or go out on a date even if their families don't approve of it, because Mumbai is such a big city it is difficult for parents to know what their children are doing when they are away from home.

The third important factor was the difference in urban environment in the two cities. A description of how the two cities differ in their urban ecology and socio-cultural environment is given below.

Mumbai

Mumbai is located on the western coast of India and is the capital city of the state of Maharashtra. With a population of 12 million (2001 census), Mumbai can best be described as a cosmopolitan city (http://www.mumbainet.com). In Mumbai, although the main native language is Marathi, people from different communities speak a variety of different Indian languages. Geographically, Mumbai has the main town area typically known as South Mumbai and the suburbs. It also has an international airport and a well established public transportation system of local trains and buses.

It is classified as a metropolitan city and also known as the financial capital of India (http://www.mumbainet.com). In the recent past, since liberalization of the Indian economy, Mumbai has attracted investments from multinational corporations making it

more open to western culture and influences than the rest of India. It is also home to the Indian film industry popularly known as Bollywood and the top entertainment TV production houses. Therefore, major cultural and fashion trends originate in Mumbai and percolate down to the rest of India.

Kanpur

In contrast, Kanpur is a much smaller city than Mumbai, with a population of 4.1 million people (http://upgov.nic.in). It is situated in the state of Uttar Pradesh in the northern region where the main spoken language is Hindi (http://kanpurcity.com ; http://www.india.gov.in). Kanpur is also considered a major center of textile and leather manufacturing business. Although modernization can be seen in parts of Kanpur in the new multiplexes and malls, it is still far behind Mumbai in development with its numerous flyovers and high rises. The multinational companies and western style restaurants such as McDonalds, Domino Pizzas and Barista coffee houses have yet to make their presence felt in Kanpur. The only means of public transportation in the city of Kanpur are handheld rickshaws and autorickshaws popularly known as three – wheelers.

Therefore, Kanpur provides a very different urban environment and socio-cultural landscape as compared to Mumbai. The two cities chosen for this study provide good examples for comparing within-country differences regarding the use of mobile phones. The next section provides the definition of young adults and describes the differences among young people in Mumbai and Kanpur.

Young adults

"Young adults" in this study refers to individuals, who are in the age-group of 18-25 years. Developmental psychologists define this life-stage of individuals as a transitory period between adolescence and adulthood (Arnett, 2000). Arnett (2000) suggested that in contemporary western societies, the stage of adolescence is prolonged as most individuals do not fulfill the criteria required to achieve adulthood such as marriage, financial independence and completion of education. Therefore, this period allows young people to prolong their identity explorations, especially in the areas of love, work and worldview. Therefore, Arnett (2000) suggested that young people continue their search for personal identity, friendships, romantic partners and struggle for independence in order to assume adult roles and responsibilities by the end of their 20s (Schwartz, Cote & Arnett, 2005). In this study, it is assumed that young people in the ages of 18-25 years, who have not achieved an adult status because they are still continuing their education, are not married and have not achieved financial independence, will use mobile phones for some of these development-related needs.

Typically, by the age of 18, individuals make an important transition from school to college life in most countries. However, the exact age of this transition may vary. While in western countries, young adults leave home and start their college life on college campuses, in India majority of young adults continue to live with their parents unless they go out of town for their studies. While in countries such as United States, young people live on college campuses they are fairly independent from parents, whereas in India, since young adults continue to live with their parents, there is more interference

from parents in the life choices they make. For example, the prevalent cultural norm of arranged marriages in India shows that parents choose a marriage partner for their children. Further, in traditional Indian culture it is not considered appropriate for young males and females to socialize with each other, also dating and flirting is not considered appropriate. However, in the recent past, due to modernization these cultural rules are changing, this change is uneven across country. In larger cities which are more modernized, the traditional rules have changed far more than in smaller cities, where the culture is more traditional. In this study, it is assumed that since Mumbai and Kanpur provide different cultural environments, young people in both these cities will behave differently. The next section describes the differences among young adults in Mumbai and in Kanpur.

Young adults in Mumbai

In Mumbai, most children make the transition from school to college around the age of 16 years once they complete their high school, that is, 10th grade. Most young adults in Mumbai receive the higher secondary education (11th and 12th grade) in colleges. However, they continue to live with their parents throughout their higher education. Because Mumbai has many educational institutes offering a variety of vocational and professional courses, young people from all over the country travel to Mumbai to seek higher education. The students who come from outside Mumbai usually live in a hostel or rent an apartment with friends. This study is mainly concerned about young people who continue to live with their parents, however, a few young adults from other cities, who lived on their own or with friends were also selected.

In Mumbai, a typical day in the life of college-going young adult involves leaving home early in the morning and reaching back home in late evening. Usually young people travel by local trains and buses across the city. Throughout the day, they either attend lectures or spend time with friends. Because Mumbai is large, it is difficult for parents to keep an eye on children and their activities throughout the day. Therefore, in Mumbai it is typically easier for young adults to engage in behavior that may not be acceptable to their parents. Culturally too, it is considered quite acceptable for young adults to move in groups consisting of males and females. Therefore, it is easier to find them spending time together in groups at street-side fashion and food shops, cafes, multiplexes, malls, beaches or at nightclubs.

Young adults in Kanpur

Unlike Mumbai, in Kanpur most young adults begin their college life around 18 years of age, because in Kanpur, children complete their higher secondary education (11th and 12th grade) in school. But like the young adults in Mumbai, they continue to live with their parents throughout their adult life. Although Kanpur has one of the best technical institutes in the country and other colleges that offer higher education in variety of fields, institutions of higher education are relatively fewer than in Mumbai. Also the admission to these colleges is determined through competitive exams taken by students across the country. Therefore, most young adults from Kanpur also leave their hometown to go to larger city such as Mumbai or Delhi for higher education. This study is mainly concerned with young people who live with their parents except for few who had gone

out or town for studies and were back in town for holidays during the data collection phase of this study.

The young adults in Kanpur also differ from those in Mumbai in terms of their lifestyle. Although young adults are enrolled in colleges, they rarely attend regular college and either prepare for entrance exams at private coaching institutes or get engaged in business along with their college. During the data collection phase for qualitative study, many young adults said that they only go to college for submitting their fees or taking exams.

The socio-cultural environment in Kanpur is also very different from that in Mumbai. For example, the culture in Kanpur is fairly restrictive and therefore, males and females usually hang out in separate groups in public places. For example, at the institute where I conducted interviews, I didn't see males and females interacting with each other, whereas in Mumbai, on the two college-campuses I visited, I saw males and females in the same group. Further, the city of Kanpur is much smaller as compared to Mumbai, so even if the young adults decide to engage in behaviors their parents wouldn't approve of it is quite easy for their parents to know from others. Most young adults in Kanpur commute through their own private vehicle. Therefore it is unlikely that young people will talk to strangers unless they stop their vehicles to chat. The student lifestyle and the cultural rules in Kanpur do not foster opportunities for young people, especially members of the opposite sex, to interact or mingle with each other.

Because the young adults in two cities have different lifestyles and live in different socio-cultural environment, it is assumed that although they will use mobile

phones for developmental needs, there may be differences. For example, since young people in Kanpur have less opportunity for dating they might use mobile phones for dating more than those in Mumbai.

The next section provides a definition of gender and gives some examples of why males and females in the young adult age-group may differ in India and in the two cities.

Gender

The concept of gender is used to differentiate between men and women according to social and cultural norms (Oxford dictionary). There are two ways in which the differences between men and women may be understood – the biological/anatomical differences which are usually referred by the term "sex" and the social and cultural differences articulated as masculinity and femininity referred by "gender." The socially constructed distinction between men and women may differ across time (historically), across societies (geographically) and have a bearing on the social identity, roles and relationships acquired by men and women in societies (Rakow & Wackwitz, 2004; Ruble & Martin, 1998). Societies have different social norms, expectations and rules for how men and women should dress (e.g. clothing, hairstyles), behave (e.g. girls should be shy), and relate to each other (e.g. men are superior to women hence women should listen to men). These social and cultural rules about behaviors, roles and relationships of men and women are termed as "gender stereotypes" and are used to discriminate between the two sexes.

Feminist scholarship has challenged these deeply held assumptions about gender differences and characterized them as cultural accomplishments (Rakow & Wackwitz,

2004). Several studies have documented and affirmed that in patriarchal societies gender stereotypes are largely in favor of men and are used to subjugate and suppress women by according them a secondary status in social hierarchy and curtailing their freedom and opportunities (World Development Report, 2007; Wainryb & Turiel, 1994; Neff, 2001). Thus, it can be said that gender is a socially and culturally constructed category used to differentiate between men and women. Further, it differs across societies and across time. For example, in India the culturally appropriate dress for women would be traditional Indian dress such as "sarees" whereas in America, culturally appropriate dress for women would be "skirt and blouse." However, in recent times, dress codes have undergone a change in urban India where wearing "jeans and t – shirt" are considered culturally appropriate dressing for young women.

Since India is a patriarchal society, there are different socio-cultural rules for males and females. For example, parents typically pay more attention to education of male child than female child. Therefore, if a male child wants to go out of town for higher education parents will be more supportive than in the case of females. Socially, it is expected that females remain virgin until they are married therefore parents are more restrictive about permitting females to date or befriend males. Similarly, it is expected that females should learn about household chores even if they are engaged in higher education. Even in the arranged marriage system, in which parents choose a spouse for their children, males have more freedom to reject their parents' choice while females typically cannot do that. Therefore, although human development literature suggests that during young adult phase, males and females have similar developmental needs, the socio-cultural expectations may make them behave differently in achieving these goals.

For example, the literature suggests that during young adulthood both males and females may have the need for intimate relationships, but in India it can be expected that males will feel more comfortable in engaging in activities that will help them find a romantic partner, the females will not engage in such activities because of socio-cultural restrictions and expectations. Therefore, in this study it is assumed that males and females will use mobile phones differently.

The next section provides a background of mobile phones in India and in the two cities and the definition of mobile phones used in this study.

Mobile phones in India

In India, the first set of cellular licenses was awarded to the private sector in 1994, permitting the launching of mobile phones in the metropolitan cities of Delhi, Mumbai, Kolkata and Chennai, The second set of licenses were given out in 1995 to operate in the 19 telecommunication circles (Fraunholz & Unnithan, 2006). When mobile services were introduced in the country, the whole country was divided into 23 circles, which were classified in Metros, A, B or C (Telecom Regulatory Authority of India, 2007-8). While Mumbai, which is in the Metro circle, was one of the first cities to have mobile services in the country, Kanpur, located in the state of Uttar Pradesh (East), falls in Circle B and received mobile phones later (www.upe.bsnl.co.in).

Initially due to high costs, mobile subscriptions were very few and the service was mainly adopted by business executives and professionals. However, in January 2000, the government introduced a new policy called NTP99, which replaced the high-cost, fixed

licensing regime with a lower cost licensing structure (Fraunholz & Unnithan, 2006). The new policy led to a drop of over 90% in cellular tariff rates. The lowering of costs, which encouraged price wars among the cellular operators, led to a massive boom in the mobile phone subscription levels (Fraunholz & Unnithan, 2006). Additionally, the availability of cheap handsets and the launch of mobile value-added services (MVAS) have added to heavy adoption and use of mobile phones.

In order to make up for low revenues due to the flexible cost-structure, mobile service providers launched a host of mobile value-added services (MVAS) such as short messaging services (SMS), ringtones and wallpapers. The MVAS in India has been divided into three different categories – Entertainment VAS, Info VAS and mCommerce VAS (Internet and Mobile Association of India, 2008). The Entertainment VAS includes jokes, Bollywood ringtones, games, dating and chatting services. Info VAS includes services that provide useful information, for example, information about movie tickets and news. The mCommerce VAS services involved financial transaction using the mobile phone, for example, mobile payments (buying movie tickets using mobile phones). The MVAS usually use the short messaging services (SMS) or text messaging platform. The MVAS such as text messages, multi-media messages (MMS), Entertainment VAS and Info VAS are highly popular among young people and present another critical factor in the growth of mobile communications in India (Fraunholz & Unnithan, 2004).

In India, the mobile service providers mainly offer two types of technology: (1) global satellite management (GSM) and (2) code division multiple access (CDMA). The companies offering GSM standard include Bharti Airtel and Vodafone, whereas those

offering CDMA include BSNL, Tata and Reliance. One of the main differences in the two technologies is that GSM allows calls to be made to and received from anywhere, whereas CDMA allows limited mobility and restricts calls to specified locations.

In India, the mobile phone companies provide both the postpaid or prepaid option. In the postpaid option, the consumer has to pay monthly bill of all the mobile services used. In the pre-paid option, the consumer can buy services worth a certain amount in advance and can use them during the specified period. The pre-paid option is very common among young people, because it allows them to manage their mobile phone bills within a specified budget set by parents.

This study was conducted in two phases: first phase was conducted in December 2007-January 2008 and the second phase in February 2009 in the two cities of Mumbai and Kanpur. In December 2007, when the first phase of this study was conducted the cellular subscribers in India were close to 233 million and the average revenue per user (ARPU) was Rs. 261 or US $ 5.68 (TRAI, April 2008). In February 2009, when the second phase of this study was conducted, the total mobile subscriber base in the country was 391.76 million and the ARPU was Rs. 205 or US $ 4.46 (TRAI, July 2009). When this study was conducted, the GSM and CDMA technologies and the mobile value-added services (MVAS) such as Entertainment VAS, Info VAS and mCommerce VAS were available in both the cities. Although there might be differences in the amount of services available, this study does not take into account those factors.

Mobile phones or mobile devices

As is evident from the above discussion, mobile phones in India not only provide wireless interpersonal communication, but they have now evolved into multi-media devices that allow for a host of different communication and multi-media functions. In this study, mobile phones are seen as multi-media technology that can be used for communication and media-related activities. As a communication technology, mobile phones facilitate various kinds of communication through voice calls, text messages, picture messages and video messages. As media devices, mobile phones can be used for various media-related activities such as accessing news alerts and video clips or listening to music and taking pictures. In this study, it is assumed that young people will use mobile phones for both of these activities.

The next section describes the theoretical perspectives used in this dissertation to understand the significance of mobile phones in the young people in India.

Theoretical Approaches Used in the Study

This case study uses three theoretical frameworks to understand the use of cell phones by young people in India. The first perspective used in this dissertation is the uses and gratifications approach, which suggests that individuals use media to obtain certain gratifications (Blumler & Katz, 1974). Previous studies have used this approach to study mobile phone usage among individuals and have determined that mobile phones are mainly for interpersonal communication gratifications such as safety and sociability. This study proposes to use this theoretical perspective to examine what are the different

communication, media and age-related needs for which young people in India use mobile phones.

The second perspective used in this dissertation is social cognitive domain theory from human development studies. This theory proposes that individuals use personal, social-conventional and moral reasoning to evaluate and think about complex events (Killen, 2007; Turiel, 2006). Prior research has shown that adolescents use these different forms of personal, conventional, and moral, reasoning when reflecting on their video game usage (Brenick, Henning, Killen, O'Connor, & Collins, 2007; Henning, et al., 2009). Further, the theory also suggests that individuals in all cultures develop individualistic and collectivistic concerns (Turiel, 1983). Thus individuals living in collectivistic cultures such as India also develop concerns with personal freedom and autonomy, but they may not choose to articulate their individual selves to fit in society. In the present study, the model was employed to assess how young adults think about cell phone use to fulfill age-related developmental needs such as expressing individuality, negotiating independence from parents and maintaining friendships. In this study, the model was employed to assume that young people will use all the three different forms of reasoning especially in their use of mobile phones to fulfill age-related needs.

The third theoretical approach used in this dissertation is social construction of technology (SCOT) framework from science and technology studies. According to SCOT, human action is shaped by society which in turn shapes the use of technology (Bijker, Hughes & Pinch, 1987). Earlier studies have used this approach to show that mobile phone usage among individuals belonging to different communication networks

use cell phones differently (Campbell & Russo, 2003). Studies have also shown gender differences in the use of mobile phones in patriarchal society such as India, where there are different cultural rules for males and females. This perspective is used in this dissertation to examine regional and gender differences in the use of mobile phones by young people in India. For example, it is assumed that the young people living in two different socio-cultural environments of Mumbai and Kanpur may use the cell phones differently. Similarly, the different cultural rules for males and females may lead them to use cell phones differently.

Scope of the Study

A variety of factors may contribute to the adoption, perception and use of cell phones among young people. For example, political economic factors such as government policies determine the accessibility to mobile services and the promotion of mobile phones as attractive devices by industry plays a role in the adoption and use of mobile phones by young people. Similarly, the socio-economic indicators such as income levels or spending capacity of the users are important reasons that impact the adoption and use of mobile phones. However, this study does not provide such analyses. This study chiefly looks at the different ways in which young people of a particular age-group perceive and use cell phones. Therefore, this study should be seen as a user study. Further, this study only applies three theoretical models to examine the use of mobile phones, therefore the application of other models and theories may lead to other insights regarding the cell phone usage by young people.

Further, although the results of this study can be compared with similar analyses conducted in other countries to show similarities and differences in the use of mobile phones by young people, this study does not provide cross-country comparisons. Similarly, the results of this study do not provide an account of mobile phone usage by young people across India. There are many cultural variations that exist within India and therefore, there may be regional variations in the cell phone usage by young people across India. Additionally, the results of this study may also not be applicable five years from now because advancement of technology, changes in government policy, and industry practices regarding mobile phones such as promotion and advertising of mobile phones, provision and cost of mobile services may change which may have an impact on the use of mobile phones by young people. Further, since this study examines the use of mobile phones among 18-25 years, the results of this study may not be applicable to other age-groups.

Significance of the Study

The popularity of cell phones among young people is not unique to India, but it is a worldwide phenomenon. The formation of a global youth culture around mobile phones is an emerging topic of academic interest and research. Several studies have been conducted on the use of mobile phones among young people in different countries across the world such as Japan, Norway, Finland, USA, and Britain. This study adds to the growing body of research by providing empirical information about the use of mobile phones by young people in India.

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Academic research on mobile phone usage among young people in different countries has looked at various issues such as their use as fashion items, for communication with friends and family, to access news and their use for personal entertainment. However, in India the studies have only looked at few of these issues such as their use for supporting romantic relationships (Wei, 2007). This case study provides information about the variety of mobile phone uses by young people in India such as their use for communication, personal entertainment and news. In addition, it also informs about their use for age-related needs such as expressing individuality, negotiating independence from parents and maintaining friendships.

From the theoretical point of view, this study contributes to the academic literature by providing evidence for the theories used in this study. By applying the uses and gratifications perspective, this study shows that young people use cell phones for personal communication, information and entertainment needs and age-related needs such as maintaining privacy, expressing individuality, negotiating independence from parents and maintaining friendships. Through the application of social-cognitive domain theory, this study provides evidence that young adults use all three forms of personal, social and moral reasoning in their use of mobile phones. Further, this study also provides evidence for social construction of technology (SCOT) framework by showing that young people living in two different cultural environments use mobile phones differently.

Description of the Chapters

This dissertation consists of seven chapters: this introduction provides specific arguments about how mobile phones are not just technologies used for interpersonal

communication but are turning into technologies for journalism and public communication specifically in developing countries such as India. Following this introduction, the second chapter provides the conceptual framework, description of the theories used in this study and reviews of empirical studies on mobile usage by young people in different countries across the world.

The third chapter outlines the specific research questions investigated and explains the methodology used. The fourth and fifth chapters present the results of qualitative analysis of interviews conducted in Mumbai and Kanpur respectively. The sixth chapter presents the results of the quantitative analysis of the survey. The last chapter provides a discussion of the results, highlights their theoretical and practical implications, identifies the limitations of the study and directions for future research and presents the conclusions.

CHAPTER 2: THEORETICAL APPROACHES AND LITERATURE REVIEW

This chapter describes the conceptual framework and the theoretical approaches used in this dissertation to gain an insight into the mobile phone usage behavior of young adults in two cities of Mumbai and Kanpur in India. It then reviews the relevant academic studies regarding the use of mobile phones by young people.

Conceptual Framework

As mentioned in the introduction chapter, there are three different theoretical perspectives used in this dissertation – uses and gratifications perspective, social-cognitive domain theory and social construction of technology (SCOT) framework. The uses and gratifications perspective is used to explore the use of mobile phones for different communication, media and age-related needs by young people. The social-cognitive domain theory is used to examine if young people use mobile phones for personal concerns such as expressing individuality and negotiating independence from parents. It is also applied to assess the different forms of personal, social-conventional and moral reasoning that young people may use regarding their mobile phone usage. The SCOT framework is used to explore the ways in which different cultural environment in the two cities of Mumbai and Kanpur impact the use of mobile phones by young people. Further, it is also used to examine the ways in which the patriarchal culture in India, which allows more freedom to males than females, impacts the use of mobile phones by

young people. The next section describes these theoretical approaches in detail and discuss examples of how they have been applied in studies.

Theoretical Approaches

Uses and Gratifications Approach

The uses and gratifications approach was proposed by media scholars in response to the media effects paradigm. The media effects paradigm conceptualized mass media audiences as passive users of media and susceptible to media influences. In contrast, Blumler and Katz (1974) suggested that audiences are active users of mass media who use media to obtain certain gratifications. The uses and gratifications approach has been used by media researchers to examine the gratifications associated with the use of different types of media such as television (Rubin, 1983), newspapers (Katz, Gurevitch & Haas, 1973), VCRs (Levy, 1987), electronic mail (Dobos, 1992), pagers (Leung & Wei, 1998), telephones (Dimmick et al., 1994) and internet (Papacharissi & Rubin, 2000). The uses and gratifications perspectives have also been used in studies investigating the use of mobile phones (Auter, 2007; DeBaillon & Rockwell, 2005; Leung & Wei, 2000; Ling & Yttri, 2002; Ozcan & Kocak, 2003; Wei, 2001).

Leung and Wei (2000) conducted one of the first studies examining the gratifications associated with the use of cell phones. They found that instrumental motives such as mobility, immediacy and practical needs were the strongest motives for cell phone use and intrinsic factors such as affection and sociability were the second most important motives. In addition to the gratifications associated with the use of cell phones

for interpersonal communication, Auter (2007) also examined the use of enhanced

features and services on cell phones such as picture mail. The study reported that

interpersonal communication motives such as affection were positively correlated with

the use of cell phones. While Auter (2007) examined the cell phone usage in the United

States, Ozcan and Kocak (2003) investigated the gratifications associated with the use of

cell phones in Turkey. The study revealed that status/relaxation was the most important

motive followed by instrumentality/ business and then security /sociability. Thus the

studies on mobile phone use applying uses and gratifications perspective suggest that

individuals use cell phones for interpersonal communication motives such as affection

and sociability and also for projecting a social image by using them as status symbols.

In this study, this perspective is employed to examine the different

communication, media and age-related needs for which young people in two cities of

Mumbai and Kanpur use their cell phones.

Social-cognitive Domain Theory

The second theoretical perspective used in this dissertation is from the human

development literature. Social-cognitive domain theory takes a developmental approach

to explain the social and moral development of children. There are two opposing views in

human development literature on how culture influences social and moral development

(Killen, 1997). The first view is suggested by cultural psychologists who theorize that

culture determines the social and moral development of children. The proponents of this

view promote the use of broad dichotomous labels such as individualism and collectivism

(Triandis, 1989, 1995) or independence and interdependence (Markus & Kitayama, 1991)

to distinguish between cultures. According to this view, Western nations such as those of North America and Europe are usually characterized as having an individualistic orientation in which individuals view themselves as autonomous and independent entities (Triandis, 1995; Markus & Kitayama, 1991). By contrast, non-western nations such as India, China and Japan are described as emphasizing collectivistic cultural values and that individuals living in these countries view themselves as relational and interdependent (Markus & Kitayama, 1991).

Cultural psychologists have used the individualist/collectivist distinction to propose a social communication model of social and moral development (Turiel, Killen & Helwig, 1987; Shweder et al., 1997; Turiel, 1998). This view is based on the assumption that culture is at the center stage of moral development and that children learn the concepts of morality (right vs. wrong) from what is communicated to them by their culture (Turiel, 1998). That is, psychological processes are affected by cultural processes and individuals living in individualist societies develop an individualistic orientation, whereas those in collectivistic societies develop a collectivistic orientation (Miller, 2006).

On the other hand, developmental psychologists criticize the use of broad labels such as individualism/ collectivism to characterize different cultures because they claim these emphasize cultural homogeneity and neglect diversity within cultures (Turiel, Killen, & Helwig, 1987; Killen, 1997; Wainryb, 2006; Turiel, 1998). Further, they comment that theories of individualism/ collectivism do not take into account the cognitive processes that might be at work while children are experiencing moral and social issues. Thus they neglect the fact that children and individuals might disagree with

cultural practices and customs (Turiel, 1998). Therefore, developmental psychologists have proposed a social – cognitive domain theory to explain the social development of children.

The social cognitive domain theory posits that children organize moral, social-conventional and personal knowledge in three distinct domains (Turiel, 1983). Regardless of culture, children develop concerns in each of these three categories. For example, in all cultures children develop both individualistic and collectivistic concerns. Research in western (North America) and non-western (India, China) cultures have shown that children develop both individualistic concerns (with self, personal autonomy, entitlement and rights) and collectivistic concerns (with authority and obedience, social roles and conventions and interpersonal obligations) in all cultures (Smetana, 2006; Wainryb, 2006; Helwig, in press; Neff & Helwig, 2002; Oyserman, Coon & Kemmelmeier, 2002). The studies have found that children growing up in cultures that favor individualism do not subordinate collectivistic concerns to personal issues and that those in cultures that favor collectivism have an awareness of both personal and collective issues but their judgments may vary due to contextual factors (Wainryb, 1995; Neff, 2001; Wainryb, 2006).

Because cultural psychologists claim that individuals in non-western cultures do not develop concepts of personal autonomy and individual rights, social – cognitive domain researchers have focused on studying whether individuals in non – western and traditional societies develop awareness about personal issues (Smetana, 2006; Wainryb, 2006; Turiel & Wainryb, 1998; Neff, 2001). Studies with Druze Arab children,

adolescents and women (Turiel & Wainryb, 1994, 1998) and Hindu children, adolescents and young adults in India (Neff, 2001) belonging to traditional, non – western societies suggest that children and individuals in these cultures are aware of personal rights and autonomy, however, the manifestation of personal issues in their decisions is affected by their social hierarchical positions in these societies.

Similarly studies with Chinese adolescents have also shown that they show similar age – related patterns to those of Canadian adolescents in judgments and reasoning regarding issues of fairness of democratic and other forms of government (Helwig, Arnold, Tan & Boyd, 2007). In studies on how emerging adults conceptualize adulthood, it was reported that young Americans across ethnic groups (Arnett, 2003) and Chinese young adults (Nelson, Badger & Wu, 2004) had similar individualistic criteria about transitioning to adulthood. This indicates that there is substantial empirical evidence that individuals belonging to collectivistic societies develop awareness of personal issues; however, their evaluations may reflect compliance with social norms because of fear of the consequences they might experience for going against the norm (Turiel & Wainryb, 1998).

In this dissertation, social – cognitive domain theory is applied to understand how young people use mobile phones to assert their personal freedom and autonomy while remaining within the boundaries of social and cultural rules of Indian society. It is also assumed that young people will use all three forms of personal, social and moral reasoning while assessing their mobile phone behaviors.

Social Construction of Technology

There are two contrasting theoretical approaches that are available to researchers studying new technologies and their significance in society – technological determinism and cultural determinism. Technological determinism was one of the first theoretical frameworks proposed to study the effects of media on society (McLuhan, 1962). The proponents of technological determinism proposed a causal relationship between technology and society suggesting that technology causes changes in society and its individuals. For example, analyzing the technological bias of particular communication forms, Innis argued that new communication technologies such as television lead to a monopolization of the production and distribution of knowledge in the hands of a select few (McQuail, 2001). This media-centric approach has been criticized by media scholars who hold that technology in itself cannot produce changes in society, but the development of technology is shaped by social and cultural factors. In contrast, cultural determinism is a non-media centric approach that developed as a critique of a technological determinist perspective. It assumes that the use of media is shaped by socio-cultural conditions and the individuals who are using these media.

This dissertation largely adopts a socio-centric view looking at how social and cultural conditions shape individual needs which in turn define the use of technology. Hence, the first theoretical perspective used in this dissertation is the social construction of technology framework (SCOT). This framework implies that the socio-cultural environment shapes the use of technology; therefore, to understand the use of technology it is important to understand the socio-cultural environment in which technology is

embedded (Bijker, 2001). Few researchers have applied the SCOT framework to investigate the use of cell phone by individuals in different cultural settings.

Campbell and Russo (2003) conducted a survey with 194 American adults, (60% female, 40% male) mobile phone users to assess their perceptions and uses of mobile phones. Using a social-constructivist perspective, the authors employed the social influence model, and predicted that the perceptions and uses of the mobile phones among participants would be similar among individuals belonging to the same personal communication network (PCN) than those outside. The findings revealed six factors: the use of mobile phones for safety/security, perceptions of cell phones as a means of display, attitudes about use in public, micro-coordination (using mobile phones for logistic purposes such as making plans), hyper-coordination (using mobile phones as a form of self-expression and social relations maintenance) and comfort with technology that were more similar within participants' PCNs rather than across the sample.

David (2007) applied this framework to investigate the use of cell phones by adult women in India. Her study suggested that cell phone use reinforced the traditional gender roles expected from Indian women. Both these studies indicate that the use of technologies such as mobile phones is shaped by the socio-cultural environment and rules that govern individual lives. Similarly, Mesch and Talmud (2008) applied this approach to investigate how culture shaped the use of communication technologies among Israeli teens belonging to Jewish and Arab ethnic groups. They conducted an explorative study using a sample of 37 Jewish and Arab adolescents. Their study indicated similarities and differences in the choice of communication channel and subjective meanings attached to

technology. For example, Israeli teens belonging to Jewish community used cell phones, instant messaging and electronic mail to meet new friends and move these friendships to face-to-face meetings as fast as possible. And although Israeli teens belonging to Arab community made friends through communication technologies, they said that these friendships were created by mistake and they kept these friendships with members of opposite sex as a secret to avoid breaking rules of their society. The above studies show that although individuals use communication technologies for personal needs their use of such technologies is shaped by the socio-cultural rules of the community to which they belong.

Studies on mobile phone usage among young adults

This section provides a review of literature of academic studies related to mobile phone usage among young adults. The growing popularity of mobile phones across the world and in particular among young people has been a topic of interest among academic researchers. In addition to academic journals that provide access to such studies, there are several anthologies and book length studies on the subject in recent years. In *Perpetual Contact,* Katz and Aakhus (2002) provided a compilation of studies from ten cultures to understand how mobile technologies are shaping human life across cultures. In *Thumb Culture,* Glotz, Bertschi and Locke (2005) compiled studies conducted in different countries to investigate the impact of mobile phones on user's life and on society as a whole. Goggin (2006) conducted a book length study titled, *Cell Phone Culture,* in which he examined the cultural and social shaping of mobile phones using an inter-disciplinary

approach. Most recently, Katz (2008) edited a volume titled *Mobile Communication Studies* to understand the social consequences of mobile technology across the world.

Further studies on mobile phones have looked at two different aspects of technology – one related to their adoption and another related to their use. The researchers investigating the adoption of technology are mainly concerned about the issues of digital divide and examine the factors that may be responsible for their adoption. The researchers examining the use of mobile phones are mainly concerned about the individual and social reasons impacting their use and the individual and social consequences of their use. Since this dissertation is mainly concerned with the use of mobile phones, only those studies have been chosen for discussion here that provide information about the use of mobile phones by young people.

Following is a review of academic studies that have been conducted on the use of mobile phone by young adults. Because some of these studies do not specify age-range, studies that have been conducted on teenagers, adolescents, college-age adults or adult populations over 18 years have also been selected. First, the studies that have investigated the use of mobile phones as communication technology are presented. These studies have been organized by the countries in which they were conducted. Therefore, although these studies may look at different issues, it is thought that organizing them by countries gives a clear picture of cell phone use within a particular country. Second, the studies that have specifically investigated the use of mobile phones for media-related purposes are discussed. Towards the end of this section, a summary of different issues investigated in these studies illustrates their importance to this dissertation. To begin with, cross-cultural

studies comparing mobile phone usage within different countries are presented and then studies from United States of America, Europe and Asia.

Studies on mobile phone usage for communication related purposes

Cross-cultural studies

Cross-cultural studies mainly compare the use of mobile phones by young people from different national cultures to gauge their impact on their mobile phone usage. As mentioned above, these studies provide some evidence for the socio-cultural shaping of mobile phone usage. The following four studies by Ishii and Wu (2006), Campbell (2007), Katz and Sugiyama (2006) and Chakraborty (2006) provide some evidence that young people living in different countries may use mobile phones differently.

Ishii and Wu (2006) conducted nation-wide surveys and qualitative observations at matchmaking sites in Taiwan and Japan to compare the different communication media usage patterns of young people in the two countries. The study reported that while Taiwanese youth (88.8%) used a variety of Internet tools such as Instant Messenger (IM) and chatting, comparatively fewer Japanese youth (58.1%) used such services. Contrastingly, Japanese youth (87.2%) were more likely than Taiwanese youth (77.8%) to use mobile phones, including voice and SMS/e-mail. The study further noted that Taiwanese youth used PC-based Internet mainly for communication, while Japanese youth primarily used it for entertainment purposes. Furthermore, the study showed that none of the Japanese youth revealed their phone numbers in their messages on matchmaking sites, whereas Taiwanese youth disclosed their phone numbers (16%) and

personal e-mail addresses (32%). The authors concluded that culturally Taiwanese young adults placed more trust in internet, whereas Japanese youth tended to avoid direct communication, thus indicating that different personal relationships patterns in the two countries impacted their use of communication technologies.

To understand the influence of culture on the perception and uses of mobile phone, Campbell (2007) conducted a survey with 318 students from a private university in Hawaii. The data was analyzed from 231 participants (65% females, 35% male) from different countries including US mainland (89), Hawaii (53), Taiwan (34), Sweden (29), and Japan (26). The questionnaire consisted of questions pertaining to the use of mobile phones as fashion statements, for safety/security, instrumental (need- based) communication, and expressive (expressing feelings and emotions) use and the use of mobile phones in public places. The findings revealed that there were more cultural similarities than differences regarding the use of cell phones among respondents. For example, the use of cell phones for fashion statements was similar for participants from all cultures. However, there were two prominent cultural differences in usage: Japanese participants showed a lower tolerance for cell phone use in public and Swedish participants were less likely to use mobile phones for safety/security purposes. The author suggested that the reason why Japanese were less tolerant of mobile phone use in public was probably because of high population density in Japan which makes it easy for others to overhear mobile phone conversations. Similarly, the author explained that the Swedes probably felt less need to use mobile phones for safety/security because of low crime rate in Sweden.

In another cross-cultural survey of college students, Katz and Sugiyama (2006) compared the perceptions and use of mobile phones as fashion statements in Japan and the USA. Two data sets with 18 – 21 year old students were used for analysis – one from a survey of 254 students (161 females, 93 males) at an American university and another from a survey of 235 students (79 females, 156 males) at a private university in the Tokyo area in Japan. The results showed that the theme of "fashion" played an important role in the adoption and use of mobile phones among the students in both the countries. In addition, the study reported that heavy mobile phone users were fashion-attentive whereas non-users and light users were comparatively less fashion attentive. However, in both groups, users said that they although they personally had not bought their cell phones to use for fashion, they used them to express a sense of self and they also agreed that others bought and used cell phones for fashion.

While Katz and Sugiyama (2006) investigated the symbolic usage of mobile phones, Chakraborty (2006) conducted a survey with 100 university students (57 men and 43 women) including 50 in India and 50 in the USA, to investigate the cross-cultural similarities and differences in the functional aspect of mobile phone usage patterns for a master's thesis project. In the Indian sample, the average age of the respondents was 23.7 years and 76% of the respondents were male, whereas in the American sample, the respondents' average age was 28.8 years and 62% of them were female. The study reported that there were both similarities and differences regarding mobile phone perceptions and usage among the students from the two countries. For example, students in both these countries used cell phones mainly for keeping in touch with friends and family. They also were not likely to share their mobile phones and they thought that

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talking loudly in public places was not appropriate. The study also highlighted cultural differences regarding the use of mobile phones; for example, Indian respondents were more likely to keep their phone turned on at all times and use text messaging, whereas American respondents tended to make voice calls instead of texting. This could be because for Indian youth mobile phone was the only phone so they kept it on, further because they lived at home or remained in crowded areas they preferred text messaging, whereas American students lived on campus where they could easily find a private place to make voice calls. Additionally, these differences could also be due to differences in cost structure of the mobile services in the two countries.

The above studies comparing mobile phone usage in different countries show that there are both similarities and differences regarding the use of mobile phones by young people and that these differences could be due to cultural reasons and the surrounding environment in which users live or the cost structure of the services. The next section reviews studies conducted on mobile phone usage by young people in America.

America

In America, Pew Internet and American Life Project, come out with periodic surveys on the use of Internet and mobile phones among Americans. According to the latest report, 85% of American adults have cell phones (Miller, 2009). Academic researchers have looked at the use of mobile phones among young people regarding their use as communication and media technology.

Aoki and Downes (2003) conducted four focus group sessions with 32 college students and a survey with 137 college students to examine their mobile phone usage from a behavioral and psychological perspective. The results from the focus groups indicated that college students acquired and used mobile phones for a variety of purposes such as personal safety, financial incentive (to save costs of phone calls), information access, social interaction, parental contacts, time management/coordination, dependency, image, and privacy management. On the basis of the quantitative analysis, the researchers identified five different groups of students depending upon their attitudes and usages. These five groups were "cost conscious" (acquired cell phones for saving money); "security/safety conscious" (acquired cell phones to feel safe); "dependent" (felt lost without them); "sophisticated" (considered cell phones a necessity), and "practical users" (used cell phones because they suited modern life styles).

In 2005, DeBaillon and Rockwell conducted a study to determine gender and student-status differences regarding the use of mobile phones for communications from a uses and gratifications perspective. They distributed a survey to three groups of participants – undergraduate college students, high-school students and non-students who were over the age of 30. Their study revealed that there were no gender differences regarding the adoption of cell phones and that both males and females were spending an equal amount of time talking on cell phones. They also found that among the three groups of participants the college students were spending most of the time talking on cell phones.

In addition, they reported that main motivations behind using cell phones were convenience/ mobility, long distance communication, getting help for emergencies and using special features. However, they found that while college students viewed cell phones as a means of keeping in touch with friends and family while they were away, the high school students used then to maintain contact with parents after school and on weekends. Furthermore, the students were more likely than the non-students to view cell phones as novelties and go for the looks and design of the devices.

The above studies conducted on American college students who live on campuses away from home suggested that they use cell phones for a variety of interpersonal communication motives such as personal safety, emergency needs, social interaction, parental contacts, coordination, image management, dependency on communication and privacy management. Additionally, DeBaillon and Rockwell, also found that while age differences exist in the use of cell phones, there were no gender differences particularly in the amount of time spent talking on mobile phones. The next section discusses the study conducted in United Kingdom on mobile phone usage by young people.

United Kingdom

Green (2006) presented the findings from The Socio-Technical Shaping of Mobile, Multimedia Personal Communications (STEMPEC) project at the University of Surrey, which conducted research for three years on young people at the South Central London High School and two "Green Belt" sixth form colleges in the United Kingdom. While the South Central London High School has 1700 students within the age range of 11 to 18 years, the colleges in the "Green Belt" have students ranging from 16 to 19

years. The researchers conducted focus group interviews and observations with the students, members of the staff at the institutes and about 20 parents of the students. The research showed that young people used the mobile phones for micro-coordination as well as hyper-coordination, which involves both the instrumental (managing accessibility) and expressive dimension (social and emotional communication) and for self-presentation within the group. The study indicated that mobile phones allowed more access to peers, which gave them a significant role in the emotional development of children.

In addition, the study pointed out that the mobile phones had an economic, cultural and social value for young people. For example, the cultural value of mobile phones was their use as fashion statements and their social value was the way mobile phones were important symbols of group membership and exclusion. The study also noted that young people used voice calls to connect with family and text messaging when connecting with friends. The author pointed out that young people were aware that parents used mobile phones to check up on them. However, they said that they used mobile phones at home for privacy and as a means to resist parental interference in their personal affairs. Thus they viewed mobile phones as devices that allowed them independence at an early age.

While conducted in a different country and on a younger group of adolescents than the studies conducted in America, Green's findings show similarities with studies conducted on American college students especially regarding their use for coordination, parental contacts, communicating with friends, as fashion statement and for maintaining

privacy and independence from parents. The next section reviews the studies conducted on young people in Norway.

Norway

In Norway, Rich Ling conducted a series of studies (Ling & Helmersen, 2000; Ling, 2000; Ling, 2001; Ling & Yttri, 2005) to examine the adoption and use of mobile phones among children and young people. In 2000, Ling conducted ethnographic interviews with the families in which the oldest child was between 9 and 23 years of age. The material from the qualitative interviews was used to design a questionnaire for a telephone survey with a random sample of 1000 adolescents, aged 13 – 20. The study revealed that there was a dramatic increase in the ownership and use of mobile phones towards the end of the teen years. Adolescents, particularly working boys who used mobile phones for social networking, saw them as symbols of independence from parents. Moreover, boys associated their devices more with their personal identities, whereas girls used mobile phones as functional devices for social interaction.

In a similar analysis of quantitative and qualitative data to examine mobile phone adoption by pre-adolescents (9 – 12 years) and adolescents (13 – 18 years), Ling and Helmersen (2000) reported that most teenagers acquired a mobile phone between 12-16 years of age when they were in middle school. The main reasons for adoption of mobile phones given by both parents and children were related to need and functionality. The qualitative analysis showed that participants thought mobile phones were needed for safety and coordination. This was especially true for fathers and families with divorced parents. The participants, however, also evaluated the ownership of mobile phones in

moral and ideological terms, suggesting that very young children should not be allowed to own mobile phones and that acquiring mobile phones for status display is not morally correct.

The findings showed that within the context of the family, mobile phones were seen as allowing teens a new type of freedom in developing and maintaining social contacts outside the purview of parents (Ling & Helmersen, 2000). The researchers concluded that mobile phones are accelerating the emancipation process of youth, leading to a more independent identity for teenagers leading to anxiety among some parents (Ling & Helmersen, 2000).

Ling and Helmersen (2000) and Ling (2000) found that within young peoples' own peer networks, mobile phones were perceived as having symbolic meaning and were used for functional purposes such as direct interaction and coordination. For example, a mobile phone was seen as a crystallization symbol, a type of identity badge, displaying one's participation within a network and a way for adolescents to step into the adult world. The ownership of a mobile phone indicated that one is accessible and in demand, and ownership of a "correct" mobile phone showed that one was active in the creation and maintenance of personal identity. In addition, the data showed that while the youngest and the oldest respondents liked displaying their mobile phones, those in the middle teen years (ages15 to 18) did not give them as much importance.

In another study, Ling (2001) analyzed two sets of data – one from a study conducted in 1997 when mobile phones were beginning to become popular in Norway and another from two separate sets of interviews in 1999 and 2000 when mobile phones were no

longer considered novelties. The qualitative analysis indicated that mobile phones were popular objects as fashion statements among teens and also held a deeper social meaning as objects of display. The model and the style of mobile phone owned by teenagers impacted their identity within the group.

In a later study, Ling and Yttri (2005) conducted 10 focus group sessions with 40 teens, 20 individuals aged 19 to 23 and 20 parents. Four of these sessions included mixed groups of boys and girls, one session each had only teen girls and only teen boys, two sessions had late teens and two had parents. The findings were similar to the previous studies by Ling (2000) and Ling and Helmersen (2000), indicating that by acquiring a mobile phone, teens were able to have greater control over their lives and more freedom in interacting with their peers outside of parents surveillance. In the peer network, Ling and Yttri (2005) reported that mobile phones were symbols of popularity and held significance as fashion devices. This indicated that although mobile phones served important needs for adolescents, they were also seen as symbolic devices, significant in establishing their identity within peer groups.

Together, these studies (Ling & Helmersen, 2000; Ling, 2000; Ling & Yttri, 2005) revealed similar findings with studies conducted in America and United Kingdom. The findings revealed that mobile phones serve the important needs of adolescents for accessibility to parents and friends, emancipation from parents, security and micro-coordination. In addition, adolescents also used mobile phones as fashion statements to express personal identity and to maintain peer relationships outside the purview of parents. The researchers suggested that accessibility and emancipation from parental

control are needs unique to adolescent life, thus indicating the reasons why mobile phones have become popular within this age group. The next section discusses the studies conducted in Finland.

Finland

Finland is home to the world's leading cell phone manufacturing company, Nokia; therefore, it is not surprising that the country achieved near saturation in terms of mobile penetration levels as early as 2002 (Puro, 2002). Puro (2002) pointed out that young people are most important consumers of mobile phones in Finland. Kasesniemi and Rautiainen (2002) analyzed data collected by the Information Society Research Center (INSOC) through interviews of 1,000 children, youths and adults to examine text messaging behavior among adolescents aged 13 − 18. The study found that the text messaging culture is giving rise to cultural practices such as message collecting, chain message circulating and collective reading and composing of messages, indicating that text messaging is a collective experience that expresses adolescents' identification with other teenagers.

Oksman and Turtiainen (2004) analyzed the data using a symbolic interactionism theoretical framework to identify the meanings that young people attribute to mobile communications in their everyday lives. The data consisted of 168 individual and group interviews of teenagers lasting from one to three hours and conducted between spring 2000 and winter 2002. The findings revealed that mobile phones were considered as an organic part of daily life rather than as status objects or fashion accessories. The young people used mobile phones as private communication devices to define personal space

and to create space in their relationships with friends and parents. They were seen as increasing freedom in teens' relationships with their parents and allowing for opportunities to explore the potential of new relationships. The young people used text messages for emotional communication, which could include romantic messages as well as passing on chain messages with mundane content. The study pointed out that while both the genders adopted cell phones equally, there were differences in their attitudes and use of the device. For example, the girls expressed more reservations about developments in technology and were more likely to send longer and more messages.

The studies in Finland on teenagers showed both similarities and differences regarding mobile phone usage by young people in America, United Kingdom and Norway. While on one hand, the studies with Finnish teens showed similarities with studies conducted in other countries such as the use of mobile phones for creating personal space and maintaining privacy, on the other, the studies also showed that they did not really use the symbolic aspects of mobile phones to express a fashionable image. The next section discusses studies on mobile phone usage in Turkey.

Turkey

Ozcan and Kocak (2003) conducted telephone interviews with 650 individuals, chosen through systematic random sampling, in the city of Konya in Turkey. Seventeen incomplete interviews were removed from the dataset, reducing the number to 633 interviews. The questionnaire consisted of questions, on uses and gratification motives of cellular use from previous studies, mobile telephone behaviors and demographic measures. The results showed that the top three motives for cell phone use included

status/relaxation (showing off or using cell phones to talk for pleasure), followed by instrumentality/business (cell phones make life easier because they are convenient and allow a user to do business from everywhere) and security/sociability (cell phone use for personal security and keeping in touch with family and friends), in that order. In addition, the study found that the experience with the cell phone, the brand of the phone and the place of use (workplace & car) impacted the amount of cell phone use. The results indicated that those who used cell phones for status/relaxation were less likely to use them for communication. On the other hand, those who used them for security/sociability used them more often for communication purposes. The next section reviews the studies conducted in Russia.

Russia

Lonkila and Gladarev (2008) conducted qualitative interviews with 14 mobile phone users between 19 and 30 years of age in St. Petersburg, Russia, to investigate the influence of social networks on adoption and use of mobile phones. The findings showed that personal networks had an influence on purchase decisions regarding cell phones and also on communication patterns. The authors also noted that the use of the cell phone is creating new intimate spaces in public or semi-public areas and leads to the formation of several individual dyads disrupting the dynamics of extended Russian family. Because individuals could interact with their partners more and at all times, leading to more intimate relationship, they had less time to interact with other family members, thus disrupting the cohesiveness of the family. Therefore, the individualizing or personalizing

effect of cell phones may have a greater impact in Russia than elsewhere. The next section reviews studies conducted in Japan.

Japan

Japan is considered to be a leader in the evolution of mobile communications. Academic researchers have been conducting research on the adoption and use of mobile phones in Japan since the mid-1990s. This section presents a summary of the studies that examine the use of mobile phones by young people in Japan.

In Japan, mobile phones are popularly called "keitai", meaning portable. Drawing from a series of ethnographic studies conducted at the DoCoMo House research lab at Keio University, Ito (2004) explained that the popularity of mobile media in Japan was first observed as the pager revolution among young girls in the early nineties. The heavy adoption of pagers to send mobile messages led the mobile phone service providers to launch short message services (SMS) in the mid-1990s. This in turn resulted in an increase in the adoption of mobile phones by young people during the latter half of 1990s, when they adopted mobile phones to take advantage of the low-cost text messaging services. Towards the end of the 1990s, mobile Internet service was launched in Japan, which made mobile phones an extremely popular device among the younger generation for personal communication. The heavy use of mobile phones by young people changed their image from being business communication tools to devices for personal communication and play (p. 14, Ito, Matsuda & Okabe, 2005). This caused a moral panic in Japan around the belief that young people used mobile phones for the

transgression of social norms and for trivial and useless chatter (Matsuda, 2006; p. 25; Ito, Matsuda & Okabe, 2006).

Ito (2004) analyzed the data from the ethnographic fieldwork, carried out in the two cities of Tokyo and Osaka, which included in-depth interviews and a set of communication diaries in which users recorded their mobile phone use. Ito noted that mobile phone adoption and use in Japan are linked to contextual factors such as urban ecologies and a range of technical and cultural factors. For example, the densely populated city of Tokyo and its socio-cultural norms, which do not allow for disruptions in public spaces, contributed to the heavy use of text-based communication.

Using the techno-social framework, Ito (2004) analyzed ethnographic interviews to highlight the nature of mobile phone use in Japan as personal, portable and pedestrian. Ito explained that the personalization of mobile phones was particularly strong for young people who were living with their parents since they had very few places where they could have private conversations with their friends and loved ones without someone overhearing their conversations. Thus mobile phones were being used for "tele-nesting", where the personal medium of the mobile phone became the glue for cementing a space of shared intimacy between two people. The portable qualities of the mobile phone not only referred to the transportability of mobile phones, but also to the practice of carrying out lightweight conversations in various settings, among a group of intimate circle of friends. This kind of social formation was termed as "tele-cocoon" or "full-time intimate community" by Japanese researchers. The on-the-street dimension of mobile phones and

the mundane character of mobile communication were identified as lending a "pedestrian" character to mobile phone usage in Japan.

In a later study on Japanese youth, Habuchi (2006) also revealed similar findings as Ito (2004), on the use of mobile phones in peer relationships. Habuchi (2006) analyzed qualitative and quantitative data to indicate that mobile phones offer two types of expressive functions to young people – first, they allow for opportunities for new interpersonal relationships, and second they help to maintain the familiar and existing relationships, which contribute to the formation of a tele-cocoon. In addition, Habuchi found that young people were using them for maintaining pre-existing relationships.

While Ito (2004) and Habuchi (2006) showed that Japanese youth were using mobile phones for supporting existing peer relationships, Ishii (2004) found that they were also used in the formation of virtual relationships. Ishii (2004) examined mobile internet usage in Japan from a social and cultural perspective by conducting three nationwide surveys with over 2,000 respondents between the ages of 12 to 74, in November 2000, November 2001 and November 2003. Ishii concluded that the use of the mobile internet has evolved due to user needs rather than as an impact of technology or policy. For example, Ishii found that the use of mobile phones for emotional communication has led to virtual relationships in which individuals do not reveal their personal information but disclose their personal emotional states to virtual strangers. This use has also popularized the use of picture mail, which reveals the emotional states of those communicating. Therefore, Ishii concluded that the use of mobile Internet serves to encourage sociability among friends.

Similarly, Ishii (2006) analyzed the data from a two-wave panel survey conducted in Japan, in December 2001 and December 2003 to investigate gender differences in the use of mobile phones and personal computer-based internet in personal relationships. In the first wave, a total of 1,878 respondents between the ages of 12 – 69 years completed the questionnaire. In the second wave, a total of 1,245 respondents completed the questionnaire. The results indicated that students, specifically females, were more likely to use mobile mail rather than make calls, whereas males were likely to use mobile voice phones. Additionally, the study also found that the less socially skilled people were likely to use the mail feature on their mobile rather than the phone. Further the study found that mobile mail was used to support a closed network of friends, whereas PC e-mail was used to promote distant friendships.

In addition, Igarashi, Takai and Yoshida (2005) conducted a longitudinal study to examine gender differences in the development of face to face (FTF) social networks and the use of mobile phone text message (MPTM) communication for social network development among first year undergraduate students aged 18 – 23 in Japan. Their study indicated that FTF networks were twice the size of MPTM networks and that MPTM communication was used to maintain friendships after first establishing them through FTF contact. In addition, they found that males and females sent an equal number of text messages; however, females were more active than males in their MPTM social network even at an early age but they rated their FTF social networks as more important than males did.

While the previous studies in Japan showed the use of mobile phones for communication purposes and investigated gender differences, Okada (2006) provided evidence that they were also used to express individuality. Okada (2006) analyzed the statistical data and interviews to conclude that a range of factors impact the adoption and use of mobile phones among young people. Okada (2006) inferred that the ability to personalize mobile phones and mobile communication devices, which allowed youth to express their individuality, were important factors contributing to the popularity of mobile phones among youth.

In another study, Kato (2006) examined students' videos on mobile phones and concluded that mobile phones are an indispensable part of youth culture. They have become such a mundane presence in young people's lives that it is impossible for them to imagine living without them. Thus, indicating a dependency on the mobile phones.

The studies from Japan indicate that geographical and socio-cultural contexts play an important role in the adoption and use of mobile phones. These studies also reveal that mobile phones are highly popular technologies for communication among young people in Japan and that they are used for maintaining friendships and cultivating virtual friendships. The studies also show that young people in Japan use mobile phones for expressing individuality and for expressing emotional states and for trivial conversations. The next section reviews the studies conducted in China.

China

Researchers have conducted a series of studies to understand the use of mobile technologies such as pagers and mobile phones in China from the users and gratifications perspective.

Leung and Wei (1998) conducted a survey of 883 university students in Hong Kong to examine the gratifications obtained from the use of pagers. The sample consisted of 47.5% male and 52.5% female respondents in the age range of 18 to 33. The analysis revealed a five-factor model of pager gratifications structure, which included fashion and status (feeling of being grown up and using pagers to look fashionable and stylish); sociability (such as scheduling appointments as well as for affection reasons); entertainment (having fun, playing tricks and relieving boredom by contacting people); information – seeking (such as access to stock updates, news headlines, weather and traffic conditions), and utility factors (such as alarm clock usage and sorting old messages). In addition, the results indicated that sociability was the strongest predictor of pager use and that females were more likely than males to use pagers for sociability. Also, late adopters were more likely to use pagers for fashion and status than early adopters.

In one of the first studies on cell phones in Hong Kong, Leung and Wei (1999) conducted a computer – assisted telephone survey with a random sample of 834 respondents, age 18 or older, of which 446 were mobile phone users and 388 were non-users, to examine the adoption of cell phones from a diffusion of innovations approach. A pilot study was conducted first to identify key variable measures which included

perceived attributes of mobile phone, adoption intention, ownership of telecommunication technologies, contacts with change agents, mass media use and socioeconomic variables. The results suggested that mobile phone have-nots were older females with lower monthly household income who were not engaging in business occupations. Although socioeconomic factors such as age, income, profession and gender predicted the ownership of mobile phones, further analyses showed that age was the only significant predictor, suggesting that younger have-nots were more likely than older ones to adopt cell phones in the future.

Leung and Wei (2000) analyzed their previously collected data (Leung & Wei, 1999) to investigate the gratifications obtained from cellular use. Their findings were consistent with previous research indicating that mobile phones were used for sociability, relaxation or entertainment, instrumentality, reassurance, and fashion and status. The study also revealed some unique dimensions of cellular use, not found in previous studies, such as mobility and immediate access. Furthermore, the study suggested that mobility, immediacy and instrumentality were the strongest predictors of cell phone use. The study also found that differences in age, gender and occupations impacted the gratifications sought from cell phone use. For example, males tended to use cell phones mainly for instrumental purposes whereas younger females used them to make longer calls while on the go.

Wei (2006) conducted a survey in China's seven most prosperous cities to examine the relationships between the lifestyles of urban Chinese consumers and the adoption and use of pagers and mobile phones. The 7,094 respondents (roughly 1000

from each city) were chosen through a multistage stratified cluster probability procedure from households with an age range from 16 to 60. The researcher used segmentation analysis to divide respondents into five clusters depending on their lifestyle traits. The five clusters included status-quo (those content with status-quo); strugglers (those who did not identify with advertising, shied from social occasions and had little influence over others); value-seekers (those who were financially well-off but did not seek a fancy and westernized lifestyle); climbers (those financially constrained but seeking a westernized lifestyle and dependent on advertising); and yuppies (those obsessed with making money and achieving higher status but not pursuing a conspicuous westernized lifestyle). While strugglers fit the description of being poorly educated with low incomes, the yuppies were the youngest, best educated and most affluent, leading a materialistic life. The results suggested that Chinese yuppies were more likely to adopt pagers and mobile phones than the other groups. The next section reviews studies conducted in South Korea.

South Korea

Yoon (2003) conducted ethnographic interviews with 33 teenage students (16 – 17 years) to examine their use of mobile phones from the perspective of the disembedding theory of globalization. The "disembedding" theory suggests that new technologies are leading young people to be more individualistic and disengaging them from their local culture. However, Yoon's study pointed out that in South Korea, the use of mobile phones by young people suggested that they are used for reinforcing traditional norms. The interviews showed that parents maintained control over adoption and usage of mobile phones by young children. For example, parents paid the mobile phone bill for

their children, hence the parents could confiscate children's cell phones to punish them. Further the study revealed that the young people shared mobile phones with each other and also used them to remain popular within their peer group, indicating the maintenance of a traditional cultured practice of sharing. Furthermore, the study suggested that the practice of sharing was more popular among female respondents. While males used the mobile phone in functional ways, females were more likely to use it to create intimate networks.

Yoon (2006) conducted another study to identify ways in which young people were represented in the popular discourses related to mobile technology in South Korea between 1997 and 2002. Examination of government documents, mass media and consumer culture showed that discourses around the ownership of mobile phones by young people indicated a sense of anxiety about getting involved in a global culture. For example, one of the first surveys conducted by the government suggested that the personalized use of mobile phones by young people may increase their chances of engaging in teenage prostitution. Major newspapers expressed concerns over use of mobile phones and recommended frugality in their use specifically by young people and women. Contrastingly, marketers positioned mobile phones as integral to family and reinforcing local traditions in order to avoid social concerns.

Taiwan

Wei and Lo (2006) conducted a survey of Taiwanese college students to explore the relationships between gratifications sought from cell phone use and the level of respondents' social connectedness in terms of loneliness and shyness. The 909

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respondents, including 378 males and 531 females, were chosen through a multi-stage cluster sampling procedure from a pool of 26 colleges in Taipei. The results indicated that affection was the strongest predictor of cell phone use for family – oriented calls and women were more likely than men to use cell phones to express affection and for making socially-oriented calls to maintain social relations. Males, on the other hand, were more likely than females to use cell phones for seeking information. Contrastingly, the study reported that the lonely respondents or those who were less socially connected adopted cell phones late and used them less for social purposes and more as markers of fashion and status. The next section reviews studies conducted in India.

India

In India, Wei (2007) and David (2007) conducted dissertation length studies to examine mobile phone usage among adult women and working young adults. David (2007) conducted a mixed methods study which included interviews, cell phone surveys with Indian women age 21 and older, and qualitative reading of cell phone advertisements in India. In August 2003 and May 2004, David conducted 40 face-to-face and 7 telephone interviews with Indian women in India and United States, who were chosen through a snowball sampling technique. In the second phase, David conducted a survey in September 2006 with 182 cell phone users, 78 female and 104 male, chosen through a snowball sampling procedure, to understand gender differences regarding cell phone usage.

The results from the qualitative interviews suggested that women viewed the cell phone as an "electronic leash" or a "medium of control" and felt that it tied them to

family responsibilities even when they were away from home. Further, the study indicated that while women used cell phones for social purposes such as talking to family, their husbands used it for professional purposes. This suggested that cell phone use reflected traditional gender stereotypes which expect women to take care of family. The study also concluded that in cell phone advertisements women were portrayed in stereotypical fashion. For example, the ads showed women using cell phones for social roles and responsibilities.

Wei (2007) conducted another dissertation length study on the use of cell phones by young people for supporting intimate personal and romantic relationships in Bangalore, India. Wei conducted qualitative interviews with 20 young urban middle class professionals in the age range of 18 – 30, comprising of 16 males and 4 females. In addition, Wei asked the participants to fill out paper-and-pencil questionnaires and to keep a mobile diary using the log form for four days. The findings revealed that participants used the mobile phones to support romantic relationships and that they played an important role in sustaining romantic relationships in which the participants were physically separated (such as in different cities) or culturally separated (such as through parental disapproval of personal contact). Thus, mobile phones were used not only to coordinate meetings but to have lengthy conversations. The participants also used mobile phones to express emotions and for nonverbal communication such as switching off their phones to express anger or saving text messages for sentimental reasons.

Overall the studies comparing the use of mobile phones across cultures and in individual countries have revealed that young people use mobile phones mainly for

interpersonal communication through voice calls and text messaging. They acquire cell phones for a variety of interpersonal communication motives such as safety, emergency needs, coordination, parental contacts and social interaction with peers. The studies also inform that cell phones are used for age-related needs such as managing personal images by using cell phones as fashion statements or status symbols; or using them as personal devices to manage privacy and develop friendships outside the purview of parents. The next section reviews the studies on the use of mobile phones as media devices.

Studies on mobile phone usage for media-related purposes

Since the evolution of mobile phones as media devices is fairly recent, the studies investigating their use as media devices for news and personal entertainment are fewer in comparison to those investigating their use for communication purposes. This section discusses some of the studies that inform about the use of mobile phones as media devices.

While previous researchers primarily looked at the role of mobile phones for interpersonal communication purposes, Auter (2007) conducted a study to compare the use of mobile phones for communication and media-related purposes from a uses and gratifications perspective. Auter (2007) conducted a survey with 182 young adults at a larger southern university in America. The results revealed that the young people used cell phones for about one and a half hours per day primarily for voice calls. The gratifications obtained from cell phone use included affection, inclusion and situational control with peers. Overall, the study underscored the importance of cell phones for interpersonal communication activities among college going young adults. It is possible

that in this study American college students did not use mobile phones for media activities because they had other media devices such as laptops, personal computers, or television for their personal use.

While Auter (2007) found that American college students were not necessarily using mobile phones as media devices, Economides and Grouspoulou's (2008) study on Greek university students aged 18-25 years showed that they were using mobile phones for both interpersonal communication and media services. The researchers conducted a survey with 416 students, yielding 384 completed questionnaires, which included 55% females in the sample. They found that college students in Greece were mainly using mobile phones for making calls or sending text messages, but that some of them used the mobile phones for taking photos, recording videos and activating reminders. In addition, the study revealed that students did not connect to the internet or send emails via their mobile phones. The results showed that there were almost no gender differences regarding the use of mobile phones except that females tended to make more calls. Thus, the study showed that college students used mobile phones for both interpersonal communication and for media-related needs. The next section discusses investigation of mobile phone usage in Turkey.

While Auter (2007) and Economides and Grouspoulou's (2008) compared the use of mobile phones for interpersonal communication and media purposes, Westlund (2008) analyzed the results from five different surveys conducted in Sweden in 2005, 2006 and 2007 to examine the diffusion and adoption of mobile phones for multimedia content, specifically their use to receive news. The sample for the three surveys that measured

diffusion of usage included individuals within the age-group of 15 to 85 years, while the two surveys that analyzed adoption attitudes included the age range of 16 to 65. The results indicated that, although the Swedes possessed multi-media phones, they were using those features in a very limited manner. The finding revealed that the early adopters were highly educated males between the age-group of 15 to 49, who were greatly interested in technology and had the latest cell phones. They read online news and free dailies for their news consumption. Additionally, the author concluded that mobile devices served as a supplementary news medium to other news media among specific user groups.

Similar to Westlund (2008) who found some evidence for the use of mobile phones for news, Hoplamazian and Feaster (2009) used the time-space diary method to examine the news habits of young adults (ages 18 – 25) at a large Midwestern American University. Their study revealed that young adults used internet technologies such as computers and cell phones to seek specific news stories and news for utilitarian purposes, whereas they viewed newspapers as a more leisure or entertainment activity. Thus, it is possible that advancement of technology and availability of news services may have changed the use of technology.

Overall these four studies conducted on the use of mobile phones for media and news purposes have revealed that although in 2007 (Auter) they were probably not used much for media services, their use for media and news was increasing. Low use could be because in 2007 these services were new and probably expensive. Thus, the studies

provide some indication that with the advancement of technology the use of mobile phones for news and media services may increase.

Identifying Research Gaps

The studies discussed above show that the investigation of cell phone usage among youth is an emerging topic of research among scholars. The above mentioned studies have looked at a variety of issues regarding the use of mobile phones by young people across the world. For example, the academic studies have revealed that young people acquire and use mobile phones for various motivations and needs related to communication, media and age. For example, the communication needs include their use for safety and emergency, for coordination, for parental contacts, for social interaction with peers. The studies also show that adolescents and young adults use cell phones for expressing personal identity by using mobile phones as fashion items, for maintaining existing friendships, for developing virtual relationships, for supporting romantic relationships, for maintaining privacy and for independence from parents especially in developing friendships outside their surveillance. The recent studies that have investigated the use of mobile phones for media-related needs also show that they are being used for accessing news and for personal entertainment via photography. While pertinent from an academic point of view, these issues have not been examined in the Indian context, which has the second largest population of mobile phone subscribers in the world. Therefore, this study is designed to conduct an investigation of these issues in the Indian context by examining the use of mobile phones by young people.

Additionally, although there are a few studies which provide information on mobile phone usage in India, all these studies have been conducted on populations in the southern part of India, therefore providing an incomplete picture. India is a vast country and the cultures in the northern and southern parts of India are very different; therefore, it is important to understand if mobile phone usage differs across regions. Therefore, it is important to examine the similarities in differences in mobile phone usage by young people in different regions of India.

Further, the study conducted by David (2007) showed that the patriarchal culture in India impacts the mobile phone usage by males and females. However, David (2007) examined gender differences among adult populations and most of her sample consisted of married couples. The above studies on younger population show that mobile phone usage differs according to age-group of the users. Therefore, it is important to examine if gender differences in mobile phone usage exist across age-groups.

The next chapter describes the research questions and the methodology used in this study.

CHAPTER 3: RESEARCH QUESTIONS AND METHODS

This chapter first outlines the main research questions and hypothesis for this study. Then it describes the methodology used in this dissertation to investigate them.

Research Questions and Hypothesis

On the basis of the theoretical approaches and the literature review presented in the previous chapter, this section outlines the specific research questions investigated in this dissertation. As mentioned in the previous chapter, several researchers have applied the uses and gratifications approach in different cultural settings to reveal the various needs that young people may be fulfilling through the use of mobile phones. Therefore, this study applied the uses and gratifications approach to investigate if young people in India are using mobile phones to fulfill similar communication, media and age-related needs. Hence, the first research question for this study is:

Q. 1. What are the different communication-, media, and age-related needs that young people in India may be fulfilling through the use of cell phones?

According to the social-cognitive domain theory, young people living in all cultures develop personal, social and moral concerns. Further the model states that by the time individuals are young adults they will show express personal autonomy. Therefore, the second research question for this study is:

Q. 2. Whether young people use mobile phones to express individuality and maintain independence in their use?

Further, the social-cognitive domain model suggests that young people in all cultures use different forms of reasoning; hence, this study assumes that young people in India will use all three forms of personal, social and moral reasoning to assess their use of mobile phones. Therefore, one hypothesis proposes in this study is:

H1: Young people in India will use all different forms of reasoning such as personal, social-conventional and moral in their use of mobile phones.

Social-construction of technology (SCOT) approach suggests that individuals living in two different locales having different cultural environments will use cell phones differently. Therefore, it can be assumed that there may be differences regarding the use of mobile phones by individuals living in two different cities. Therefore, the fourth research question identified in this study is:

Q. 3. What are the city-wide differences in the use of mobile phones by young people residing in the two cities of Mumbai and Kanpur in India?

Finally, this study will examine gender differences in the use of mobile phones. India is a patriarchal society and the social rules are different for men and women. While men enjoy more social freedom, women have to conform to traditional norms. In one case, when an adult woman belonging to the Sindhi community eloped with a Muslim young man and got married, the Sindhi community issued a religious order banning the use of technologies such as mobile phones and three-wheelers, because leaders feared

that these technologies are allowing women freedom to take control over their lives and therefore that they should not be using them. Further, the study by David (2006) in India revealed that women viewed mobile phones as electronic leashes and devices through which traditional norms are being reinforced. However, in her study, David (2006) examined the use of mobile phones only among adult men and women who were married. Therefore, this case study proposes to examine cell phone usage by unmarried males and females in the young adult age-group. Thus, the fourth research question for this study is:

Q. 4. What are the gender differences in the use of mobile phones by young people in India?

The next section describes the methodologies used to investigate the research questions posed in this dissertation.

Rationale for Research Methodology

Researchers investigating the adoption and use of new technologies among children and young people have either used surveys (Odell, Korgen, Schumacher, Delucchi, 2000; Ishii & Wu, 2006; Leung & Wei, 1998; LaRose, Mastro & Eastin, 2001; Campbell, 2007; Katz & Sugiyama, 2005; Wei & Lo, 2006; DeBaillon & Rockwell, 2005; Chang, Lee & Kim, 2006) or a combination of qualitative and quantitative methods. This dissertation also uses a mixed-methods approach using qualitative and quantitative methods.

Scholars recommend using qualitative methods especially for exploratory studies that investigate little-known phenomenon. Further, qualitative methods such as ethnographic observations allow researchers to observe participants in their natural settings and in-depth interviews allow researchers to gain access to participant's feelings and subjective explanations of experiences and meanings attached to the phenomenon (Denzin & Lincoln, 2003; Marshall & Rossman, 1999). Therefore, through qualitative methods, researchers can gain deeper understanding, uncover hidden meanings and form judgments about the issues associated with the phenomenon by being a part of the participants' natural habitat.

However, because qualitative methods involve subjective explanation of events, they may include a researcher's personal bias. Further, qualitative research can only be conducted with very few participants, thus limiting the ability to generalize results for larger populations. Therefore, researchers usually recommend conducting quantitative research with larger populations to form an objective analysis of the phenomenon and to check the validity of findings for larger populations. Therefore, the research for this dissertation was conducted in two phases: phase one involved conducting qualitative in-depth interviews and in phase two surveys were conducted.

Qualitative research: In-depth interviews

Although there are many qualitative methods available to researchers investigating new phenomenon such as ethnographic observations, focus-groups and long interviews, this study used the long interview method. Qualitative researchers recommend using long interviews to investigate a new phenomenon and identify the

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issues and implications associated with it (Marshall & Rossman, 1999; McCracken, 1998). Further, the ethnographic observations require spending long periods of time in participants' natural habitat which was not possible due to time constraints. Although researchers have used focus-groups to investigate the use of mobile phones among young people (Aoki & Downes, 2003), the possibility of using them for this research was ruled out for practical reasons. First it would have been difficult to find a setting to conduct focus-groups and second, it may have been difficult to gather participants in one place at one time. Also it does not allow the researcher to observe participants in their natural setting.

Therefore, it was decided to conduct in-depth interviews with young people in their natural environment to observe and gain insight into their mobile phone usage. A semi-structured questionnaire was designed for long interviews based on the information from review of literature of previous studies. Additionally, informal discussions were conducted with young people who came to United States as students at University of Maryland in August 2007. Because these students belonged to the similar age-group of the participants used in the study, it was assumed that their use of mobile phones in India would be similar.

The long interviews were conducted using a semi-structured interview schedule for which the questions were developed according to the research questions and hypothesis proposed for this study. The interview schedule was organized in six different sections. The first section titled background information asked questions regarding the general information of the participants. The second section titled acquisition of cell

phones was designed to get information about how young people acquire cell phones. The third section titled general usage of cell phones asked questions regarding the main purposes for which young people use cell phones. The fourth section titled mass media and internet usage on cell phones was designed to elicit information regarding the media habits of participants and their use of cell phones for media- and internet-related services. The fifth section titled perceptions of cell phones was designed to gather information regarding the symbolic perceptions and usage of cell phones by young people. The sixth section titled social functions was designed according to the social-cognitive domain categories to elicit information regarding personal, social and moral reasoning in the use of mobile phones by young people. This last section of the interview schedule contained the following seven sub-sections: personal autonomy, friendships, parental jurisdiction, college authority jurisdiction, government jurisdiction, social-conventional transgression and morality (see Appendix A for the interview schedule).

Because qualitative research may involve some form of researcher's personal bias and can only be conducted with limited number of participants, therefore in the second phase quantitative research was conducted to confirm these findings on the larger section of population and to examine city-wide and gender differences.

Quantitative Research: Survey

The second phase of this study used the survey method to test the findings of qualitative research on a larger sample of college-going young adult populations and to examine city-wide and gender differences in the use of mobile phones among young adults. Although a variety of quantitative techniques are available such as experiments,

surveys and content analysis (Poindexter & McCombs, 2000), surveys are considered to be the most suitable method for user studies such as this one. Experiments are usually conducted in closed-laboratories and test cause-effect relationships between specific variables and content analysis usually involves quantitative analysis of media materials; therefore both of these methods were not suitable for this research.

There are several different types of surveys that are available to quantitative researchers, for example, mail, telephone, online, or face-to-face (Poindexter & McCombs, 2000). Although mail, telephone and online surveys are cheaper to conduct and are usually less time consuming, they are not convenient to conduct in India. The mail surveys are not preferred in India because the Indian postal system is not that reliable and it is easy for letters to get lost in the mail. Furthermore the landline penetration is very low in India. For example, in September 2007 there were only 39.58 million landline subscriptions all over India. Therefore, it is difficult to conduct such surveys on samples that are representative of populations. Also it is unlikely to find young people using landline telephones at home. Similarly internet penetration is quite low in India and many young people still don't use internet regularly, therefore, it was decided to conduct face-to-face, paper-pencil surveys. Despite the fact that face-to-face surveys are expensive to conduct, they also yield a high response rate and more completed forms. A well-established survey agency, C-Voters, agreed to conduct surveys free-of-cost for this research.

The survey questionnaire was designed on the basis of results obtained after the qualitative analysis of the long interviews. The results from the qualitative research were

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organized into categories which were then put in question form. Because the survey was conducted immediately after the Mumbai attacks in which cell phones were widely used for news, therefore specific questions were added to investigate their usage for news during the attacks. The survey questionnaire consisted of twelve sections. The first section contained questions regarding background information on the participants including demographic information, their socio-cultural orientation and their access to different forms of media. The second section consisted of an open-ended question asking respondents the first three words that came to their mind when they think of cell phones. The third section consisted of questions regarding the acquisition of cell phones – that is how many cell phones they have, the reasons for acquiring a cell phone, the means of acquiring cell phones and the factors and features that are considered important while acquiring them. The fourth section was designed to ask questions regarding the symbolic perceptions and usage of cell phones such as perception and use of cell phones as western, fashionable and status item. The fifth section contained questions regarding the general usage of cell phones to compare which features of cell phones were more popular among the young people. The sixth section asked questions regarding the use of cell phones as a personal technology. In the seventh section, the questions pertained to the use of cell phones as a social technology to communicate with friends. The eighth section asked specific questions regarding the use of cell phones as news and information devices. The ninth section contained questions regarding the use of cell phones to share and store media content. The tenth section titled jurisdiction contained three subsections to elicit responses about the use of cell phones at home, in college and in public places and whether parents, college authorities and government should put restrictions on cell

phone usage. The last two sections asked questions about acceptable and unacceptable mobile phone behaviors and likes and dislikes about mobile phones.

The survey was designed in English and then was translated in Hindi in consultation with a translator in India who was familiar with the local language of the participants. The survey form in English that was used for research in Mumbai is presented in Appendix B and the one in Hindi that was used in Kanpur is presented in Appendix C. Since the survey form used in two different cities were in two different languages it may slant the results.

The survey form was pilot-tested on five Indian males and females who were students at University of Maryland and had recently arrived from India to United States for higher education. These students were in the age range of 18-25 years and had been in United States for only two months. Therefore, it was assumed that their mobile phone usage in India would be similar to that of the sample population of this study. They were briefed that they should respond to the survey questions on the basis of their mobile phone usage in India.

<div align="center">**Data Collection**</div>

Qualitative Study: In-depth Interviews

Participant selection and recruitment. In the first phase, in-depth interviews using asemi-structured interview schedule were conducted with 30 young adults within the age-range of 18 – 25 years in the cities of Mumbai and Kanpur in December 2007 and January 2008. In each city, 15 individuals were interviewed including seven women and

eight men. A snowball sampling technique was used to recruit students for qualitative interviews. The researcher asked the students on college campuses if they would like to participate in the study and some of the study participants recruited their friends. In Kanpur, students were also recruited through researcher's family and friends. Thus the recruitment process which progresses in this manner through connections can be compared to a rolling snowball.

Interview procedure. In Mumbai, the interviews were conducted mainly in an open – air setting on the college premises or at a nearby café where students hangout. In Kanpur, the interviews were conducted at a coaching institute and at the residence of one of the interviewees. At the beginning of the interviews, participants signed a consent form approved by the Institutional Review Board (IRB) (Appendix D). In Mumbai, all the participants chose to give the interviews in English, whereas in Kanpur, almost all except for a couple of females chose to be interviewed in Hindi. Each of the interviews lasted over an hour and was digitally recorded. The interviewees received no compensation for participating in the interviews. A detailed description of observations made and experiences gained during the interview process in two cities is given below to illustrate the difference.

Interview process in Mumbai. In Mumbai, the interviews were conducted in two different locations – at Mithibai College located in suburbs of Mumbai and at HR College which is situated in South Mumbai. In addition, interviews were also conducted at a café nearby HR College where students gather. The interviews at Mithibai College were conducted in the open – air courtyard in the middle of college. The courtyard consists of

two college cafés and during the day in between classes, a large number of students hang out there to grab a bite or just to interact with friends. It was interesting to observe that most of the students in this area were either talking on their mobile phones, listening to music on their mobile phones or laughing at texts received on their mobile phones while showing it to their friends. In one case, a few students were huddled around watching the tiny screen of a mobile phone. When asked what they were doing, they said one of the students has TV on his mobile phone and all of them were watching it. The interviewees were recruited by approaching the students directly and sometimes students asked their friends also to participate in the interviews. Although the area was a little noisy because of the informal setting, a quite corner was spotted where most of the interviews were conducted.

Unlike the Mithibai college experience, recruiting students at the HR (Hassaram Rujhimal) College of Commerce and Economics was not very easy since the college consisted of just one building and a college café squeezed in the corner at the back of the building was too small for holding interviews. Therefore, a student leader was contacted to see if he could help recruit students. Here too, students were randomly asked if they wanted to participate in the interviews. The interviews with students from this college were conducted at a nearby café frequented by the students. Although the café was busy, it was easy to identify a quiet spot where the interviews could be conducted and recorded. A few participants were recruited at another café in the same area which was highly popular among students because it sold hukkahs. Here the students came to hang out with friends and have a smoke.

At all three locations in Mumbai, students who agreed to participate in the interviews appeared very enthusiastic about sharing their mobile phone experiences and did not appear hesitant or shy about discussing any intimate issues or activities. Some of them even mentioned that the interview was over very quickly, since they were really enjoying talking about their mobile phone experiences. Since emails and mobile phone numbers were exchanged with the interviewees for contact purposes, some of them inquired about the study a couple of days later and sent emails or called if they spotted news on mobile phones from mass media. From their enthusiasm, it was very apparent they felt very attached and emotional about their mobile phones.

Interview process in Kanpur. In Kanpur, it was slightly challenging to find the interviewees because students do not go to colleges regularly unless they need to take an exam. However, it was learned that most students enroll in regular colleges and take lessons for competitive exams at coaching institutes. Therefore, the proprietor of a coaching institute in Kanpur was contacted for permission to recruit students and conduct interviews. The coaching institute consisted of three rooms on the second floor of a three storey building - one large room where about 100 students attend classes, a very small room where supplies are kept and the proprietor's office. Since students did not really hang around at the coaching institute, on day one students were asked to give their names if they wanted to participate in the study. A schedule of interviews was prepared according to the times that were suitable for the interviewees and they were asked to report at the coaching institute for the interviews. All the interviews at the coaching institute were conducted over a couple of days before and after the class time in the big classroom. At the time the interview was conducted, the classroom was nearly empty

except for occasional cleaning staff. Except for a couple of interviews with females, all the interviews conducted at the institute were with male students.

The rest of the interviews with female students in Kanpur were conducted at the residence of one of the interviewees who was recruited through the researcher's relative. She contacted the female students in her apartment building. Since the parents of the female participants were not comfortable with them going elsewhere for the interviews, the interviews were conducted at the residence of one of the female participants. All the interviews were conducted in a closed room. Finally, a couple of male interviews in Kanpur were recorded at the home of the researcher's house in a closed room.

Unlike Mumbai, in Kanpur it was hard to spot students talking on their mobile phones or sharing them with each other probably because the coaching institute had strict rules about students using mobile phones on the premises. Since students did not go to college, it was difficult to observe them in an informal setting such as college canteen. Also, at the coaching institute it was apparent that males and females didn't interact with each other much. Furthermore, in Kanpur it appeared that some of the students, mainly females, were a bit hesitant to discuss intimate issues related to mobile phones except for one female who was staying at a hostel in Delhi. From the interviews it appeared that males and females in Kanpur did not have much opportunity to interact with each other and females were more conservative in discussing personal issues related to mobile phones.

Quantitative study: Survey

Sample. In the second phase of the study, a face–to–face paper and pencil survey using a structured questionnaire form was conducted by the research agency C-Voters in India. The survey was administered to 400 college-going young adults in the age range of 18 to 25 years in the two cities of Mumbai and Kanpur. In each city, 200 participants filled out the survey. In Mumbai, the participants included 105 males and 95 females, whereas in Kanpur, the participants included 99 males and 101 females. The surveys in both the cities were carried out from 16th to 18th February, 2009.

Sample selection. The participants were selected a using simple random method. First, the names of universities and colleges in each city were compiled alphabetically in a list. In Mumbai, the list included 68 colleges, and in Kanpur it contained 45 colleges. For the study in Mumbai, every fifth college, and in Kanpur, every third college, was chosen from the list. In Mumbai, nine colleges were selected, and in Kanpur ten colleges were selected for the survey. In each of the colleges that were selected, permission was gained from the college administration to conduct the survey. Then the researchers talked to the professors at the respective institutes who showed interest in the study. An announcement was made in the classrooms about the study directing those students in the age range of 18 – 25 years who were interested in the survey to gather in the auditorium during lunch hour. The survey was conducted during lunch hours so that participants' regular schedule was not disturbed.

Survey procedure. Once the students were assembled in the auditorium, they were briefed about the survey. Before filling out the surveys, the participants were asked

to sign a consent form approved by Institutional Review Board (IRB) at University of Maryland. The consent form is presented in Appendix F and G. It took approximately 20 – 25 minutes for the participants to fill out the survey forms. The same procedure was used in both the cities. However, in Mumbai the survey was administered in English and in Kanpur, it was administered in Hindi.

Data Analysis

Qualitative Analysis

For the qualitative analysis the digitally recorded interviews were transcribed and those conducted in Hindi were translated in English by the researcher. Marshall and Rossman (1999) recommend that the main technique for data analysis involves "reading, reading, and reading once more through the data, [which] forces the researcher to become familiar with those data in intimate ways" (p. 153). Therefore, after re-reading the interviews several times, the emergent themes that correspond to the research questions used in the study were spotted and noted down. Then the specific examples of evidence supporting these themes were added to the main analysis.

The identified themes were organized according to the theoretical perspective and the research questions investigated in this study. For example, the uses and gratifications perspective was used to identify the various communication, media and age-related needs for which young people used cell phones. The communication needs that were identified included the use of mobile phones for being connected, their use for communication during emergencies, their use to inform parents, their use for coordination and planning,

their use for text messaging and their use for private conversations. The media-related needs for which young people used cell phones were organized into two themes: their use for information and news and their use for personal entertainment. The age-related needs for which young people used cell phones included themes such as the use of mobile phones for social image, mobile phones as personal items, mobile phone use in friendships, using mobile phones to negotiate independence from parents, and using them for pornography.

The data analysis for the second research question and hypothesis were conducted according to the concepts of the social-cognitive domain theory. Social-cognitive domain theory suggests that individuals use personal, social-conventional and moral forms of reasoning. In the context of mobile phones, personal reasoning can be defined as the use of mobile phones for personal relationships and asserting personal autonomy by young people. For example, this would involve assertions such as "mobile phones are my personal property, therefore others (for e.g. parents, college authorities, government) should not interfere and tell me how I should use mobile phones." Social-conventional reasoning in the context of mobile phone usage can be defined as the use of mobile phones to comply with social rules. For example, social reasoning would be reflected in assertions such as "when I am with family, I don't use mobile phones because I respect my parents." Moral reasons in the context of mobile phones can be defined as the use of mobile phones in a manner that will not harm others. For example, it would involve assertions such as, "I should not use mobile phones to ridicule others because that is unethical." The occurrence of these forms of reasoning was identified through the administration of the interview protocol, which was developed to measure the extent to

which the participants used these responses to questions asked in Section VI of the in-depth interview schedule (attached in Appendix A).

Quantitative Analysis

Since it was risky, expensive and time consuming to send the completed paper-based survey responses from India to United States via mail, the survey agency that collected the quantitative data coded the data in an excel spreadsheet and sent them via email. The data from the excel spreadsheet was imported in the SPSS, Statistical Package for the Social Sciences, format and was coded in specific variables by the researcher. The data were quantitatively analyzed and interpreted using SPSS tools. Since the main purpose of the data analysis was to explore city-wide and gender differences in mobile phone usage, it was not considered necessary to conduct extensive descriptive statistical analysis. Significance testing, however, was conducted for some of the differences when it appeared necessary. This is an exploratory study and therefore it only looked at whether the differences exist. That is why, at this time, differences have not been calculated in statistical terms and exact directional relationships between the variables have not been defined.

Overall, the main aim of the selected methods and data analysis was to examine the use of mobile phone among young adults through the proposed theoretical framework and research questions. The results of the qualitative and quantitative analysis are presented in the following chapters.

CHAPTER 4: RESULTS – QUALITATIVE ANALYSIS: MUMBAI

The results of the qualitative study on mobile phone usage among youth in India are divided into two chapters. Chapter four and five present the results of the long interviews conducted in Mumbai and Kanpur respectively. This chapter first presents a brief qualitative description of each of the participants selected for the interviews in Mumbai. Then data gathered from the interviews is presented under the following seven headings – mobile use for communication activities, mobile phone use for media-related activities, mobile phone use for social image, mobile phones as personal items, mobile phone use in friendships, mobile phone use in negotiating independence from parents, mobile use for pornography, and mobile use for teasing and harassment.

The information presented under some of these headings is organized under sub-headings. For example, the section on mobile use for communication activities contains the following sub-headings: "cell phone is a lifeline," It keeps me connected; emergency devices, to inform parents, coordination and planning, text messaging (SMS), and private conversations. The section on mobile use for media-related activities contains two sub-headings: information and news and entertainment. The section on mobile use for social image contains two sub-headings: status symbols and fashion items. The section on mobiles as personal items contains following sub-headings: marker of adulthood, extension of self, prized possession, personalization, and privacy. The section on mobile use in friendships contains following sub-headings: maintain friendships, online friendships, and dating.

The qualitative data in all the sections has been analyzed and organized on the basis of the theoretical perspectives used in this dissertation. All the sections in this chapter provide evidence for the uses and gratifications theory suggesting that young people used mobile phones for a variety of functions to fulfill needs related to communication, media, and age (for enhancing social image, for personal identity and privacy, for maintaining friendships and dating, for negotiating independence from parents and for pornography). The data in the sections on mobile phone use as personal items, mobile phone use in friendships, mobile phone use in negotiating independence from parents, mobile phone use for pornography and mobile phone use for teasing and harassment has been analyzed using the concepts from social-cognitive domain theory and provides evidence that young people used all three forms of reasoning: personal, social and moral, in their use of mobile phones.

Description of the Interviewees

In Mumbai, 15 college going young adults ranging in age from 18 to 25 years, were interviewed at and nearby two college campuses. As mentioned in the previous chapter, the respondents were recruited on location and were asked to sign a consent form approved by the Maryland Institutional Review Board before participating in the interviews. A brief description of each of the eight young adult male interviewees from Mumbai is presented first followed by a brief description of the seven young adult female interviewees. The description of the interviewee includes information about their family, their education, their cultural preferences, their access to other communication media and when and how they acquired their first cell phones.

Description of Male Participants

Case no. 1. Aditya was the first person interviewed for this project. At the time of the interview, he was 18 years old and studying in the first year of his Bachelor of Commerce at Mithibai college. He lived in the suburbs of Mumbai with his family, which consisted of a grandfather and his parents. His father was a businessman. He said that he was a mixture of traditional and modern. He was traditional because he respected his parents and modern because he was open-minded. He shared a TV with his parents. He said he liked reading newspapers everyday and consider them to be the best source of news. He used the internet at a cybercafé once in two or three weeks. He got his first cell phone when he was 15 years when he started going to college after high school. He said that he got his first cell phone because he used to leave home at 7 a.m. and come back at 10 p.m. so his parents wanted to have a way to contact him and vice versa. At the time of the interview, he had already replaced two cell phones and was using his third.

Case no. 2. James was an 18-years-old male studying in the first year of a Bachelor of Commerce program at Mithibai college. He lived in the suburbs of Mumbai with his parents. He had no siblings. He worked part-time in the same office where his mother was working. He said that he was traditional because he didn't believe in live-in relationships before marriage and he respected his parents. He also said that he was modern because of the clothes he wears such as shorts and he liked going out with his friends. At home, he had access to a computer with internet and TV. He said that he liked using internet more than TV. He received his first cell phone from his mother when he was 15 years old and studying in tenth standard. He said that since both his parents are

working, his mother gave him a cell phone so she could keep an eye on him during the day. He said that he would have preferred to buy an iPod than a cell phone, since his parents were only willing to buy a cell phone, he decided to buy a cell phone with a good music player. At the time of the interview he was using his second phone.

Case no. 3. Akash was an 18-year- old male studying in the first year of a Bachelor of Commerce program at Mithibai College. He lived in the suburbs of Mumbai with his parents and elder brother. He said that he was somewhat traditional because he respected his elders. He added that he was mostly modern because he was spiritual and had his own way of thinking about life and did not care much about what others think. He had access to TV and two computers with internet service at home which he shared with his family members. When he was 14 years old and studying in the eighth standard, he decided that he needed a cell phone and used his own savings to buy one. However, part of the cost was borne by his parents. Since then he had replaced his cell phone five times.

Case no. 4. Naman was a 23-year-old male who was living with friends in Mumbai in a rented apartment. He was originally from Delhi but was in Mumbai to study for his Masters in Business Administration. He and his three other friends had rented an apartment in Mumbai. He said that he had traditional values because he respected his parents. However, he was also modern because he went out with friends for clubbing and partying at nights. He had access to a TV which he shared with his roommates and owned a laptop with internet service for his personal use. He got his first phone from his parents when he was 18 years of age as a gift for entering college. His parents wanted to ensure

that he could contact them in case any emergency arose while he was away from home. At the time of the interview, he was using his fourth cell phone.

Case no. 5. Pranay was a 21-year-old male living in the suburbs of Mumbai with his parents and younger sister. He was studying in the final year of his Bachelor of Commerce program at Mithibai College. He usually worked once or twice a year doing promotional events for clubs. He said that he was mostly modern because he followed fashion trends and dressed accordingly, but he said he was also traditional because he can't go against his parents' wishes and did not like fast food. He said that he had access to a TV and desktop at home which he shared with his family. However, he could not get an internet connection as they don't have a landline. He said that he rarely accessed the internet from a cybercafé. He said that he decided to buy a mobile phone to talk to his friends and his parents paid for it. He got his first mobile phone, when he was around 16 years of age and still studying in high school. He said that he was crazy about mobile phones when he was in school but now he has matured and understands that it is not important to buy an expensive mobile phone. He said that now he paid for his own cell phone from the money he made from stocks.

Case no. 6. Varun was an 18-year-old male living in a boy's hostel in South Mumbai away from his family who lived in another state. He was studying in the first year of his Bachelor of Commerce program at H.R. College of Commerce and Economics in Mumbai. He described himself as having both traditional and modern values. He said he was traditional because he participated in religious ceremonies and listens to his parents and he was modern because he hangs out with friends and uses

technical gadgets such as computers and mobile phones. In the hostel, he said he had access to a TV which was shared by all the residents. He usually accessed the internet from a cybercafé and sometimes shared his friend's laptop. He got his first cell phone from his parents when he moved to Mumbai for his studies after completing school. He said that he pestered his parents to buy him a cell phone because everyone he knew had a cell phone and he felt left out. At the time of the interview, he was using his third cell phone.

Case no. 7. Mukul was a 20-year-old male studying in the second year of his Bachelor of Commerce program in H.R. College of Commerce and Economics in Mumbai. He lived in the suburbs in an extended family consisting of his grandfather, father's brother and his family, parents and a younger brother. His father runs a family business along with his brother. He said that he was both traditional and modern – traditional because he respects his parents and modern because he keeps up with changing trends. He had access to TV and computer with internet serves at home which he shared with his family. He received his first cell phone when he was 16 years old as a reward from his father for securing a high grade in his exams. At the time of the interview, he was using his third cell phone. Mukul said he mainly used his cell phone for listening to music while traveling since he traveled by local train for at least couple of hours every day to get to his college.

Case no. 8. Vikram was 20 years old and living with his parents in South Mumbai. He was studying in the third year of his Bachelor of Commerce at H.R. College of Commerce and Economics. He was an only child with no siblings. He said he was both

traditional and modern. He said he was traditional because he respected his parents and would cancel his personal appointments for family gatherings and religious ceremonies at home. However, he said he was modern because he goes out partying at nights in clubs. At home, he had his own personal TV and a laptop with high speed internet connection. He got his first phone from his parents, when he was 16 years old and studying in class 10. His parents bought the cell phone for him so that they could contact him during the day. At the time of the interview, he was using his fourth phone.

Description of Female Participants

Case no. 9. Vaani was an 18-year-old female living in the suburbs of Mumbai with her parents. She was studying in the first year of her Bachelor of Commerce program in Mithibai College. She said that she was both traditional and modern in her thinking. She said she was traditional when she was with her family, however, she was modern when going out with friends. She said that she was modern because when she sees something wrong happening in front of her she speaks out without any regard for elders. She had access to a TV and computer with an internet connection at home which she shared with her family. She received her first cell phone from her parents when she was 15 years old when she was living in a hostel in a different city than her hometown. Her parents bought a cell phone for her so they could contact her easily. By the time of the interview, she had already replaced her cell phone three times.

Case no. 10. Vinita was 18 years old female in the first year of study for her Bachelors in Arts in political science. She was living with her parents and brother in Mumbai. Along with her studies, she was also working part time as a choreographer with

a dance company. She said that she was traditional because she believes that a girl must remain a virgin until she is married. She said that she was also very modern because she smokes and roams around with boys. She had access to TV and a computer with internet connection at home. She got her first cell phone from her parents when she moved to a hostel in another city for her studies. At that time, she was 13 years old and was studying in the eighth grade. They wanted to have some form of contact with her while she was living in a hostel. At the time of the interview, she was using her third cell phone.

Case no. 11. Shuchi was an 18-year-old female student in her first year of a Bachelor of Commerce program at Mithibai College. She was living in Mumbai with her parents and a younger sister. She said she was both - traditional and modern. Traditional because she wears traditional Indian clothes when she goes out for family functions with her parents. She said she was modern because she wore modern clothes such as jeans and skirts when she goes out with her friends. She had access to TV and a computer with internet at home which she shared with other family members. She got her first cell phone in 11th grade when she was 15 years old. Her father decided to buy her a cell phone so she could inform her family on her whereabouts during the day. Her father is a businessman and her mother is a housewife. At the time of interview, she was using her father's old phone as she had lost her own.

Case no. 12. Ruchita was a 20-year-old female in the third year of her Bachelor's in Management Studies at H.R. College in Mumbai. She was living in the suburbs of Mumbai with her family consisting of her grandmother, her parents and her elder brother. She traveled via local train everyday as her home and college were located at opposite

ends of Mumbai. She said that she was a mix of both because she although her parents are quite modern, for example, they don't have a curfew on her coming late at night, she consults them before taking any decisions. She said that she is modern because she believes that she needs to stand on her own feet in life and be independent. At home she had access to family TV and had a laptop with an internet connection for personal use which she sometimes shared with her brother. She also shared a desktop with an internet connection with her brother. She received her first cell phone when she was 18 years old and transitioned to college from school. She got the cell phone from her parents so that she could contact them if an emergency arose while she was away from home. She worked during summers. At the time of the interview, she was using her second phone because her father threw away her old phone because it was old and damaged. She joked that she was so attached to her cell phone that she didn't want to change it despite the fact that it had cobwebs inside. She said that she was very conscious of the brand of her cell phone which is why she paid for part of the cost.

Case no. 13. Gunjan was an 18-year-old female living in the suburbs of Mumbai with her parents and younger brother. She was in the first year of her Bachelor's of Management Studies at Mithibai college. She said that she loved traditions such as living with parents in an extended family and she didn't believe in live-in relationships. She said that she was modern only in the way she dressed. She had access to her family television set and a computer with an internet connection at home. She said that she didn't watch a lot of television as she could not find time, however, she used the internet a lot for class projects and chatting with friends on social networking websites. She got her first cell phone on 29th July 2006 from her parents after the Mumbai floods on 26th

July 2006. During the floods she was stranded and used her friend's cell phone to contact her parents; therefore, her parents decided that she needed her own cell phone so that she could call them in case of emergency.

Case no. 14. Shweta was an 18-year-old female in the first year of her studies for a Bachelor's in Political Science. Along with her studies, she worked full – time as a model in fashion shows. She was staying alone in a house of her own while her parents lived in another part of the city. She said she was traditional because she respects her parents; however she was modern because she wore modern clothes, was financially independent and made her own decisions. She had her own TV and a laptop with high speed internet connection. She said that she bought her first cell phone when she was 12 years old and paid for it herself from the money earned through her modeling assignments. Since then she had changed her mobile phone seven times and at the time of the interview, she had two mobile phones – a cheaper one for calls related to work and an expensive one for personal use to receive calls from family and friends.

Case no. 15. Anjali was a 19 – year – old female studying in the first year of her Bachelor's in Arts degree from St. Xavier's college in Mumbai. She was staying in a girl's hostel in central Mumbai. Her parents lived in Cochin, far away from Mumbai in southern India. She was the only daughter of her parents. She said that she was modern because she was living in Mumbai on her own so she doesn't feel the need to follow traditions and she smoked. She said she was traditional at home when she was with her family, for example, she said she didn't smoke in front of her family out of respect. In the hostel, she had access to a TV but she didn't watch much as they had restrictions. She

said that she received her first cell phone from her parents when she was 15 years old and studying in 10th grade. She said that she just told her parents that she needed one. At the time of the interview, she was using her 5th cell phone. She said that she changed her cell phone once a year.

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Qualitative Analysis of the Interviews

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Mobile Use for Communication Activities

The long interviews with the college – going young adults in Mumbai showed that they used mobile phones for a variety of activities. The interviewee responses in this section has been organized under the following headings: "cell phone is a lifeline,": It keeps me connected, emergency devices, to inform parents, coordination and planning, text messages (SMS), and private conversations.

"Cell phone is a lifeline," It keeps me connected. The college going respondents in Mumbai led a hectic lifestyle which meant that they left home early in the mornings and remained away until late at night for studies and work-related projects. Pranay, case #5, who was studying in a local college in Mumbai and simultaneously preparing for his chartered accountancy entrance exams, said that cell phones were an important aspect of his life.

> *"When I don't have mobile, I feel something is missing. I am always outside home, like I go to library for my studies for my CA exams, whole day I am in library. Then again at night, I come [home]. It's like I am staying in a lodging house." – Pranay, case #5*

Aditya, case #1, who also remained away from home for long hours practically all day, said that cell phones were helping him to remain connected not only with his family but also with the outside world by providing access to news.

> *"It's (cell phone) a lifeline. Lifeline because see, you need to be in constant touch with your parents and outside world….in cell phones you can access news, in any corner of the world, you can reach with cell phones, with just a palm in your hand. So cell phone is like a lifeline to you, it gives you all the information related to business, sports." – Aditya, case #1*

Other participants such as Vikram, case #8, and Mukul, case #7, commented that cell phones were devices that helped them to stay connected with family and friends because they provided instant communication.

> *"The way technology has changed, with the internet, with instant messaging, with things like facebook and msn and mobile connectivity, communication has become so fast. I mean before you would wait to get home and make a phone call. Now the instant you send an sms to someone, if within 5 min you have not received a reply, suddenly you say oh why he or she has not replied. So I think in those sense it's become an urgency, so now if you don't have a phone for even 20 min then suddenly you are wondering, how many people have called? Or what has he [my friends] done? or how many messages [I have received]. I think it's unbelievably crucial from a connectivity point of view. Connectivity, in the sense….of keeping touch." – Vikram, case #8*

> *"24x7. Yeah, cell phone is there with me. Most of the time, I keep on checking my cell phone for messages or calls." – Mukul,case #7*

While Aditya, case #1, Vikram, case #8 and Mukul, case #7, thought that it was important to remain connected at all times, Ruchita, case #12, who traveled a long distance daily said that a cell phone represented a pressure to remain connected all the time.

"I mean there is nothing called personal space anymore. You are always connected to someone, someone always knows where you are, like if I switch off my cell phone for half an hour, I have like at least 23 missed calls. As soon as I switch it on, [I hear questions] Where the hell you were? What is wrong with you? Why have you put off your cell phone? So I don't think you can change that. But I think that's what is happening that we are becoming really dependent on cell phones... You want to be alone. You can't be alone because you are like always connected." – Ruchita, case #12

Connectivity for the participants did not necessarily mean that they were communicating all the time, but it also meant that they had the ability to communicate or reach out to friends and loved ones or vice versa. For example, Varun, case #6, who was living away in Mumbai in a hostel, reiterated that when he is alone, he finds cell phones to be great companions because he can use them to reach out to his best friends and engage in a variety of communication activities.

"For me, to be honest, it [cell phone] is my friend...because whenever I am alone, like I have come outside [away from home] ok, so I have a group at my college, and I have a group at my hostel, but still there is a time when I am alone, because still my best of friends are not there in Mumbai... So when I am alone, then only friend is cell phone, so I can [use cell phone to] listen to the radio, to SMS... my friends from out of town, or to forward [messages to] someone, or to chat with a girl, or anyone if I want to and to access, to see my mails and all basically. Basically time pass, like I am alone while going from college to hostel so that 15 – 20 min so that's like without my cell phone I can't hear my music, I have to go to town..." - Varun, case #6

Therefore, it appeared that because in Mumbai participants traveled long distances and remained away from home for long hours so they felt that cell phones allowed them to remain connected to their family and friends all the time.

Emergency Devices. Although the connectivity and companionship were considered an important use of cell phones, the college – going female respondents said that the cell phones were particularly useful during emergency situations.

Ruchita, case #12 who commuted everyday from home to college via local trains and stayed away from home for long hours, said that she acquired a cell phone mainly for the purpose of contacting her family during emergencies.

> *"I got a cell phone in my 13th year that's my graduation 1st year. I was 18 years old then and for the basic reason that Bombay is a very large city and I live in the complete opposite end of the town and I go to college at the opposite end of town. It's a distance of one and a half hours. Just to keep in touch with my parents, that was like the first priority, that if I get stuck anywhere in a city like Bombay you need a cell phone and besides my course is very demanding. I am out of the house the entire day. I leave home at 8 in the morning and I come back home at 8 in the evening." – Ruchita, case #12*

Vinita, case #10, who worked part time for a dance company, found herself in a dangerous situation one night and said that having a cell phone ensured her safety.

> *"Well, once I was walking alone, 1 o'clock at night. I was working so I came home a bit late so my friend, I dropped her home and I was going home, there was a group of five people walking behind me, and those people were you know, calling me and teasing and all that, trying to be close and all, so I just ran to a building and I called the cops, and I think in 5 minutes I had safety over there, so I felt like I was on cloud nine because I had a cell phone at that time." – Vinita, case #10*

A couple of female respondents said that they acquired a cell phone after the Mumbai floods in 2006. During the Mumbai floods, residents were stranded at various locations in the city and it was difficult for them to contact their families if they did not have a cell phone.

"Like for example, if you have a 26/7 (floods) out here you need a cell phone to call your parents…. During 26/7 there were floods out here and the connections were all out and there were no phones and all and only some of the phones were working so if you had a cell phone you didn't have to run out to a PCO (a public telephone booth is commonly known as PCO abbreviated for Public Call Office) and all. If you had a cell phone you could have called your parents and you could have given them information like we are safe and we are here and something…. My story was that we were in college and we had to go home and there were no cars working so we had to go home walking and all the shops and all everywhere it was flooded, everything was closed, phones were not working and there was water in phones, if you had a cell phone you could've called up your parents. Many of my friends had and we called from those cell phones. So if you had your cell phone, then you didn't have that much tension. You didn't have to borrow a cell phone and that person was also busy out somewhere. So you need your own thing." – Shuchi, case #12

"I wanted a cell phone but my parents told no, it's not (for) your age right now. I bought it after 6ᵗʰ July, the flood that came in 2006 after that I had to buy because my parents told that you have to buy now. To communicate, I don't have to depend on anybody. You can easily call anybody (or) my parents if I am late. To keep in touch with everybody." – Gunjan, case #13 from Mumbai

One of the male participants, Varun, case #6, who was staying in a boy's hostel, also said that he needed a cell phone so that he could contact others in times of need.

"I feel like I am lost without a cell phone basically if I don't have money so at least I can call somebody about where I am and they can help me out."- Varun, case #6

The above examples show that cell phones are extremely important devices for young adults from the point of safety and security especially in a city such as Mumbai where life can be unpredictable and young people live a hectic lifestyle and remain away from home for the better part of the day.

To inform parents. The participants did not only use cell phones as devices for use during emergencies, but also to inform parents about their day-to-day activities, in a way acting like a remote parenting device (Rakow & Navarro, 1993). This was especially true for participants who did not have any siblings.

Anjali, case #15, who lived in a hostel in Mumbai and whose parents lived in another town, specifically found cell phones useful for this purpose. She said:

"Especially in Bombay and for people like me who stay away from home, keeping in touch with family is very important. I think a cell phone is a best way to do it. Keeping in touch with family and you know to make sure things are fine." – Anjali, case #15

Aditya, case #1, who stayed away from home for long periods each day said:

"I stay out of my house so I need to be…I would like to inform my parents… Where am I? Where am I going? So it's better no, to be in constant touch otherwise they will be like tensed and even I will be worried. So there should be something with which you can inform your parents." – Aditya, case #1

"My parents - they keep on needing information about where I am, what I am doing, so it's easier to give them information." – Vaani, case #9

James, case #2, lived in a nuclear family. Both of his parents were working professionals which meant that they stayed out of the house for the most part of each day. He acquired a cell phone so that his parents could remain in touch with him throughout the day.

"My mom gave it to me to keep an eye on me. Yeah, she bought it for me so that she can contact me whenever she wants during the day. Both my parents work so they are out of the house most of the time." – James, case #2

It appears that participants used the devices to remain in touch with parents and vice versa to maintain their family ties.

Coordination and planning. While the participants used cell phones for keeping in touch with parents, they also used them to coordinate and plan activities with their friends. Since the participants were living in different parts of the town and had classes during different times of the day, it was easier to use cell phones than other forms of communication to plan their schedules for the day.

"Even while coming to college every day I use (it). Because I want to know where everyone is so I don't want to be left behind all alone thinking where other people are, I can just say, I am here and you guys come here. To know that is it imp to come or I can bunk for today for college purposes. And I can give them (the news) that I am not able to come today so they don't waste their time waiting for me in a way. Q: And what about college? Why do you use so much in college? A: I talk to my friends; they keep on disappearing from time to time. So basically for co-ordination, in college it's co-ordination, but if I am not in college and I want to talk then its talk." – Vaani, case #9

For Vinita, case #10, who was working part time while going to college it was easy to confirm the time with her friends so that she could meet them while they were in college.

"Just simple questions like where are you? What time are you reaching (a certain location)? Yeah, just co-ordination, no long talks." – Vinita, case #10

Ruchita, case #12, who lived far away from college, used cell phones to coordinate meetings with her friends and her team members for college projects.

"When you stay connected so you usually remember to call up someone when you are going somewhere or you are just walking on the street or if you have to go to a public place to meet someone then co-ordinate with that person that it's ok I am reaching at this place in so much time and you be there. Where are you? I can't see you (after reaching the location), things like that, you end up just using it while traveling or when you are in public…. Coordinate any kind of meeting, basically it's a lot more convenient than

actually going and finding a PCO because firstly you never have change (coins) and secondly it's always a hassle like if you are in a new area and if you don't know where the PCO (public telephone booth) is? It takes a lot of time, so it's a lot more convenient to have a cell phone." – Ruchita, case #12

Vikram, case #8, who lived in South Mumbai and whose friends lived nearby, said he used cell phones mostly to plan an evening and meet up with friends.

"I generally don't talk on the phone at all so my calling is simply to confirm a plan or fix a plan or see what's happening, what are you doing and then actually meet and do whatever talking and whatever you have to do. It works more like that." – Vikram, case #8

Varun, case #6, who lived in a hostel, said that he found the SMS features on cell phones very convenient for coordinating college activities.

"Now-a-days I am going for tuitions (extra coaching classes for entrance tests), (so) I have to be in contact with my friends, I have to sms them that where are they. And we are studying till 3 or 4 at night so we need a cell phone to talk like for question and answers and during exams also." – Varun, case #6

Overall, cell phones provided a great way for participants to coordinate their daily activities for both college and recreation purposes.

Text messaging (SMS). The participants used the SMS feature on cell phones for not only coordinating plans with friends but to participate in a variety of communication activities because it was convenient and it allowed them privacy.

Aditya, case #1, who lived with his parents, said that he doesn't like to talk on his cell phone once he is at home, but that he sends SMS because that way his parents are not disturbed and don't know if he is communicating:

"Because voice sometimes you get too excited so you shout and your parents might hear you, sometimes that's pretty bad. In SMS, ok, there are few words, a little bit you can express yourself, you express something. That's why I am more into SMSing. So SMS I feel is the best option to communicate with friends." – Aditya, case #1

Similarly, Shuchi, case #11, who actually enjoyed talking on phone better than texting said that her parents were quite conservative about talking on phone all the time so she used the SMS feature on her cell phone to communicate with her friends when she was with them.

"90% is via voice calls and 10% is text messaging... It's better to talk on phone, because it's the same thing that you are going to talk through messages. So why waste time in sending messages, its better you call that person via (your) own cell (phone) that is more clear and everything…. It's a situation, like, if you are with your parents, and you are talking to them, you can't talk on the phone at that time, you don't talk, or else you are sitting with your parents so your parents don't like you talking for so much time on phone, so you can have a message kind of thing, you can also have a chat with them and message your friends, even your parents won't mind that." – Shuchi, case #11

Ruchita, case #12 pointed out that cell phones were not only convenient when she is with her family but in a variety of group settings:

"Texting is lot more convenient when you are with your family or you are in a group because you are not disturbing the other person. In seminar or conference you can just send a text so that's a lot more convenient." - Ruchita, case #12

She also said that texting was convenient while commuting through local trains.

"Yeah, majority I do through texting. Q: Why's that? A: It's just more convenient. I travel through local train and I can't really stand and talk because you know you are pushed from all sides so I quickly type a message and send it. So it's a lot more convenient and when you are in a public place there is a lot of disturbance cell phones gets….and rubbish rubbish (refering

to noise and cross connections) so it is a lot more easier and convenient to send a text." – Ruchita, case #12 from Mumbai

Vikram, case #8 said that he mostly used text messaging because it was more convenient and used the call feature only if he had to discuss something very important or in detail.

"Mainly text messaging. Because a lot of times what happens is you are always in the middle of something or even you are sitting with 5 or 6 people. You know picking up the phone and calling might be rude. You slip out your phone quietly and see the message and text it. So it's more convenient. Also if you are in the middle of something obviously you may not want to stop and call or actually call then yeah text messaging mainly. But if something needs to be discussed in detail then yeah call. If it is simple in nature then you can just message, but if it is a bit more complicated then yes you have to call. If you are making a proper plan or deciding something or work needs to be discussed or talk about something then yes call." – Vikram, case #8

Vinita, case #10, however, highlighted that it's because of the cost-effectiveness that she uses text messaging rather than calling.

"Both are equally (expensive) – now we are using pre-paid mobile so we don't have balance (cash balance) so it's text messaging otherwise calling is better you can explain things much better rather than typing it and then sending it." – Vinita, case #10

Mukul, case #7, noted that he used text messaging to share interesting stuff with friends, to communicate with friends when the network is down and to communicate during classes.

"General messages that are forwarded like poems and general jokes and sometimes to communicate if you can't get through a person… if the person is not answering and if there is a problem the phone is getting cut then you text so that the person can get in touch as soon as they find time… Texting because obviously you can't talk in front of the professor… until and unless

it's not noticed by the professors, because if they notice it (texting) they will confiscate it (cell phone)." – Mukul, case #7

Similarly, Shweta, case #14 said that she gets a lot of jokes on her cell phone from her friends.

"You get a lot of forwarded messages and all which is sometimes really nice. Q; What kind of forwarded messages? A: You know the things about day to day life, it depends on what comes, probably jokes, something interesting. Q: What kind of jokes do you get? A: It depends on who is sending, I get all kinds of jokes, we have lot of day to day jokes, lot of perverted jokes also. You can get whatever you want, there are a lot of ways to get jokes, but I don't get that much (many messages) but as long as it's interesting. There are a lot of perverted jokes." – Shweta, case #14

Overall, the above data shows that the participants used text messaging because they found it a convenient way to communicate in a variety of group settings. At home they used it to communicate with friends so that they didn't disturb their parents. Cost-effectiveness was another reason why SMS was used as a way to communicate with friends. Furthermore, using the SMS feature fitted more with the hectic lifestyle that participants were leading in Mumbai. The crowded and the noisy spaces meant that they could not carry out voice conversations all the time. Also SMS was a great feature to communicate especially when the network was down.

Private conversations. Besides the use of cell phones to have short conversations to keep in touch and plan activities, the young adult respondents also used cell phones to have long conversations. Vaani, case #9, who had been in college for six months at the time of the interview, said that she had long conversations with friends even when at home because there are some things that she can't share with her parents.

"So at home you call your friends to socialize. Because I think it's important we need to socialize, we cannot sit idle at home you know. We can share our feelings with our friends. There are some things which are not meant for families, they are meant for friends. We cannot say day – to - day masti (fun activities), we went there (places I went to). With family there is always a limit but with friends there are no limits we can use the language that we want. You don't need to think over it, you can just randomly use any word that you want. It's not that I don't share with my family, I do but more in a healthy manner." – Vaani, case #9

Varun, case #6, said that cell phones are seen as devices through which young people socialize, if someone doesn't have a cell phone then others think that it may be difficult to maintain friendships with them.

"See, now-a-days there is something like for every individual and every student and not having a cell phone is like oh! He doesn't have a cell phone he is like, he can't socialize so well, he doesn't have a cell phone…. I have to call up my friends and basically for messaging, for socializing, and now-a-days we have access to internet on cell phone so I don't have to buy a laptop or something." – Varun, case #6

"Co-ordination plays a role when we are meeting daily but on vacation, socializing is more than co-ordination because in vacation you chill out in your own place so like college friends you won't be meeting them often so it won't be co-ordination but socializing at that point of time. But now that colleges are on we usually call up (and asks) where are you, what time you are coming, so basically it's a mixture of both, it depends upon time to time." – Mukul, case #7

Thus, it is evident that cell phones are not only devices to remain connected and have short conversations throughout the day but also serve an important need to have long private conversations with friends, whom the respondents cannot meet every day. A detailed description of how young adults use cell phones to maintain friendships will be given later in this chapter.

Overall, the interviews indicated that the young people used cell phones to remain connected with friends and family, to seek help during emergencies for safety and security, to inform parents regarding their whereabouts, to coordinate and plan activities with friends, to have private conversations with friends, to flirt and kill time when getting bored, to communicate via SMS and to express and share feelings.

Mobile Use for media-related activities

Information and news. At Mithibai College it was easy to spot students huddled together watching a small cell phone screen. The owner of the cell phone introduced himself as Akash, case #3, and said that the group was watching a cricket match. In his interview, Akash, case #3, said that he likes the TV facility on his cell phone. This is why he said he paid part of the cost of the cell phone from his own savings in addition to the money that his parents gave him, so that he could buy a cell phone which will have this facility. He said that he liked watching both entertainment and news-based channels which air sports such as cricket and football.

> *"Q: Why do you use TV on cell phone? A: TV (and) entertainment and to be in touch with what's happening around the world. Q: What do you watch on TV on your cell phone? A: News, movies, cartoon and other stuff. Movies, say, like STAR movies or HBO or something, news, depends, CNN or NDTV or CNBC, music VH1 and MTV and so on and so forth. Q: How much time do you access TV? A: Depends if I am not doing anything maybe the whole day. Most of the time, I am on cell phone, like 60% of the time. Q: Why do you access TV on cell phone? A: yeah, you don't get time to watch TV at home and it's easier, for example, if a match is going on, cricket or football, and you want to watch it and if you listen on the radio it's hard to know what's happening. So if you watch on TV you get to know. Q: What kind of news do you access mostly? A: Depends whatever is on is on. I don't see news which is based on finance or so, I just see general news. General news,*

it could be anything, it could be finance, or stock market or weather, normal news – sports. Q: When did you get TV on your cell phone? A: Software wise depends when the network provides it. Like if the service provides it, if they have the facility then only it happens. Or it's a waste of software. Q: Which service do you have? A: Vodafone. Q: Is it good, the quality is good? A: Right now, it's not because right now they have just entered Indian market; before them it was Hutch so they took over. So it takes time for them to get a grip on Indian market, so it's not good yet." – Akash, case #3

Vaani, case #9, said that she liked to access information regarding clubs, movies, etc. and news on current topics. She said that she gets SMS alerts on her cell phone from the cell phone service provider and when she wants to read particular news brief she clicks on it. That way she only has to pay for each SMS she reads:

"Information like if I have to go somewhere, I can just call and know whether it is open or closed. And anyways each and every place asks your contact number to contact you back so I cannot give my home number because I am not available all the time. If I give my cell number I am available all the time. So it's easy for the second person to contact me again. Sometimes cinema hall, sometimes college, sometimes when you go for clubbing, pubbing you just want to know whether the entries are free. so I don't waste my time going there and asking then…. News in a way because there is a kind of service from Hutch or Airtel they keep sending you messages about if you want to know news about this then just press this button so when I think this is news I should know I just press that. I go for news about blasts and all, politicians and all; I am less interested in stars and all. I don't care if they are going around with someone or if they have got a breakup or anything. Q: So you are more interested in politics? A: Current affairs you can say in a manner. Q: Do you get it every day? A: Yeah I get it every day. It's like regular they keep on asking me and it's my wish when I want to then I click and get it. It's kind of service you need to access." – Vaani, case #9

Pranay, case #5, who invested in stocks, subscribed to stock updates from a website. He also accessed news which catered to his interests.

"Basically services provided by different websites for example,… I have subscribed to mytoday.com and they provide with every information, whether

it is related to sensex, news, sports news, then even they provide with horoscope. Q: How often do you get news alerts? A: Twice in a day. About sensex (stock exchange) they send message around 10:15 am and about cricket they send message around morning 7 – 7:30. And even in case of horoscope we get message in the morning around 7 – 7:30. Usually when I come to college I check the messages at the time they come but when I am at home I get up late so I check it later." – Pranay, case #5

Shweta, case #14, who was a fashion model, said she accessed news related to media and the fashion industry. She said that she had to pay for it.

"Q: Do you use cell phones to access news? A: yeah, I do especially on the modernization like what's going on in the media. So what's going on for the latest fashion, so I go for that. Q: How do you do that? A: We go on the Airtel gallery like I have the Airtel card. I go on the gallery and I click on the latest news and I select the category fashion and then I get the latest news. Q: Does it cost you? A: Yeah, it costs me Rs 3 per sms. It's expensive. Q: So do you mostly access news on fashion? A: Yeah, because I am not interested in crime. I am not interested in sports except for gun shooting and there is not much out there about gun shooting so. Q: So how often do you access? A: Around 3 – 4 times a day. I do see the pictures so I have MMS software so you get detail in that with the pics and everything. Yeah, it's a good thing, this little gadget and you have everything around your eyes I mean Q: Do you share with your friends when you access that? A: Well if I am with my friends, I do share with them. And especially the boys like to see the girls in little little dresses." – Shweta, case #14

While the other participants paid to get news on their cell phones, Gunjan's, case #13, cell phone provider sent news updates free of cost. She said that although she reads most of it, she usually deletes news items unless they are of particular importance.

"Q: Do you get news updates on your cell phone? A: yeah. Q: What kind? A: If it is from Reliance (the cell phone service provider), then I just delete it, sometime back I got a message from anti-corruption bureau I have kept them till now, because they have a number I have kept it till now, that if you see any kind of corruption you can call this number, so if it is usable, I keep it if not I just delete it." – Gunjan, case #13 from Mumbai

Shuchi, case #11, said that she cannot access news on her own cell phone but uses her friends' cell phones for information and news. She said that she used her friends' cell phone to get her exam results.

"I don't have it (the multi-media feature required for news) but my friends have got (it) and I can use their phone. I mean when it is required, when it is necessary, like I gave my exam right now and the results were out only online. So I was in college and I had to see my results so I had to see it in someone's cell phone having internet features in it. I don't check my email on it; for that you have your home computer." – Shuchi, case #11

However, Naman, case #4, who had access to a laptop with internet connection, said that he didn't really need to access news on his cell phone. However, his response indicated that he was thinking of getting a news service on his mobile phone mainly for news of his particular interests.

"The real use of mobile phone for accessing internet and news will happen from next year; this year we have 24x7 access on laptops so I am not keeping that option open on my mobile, but next year I am going to have online access on my mobile. Then I will be more interested in business news, what's happening, what's new in the corporate world so that you move with the time not behind the time." – Naman, case #4

Although those who accessed news subscribed to it, Anjali, case #15, said that she would only receive news updates if they were for free.

"I don't mind if it is free but I don't think I can subscribe to it." – Anjali, case #15

Overall, the interviews indicated that the participants accessed news on their cell phones which was of personal interest and that they could share with their friends. The hectic lifestyle of these participants meant that they did not have access to television

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during the day. Further, situations in which there are rapid developments such as (bomb) blasts etc., cannot be updated fast in newspapers; hence participants liked to receive news about such events on their cell phones.

Entertainment. Almost all the respondents in Mumbai commuted by local trains or buses every day to their colleges. During their commute, the participants used their cell phones to entertain themselves in a variety of ways. Listening to music, clicking pictures, playing games, sharing jokes via text messages (SMS) and vides through multi-media messages (MMS) were some of the ways in which participants used mobile phones for entertainment. At the same time, some participants also mentioned that mobile phones are also popular for showing pornographic material. Although the participants enjoyed clicking pictures and sharing them with friends, they also noted that clicking pictures of females without their permission is not an appropriate activity.

In Mumbai college students commute long distances to reach their colleges every day. The crowded spaces in local trains and buses make it difficult to carry out long conversations on cell phones. Therefore, it appeared that respondents often used cell phones to listen to music during their everyday commute.

"Actually mobile is just for time pass so we can do a lot of things with MP3 (music players), like in train if we travel we can listen to MP3 players and radios." – Gunjan, case #13

Anjali, case #15, said the she liked the option of clicking pictures through her mobile phone because it is not feasible to carry her camera everywhere.

"Like I said, my camera and my music player are the most important things. Music player, probably when I am traveling or when I am probably going off

to sleep or something like that. Camera, because I like photography a lot, and I can't always carry my camera because it's not portable, so I have an SLR (single lens reflex) camera you can't carry it around all the time so things like when you want some pictures so I use my phone." – Anjali, case #15

Aditya, case #1, who commuted every day to college, said that he told his father that he needed a music player in his cell phone. However, he said although clicking pictures and listening to music provides entertainment, it's not at the same level as the movies and TV.

"I just told him (father) that I need a phone with a music player because radios actually don't play that (many) good songs so at least you can play songs of your own if you want. It has a music player so that's the best feature about it….Entertainment, ok, if you have a camera phone and you do video recording or so, that also provides a little bit of entertainment. I won't say entertainment to that level which we derive from watching movies. But ok from video recording, taking pictures, yes, listening to music also provides entertainment." – Aditya, case #1

Ruchita, case #12, who commuted a long distance, said that she found cell phones very useful for storing data as well as clicking pictures.

"It's a multipurpose device really – like data storage for pictures, like no one really carried cameras anymore. For video-recording, for pictures or playing games there are a lot of games on phones these days. In a city like Bombay you tend to travel a lot so it's like really a useful device to have….Any picture that we take when we are gathered together, or any funny videos which you have. See videos like either you are doing foolery in college and someone's recorded it that goes around very quickly…there are these blooper videos. So you can transfer those directly to your computer even those get transferred. Q: What are blooper videos? A: Any funny videos that you have online, like you tube etc. have these funny videos so you can download (them) on your comp and then transfer (them) on your phone." – Ruchita, case #12

Vaani, case #9, said that she liked clicking pictures through her mobile phones.

"I use it basically to talk and take pictures and listen to the music….First of all I keep on clicking my own picture, I am self-obsessed. And I take pictures of places, scenes and something which I really like and click on occasion at home. Anything which I feel this thing I should capture. I just go and click." *– Vaani, case #9*

One of the female respondents, Shuchi, case #11, said that once she downloaded a movie to watch it in her free time and to watch it with her friends.

"I downloaded one "Jab We Met" movie. You can watch it like, when you are getting bored you can watch it….if you need to pass time. Like you like some scene or some part of the movie so you can watch it. Q: So do you watch it with some friends or by yourself? A: If you are alone, you can watch it alone and if you are with friends, and if everybody likes that thing then you can watch it together. It's of no cost. It is free of cost. There are some devices and all which you can use. You can connect it on internet and everything and you can download it on computer….You can download many songs, you can download images and everything. You need to connect this device through your computer and through your cell phone and it can be downloaded." *– Shuchi, case #11*

Naman, case #4, said that when he got bored he liked playing games on his mobile phones.

"For talking, sending messages, playing games, when we are in the class and the teacher is quite boring and he is not teaching us anything which, if we are not getting anything, then playing games. I forgot to mention that games is also a very important part in a mobile phone. When you are in flights, when you are in trains and all then what to do in your idle time then you take out your phone and you want to play games. Generally now when people buy a mobile phone they ask for software through which they can download more games or they go into the game section and try to find out how many games are there so that during the idle time they can pass off their time playing games and all." *– Naman, case #4*

Overall the interviews indicated that the young adults who were interviewed in Mumbai used the cell phones to occupy themselves by listening to music or clicking

pictures through their camera for entertainment and passing time when they were commuting long distances and spending time with friends. They also shared pictures and videos with their friends.

Mobile use for social image

   Status symbols. Many of the participants agreed that having a cell phone shows a person's status and that it is very common to show off an expensive cell phone. In one of the first interviews, Aditya, case #1, looked at the temporary cell phone I was using and said that if someone looked at your cell phone they will think "what a hideous cell phone". He said:

   "Status, yes, using high-end cell phones shows your background, whether you are rich or middle class."- Aditya, case #1

   "If you saw someone with an iPhone you will think of them as a little more modern, you'd think they are a little more outgoing, you'd think they will pay attention to aesthetics more. If you saw someone with a phone like this (my phone Nokia 3310, slight laughter) then you probably wouldn't think of the person as let's say…it's probably like seeing two people, one person drinking Mangola (a mango drink) and one person drinking Pepsi. a Mangola (drinker) would be more of a homely, more of a simple person, someone drinking Pepsi you tend to think is more outgoing is more mischievous, you associate it with what the brand has done for itself, you tend to associate." – Vikram, case #8

   Fashion items. The respondents in Mumbai were of the view that younger individuals who are not mature are more likely to use cell phones as fashion items. However, the respondents said that just having a cell phone is not a status symbol but carrying an expensive cell phone shows that you are rich.

"I want to say that people who have grown up in age but are not mature enough and have lot of money they tend to show it as a fashion item. They tend to show off. Q: How do they show off? A: They keep 50 – 60,000 Rs. ($1000.00) mobile phone. We have screen touch kind of thing. What it means that if you touch on screen it can write the message so by these things you can show off and I mean they generally take out their phone again and again. So these are some of the signs that say I have a very expensive phone so you have a look at it. And another point is that they stay on FM 24x7 I mean if they are in class they keep their ear phones on. So that's the point is that see you (people) are studying in the class, you are not going to listen to music."- Naman, case #4

"At the initial school days when you are not that matured you take it as a fashion statement. As you go deeper and deeper, you eventually realize it's just a commodity and (more of) a day to day use than a fashion statement." – Mukul, case #7

One of the respondents, Varun, case #6, said it was more a difference of gender; according to him, women were more likely than men to use cell phones as a fashion item.

"Yeah, they are a fashion item because now-a-days carrying not such a good cell phone it's like, oh! He is not carrying a good cell phone, how is he or how is she? She is not that good, so it really does matter, they are turning into fashion statements because now-a-days accessories are also coming with the mobile phones like, if you are wearing a black t-shirt or a black top so you should have a black cell phone. Q: Do you use it? A: No, I don't use it, girls use it, I am pointing basically towards girls. Guys are not much, they are comfortable with everything. Girls are more into fashion, so that they can keep the slimmest phone. Yeah, guys basically go for more technosavvy things and more features while girls go for looks and easy to use." – Varun, case #6

Thus, it can be said that respondents in Mumbai did not really think that cell phones were a fashion item; however, they were of the view that carrying an expensive cell phone reflects on an individual's status. One of the participants also felt that it was women who were more likely to use cell phones as fashion accessories than men.

Mobiles as personal items

This section presents an analysis of the responses to questions that pertained to the use of cell phones as personal devices. The information in this section is organized to show various ways in which young people used mobile phones as personal items: marker of adulthood, extension of self, prized possession, personalization and to maintain privacy. The concepts from social-cognitive domain theory have been used to show that young people used personal reasoning to assert personal autonomy and maintain privacy in their use of mobile phones.

Marker of adulthood. Ruchita, case #12, who received her cell phone when she was transitioning from school to college, said that it was a device that marked her turning 18 years old. She described it as a big event in her life, indicating that she was now matured enough to have her own mobile phone.

> *"Yeah, yeah, we went together, it was a family decision and a big occasion coming of an age sort of thing. But when we came back it was finally like we are getting a graduation (present) turning 18 etc. so my parents bought it for me. It was big deal that you got a cell phone finally because most of my friends in junior college already had one. I was the one in boarding school so I didn't get one." – Ruchita, case #12*

Extension of self. However, most other participants in Mumbai had a cell phone at a younger age and they viewed it as an extension of themselves, a part of their body.

> *"I feel very handicapped without a cell phone, the first thing you see in the morning, the last thing you go to sleep with is a cell phone. Because it is a very important part of my life right now." – Anjali, case #15*

> *"It's a necessity,…like bread and butter now…if u don't have a cell phone, then you feel handicapped, maybe you feel free, people in India basically*

when their cell phone is down, in the long run they find something missing in them." – Mukul, case #7

Prized possession. While the above three examples show that students saw cell phone as an extension of self, others such as Ruchita, case #12 and Akash, case #3 saw it as a constant object which they described as their most prized possession.

"I don't think I can survive without cell phones...Every hour I can do something with my cell phone, I can set an alarm and wake up with the cell phone in the morning and go to sleep after texting someone. It's like a constant object in my life...I can't roam around with my soft toy but I can roam around with my cell phone." – Ruchita, case #12

"To me it depends, sometimes it's a menace, sometimes it's a gift. Menace because when you are studying for your exams, it rings and it's annoying. While you are getting bored it's a gift or if you need someone to talk to, you can call up anyone from your cell phone...I don't like people harming my cell phone, scratches and stuff. Yeah, I am possessive about my cell phone and guitar."- Akash, case #3

Personalization. While some considered it as an integral part of themselves, without which they felt lost, Ruchita, case #12 considered it as a personal object which she could personalize through accessories and pictures.

"Yeah, as I said you have accessories... I have panels in my phone and my mom has got me something like a pouch and something to hang with like hangings. As many panels, I have like four panels of different colours and my mom has got accessories like pouch and hangings in all colors. So I can use any that I want. So that is how you personalize it and then you can change your font, you can change your wall papers....have weird names of your friends so like if anyone goes through someone's phone you will know at least half of his life. Yeah, you have like pictures, you have text messages. Who messages you most and then calls. It's like a very personal object." – Ruchita, case #12

Varun, case #6, who lived in a boys' hostel, said that four boys in his hostel had a similar phone so to distinguish his cell phone he had a ringtone which no one else had in his hostel.

"I do, because the kind of ringtone that I am having, nobody has in my hostel among the 100 students, like this cell phone, 4 of the guys have this cell phone, exactly same, but because of the ringtone they can make out whose phone is it. Yeah, through ringtones and wallpapers, like two cell phones are kept, and by seeing the wall paper I can make out this type of wall paper my friend likes and this type he doesn't like." – Varun, case #6

Privacy. In addition to seeing it as a device they could personalize through ringtones and accessories, young people also viewed mobile phones as their private property which no one had access to without their permission. They gave personal reasons to suggest that cell phones are their personal items and that they use them to store private content. Therefore, they say others, such as family or friends, should not look inside their cell phones.

"There are [a] lot of pictures of myself, my family and my girlfriend which I like to keep personal. Yeah, there are a lot of personal things which I discuss, but there are few things which I don't like to share with other friends." – Aditya, case #1

"Privacy is privacy you know whoever it is, it should not be intruded. Specially messages because there are so many messages which are stored and just sitting there. So someone who picks up your phone may read a lot of things you may not want them to read. And now-a-days with cell phones you may have a lot of pictures in your cell phone you don't want people to see…. You may have certain things you may not want certain friends to see. Maybe you made a plan with a group of friends and you went somewhere else and that may be sitting in the form of some message on your cell phone you don't want this group to see it…You know pictures with girlfriends or out of town pics or may be pictures where people are drinking and things like that you know you may not want your parents to see it." – Vikram, case #8

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Thus it appeared that cell phones were an important part of the teenage experience and a marker of adulthood for the respondents in Mumbai. Further, they were seen as an extension of self, a personal device through which they expressed their individuality and maintained privacy in certain matters of life. Additionally, the students used personal reasoning to assert personal autonomy in their use of cell phones.

Mobile Use in Friendships

Maintaining friendships. The responses from young people to the questions on the use of cell phones in friendships are presented in this section. In general cell phones allowed the respondents to stay in touch with their friends. For example, one of the female respondents said that because of cell phones, now she can talk to her friends on a daily basis, which she couldn't do earlier.

> *"Generally, to talk to people, now I can talk to my friends, earlier I couldn't talk to them. Outside of home you couldn't talk to them. Now if you have a cell phone they can just call you and they don't need to call your home and you can have a chat with them… If you haven't talked in so long so then the conversation will take like half an hour sometimes. And if it's like if you are talking everyday then 2 min 5 min. at the most 10 min." – Shuchi, case #11*

> *"My friend who doesn't have a cell phone, I just have conversations with his mother. We never get through to him because his mom says beta (dear child) he has gone out and I don't know when he will be back." – Ruchita, case #12*

Online friendships. The respondents also used cell phones to maintain friendships with individuals they meet through social networking websites. At least four of the respondents recounted individual stories about how they made friends with random people on Orkut, a popular social networking websites and then carried on with these friendships on cell phones.

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Shuchi, case #11, said that she met one guy on the internet and she exchanged cell phone numbers with him and talked to him for about a year before the friendship frizzled out and they decided to end it.

"It was like there was a friend of mine, we are very close friends, we stay in the same building and we had this friend we were all internet friends, these two guys and they had all met and everything and they were good friends and this guy was like this is my friend you talk to him he is good. He called me like hi! It was like we never met and now the life is so busy you can't meet them and there were time clashes. I felt that this person doesn't know my friends, doesn't know anything about me, so I can share and he won't go and tell other people about what I said about them. So I could share a lot of things with him. We decided one day that we were going to meet but it was not possible like he was busy sometime and I was busy sometime, then I thought it's useless talking on phone, you have never met this person so what's the use. It was not like he was not meeting but I myself was not sure like if I wanted to meet him I was like I have never seen him, I don't know how he would be I don't know what kind of a person he is or something I was like it's better I will end the friendship out there." – Shuchi, case #11

Another female respondent from Mumbai, Gunjan, case #13 said that she also made a friend on Orkut, a popular social networking website, with whom she exchanged cell phone numbers. However, she said that she hasn't showed him her picture indicating that she has protected her identity.

"I have only one friend on Orkut. On Orkut I just gave him my number so he is just a friend. I don't give my cell number to anybody so from net only one person. Q: But you haven't met him? A: No, never. He is from Sion and he is in 12ᵗʰ std. Q: But you talk on cell phone? A: Little bit. It's ok if I meet him because I know him from his face. He doesn't know me I don't have a pic on Orkut. He does have, so he said even if I don't see you it's ok we can be friends so it's ok." – Gunjan, case #13

Two of the male respondents in Mumbai said that they also made friends with females on Orkut. Mukul, case #7, said that he made friends with one of the females on Orkut and now has known her for one and a half years but haven't met with her yet.

"I met a female on Orkut, so mutually we became good friends and then we exchanged numbers and then we have been in touch for quite a long time now. We haven't met in one and half years. We don't talk regularly, say, once in two months, once in three months. She works in one of the call centers. She is in Mumbai. She was a very forward female so you can say a very desperate female so she just gave her number in the first talk that we were having. We exchanged our IDs on Orkut so we could talk on messenger in a personalized way and we exchanged numbers and we spoke." – Mukul, case #7

Varun, case #6, said that although he has a girlfriend, yet he became friends with a girl on Orkut so that he could chat with her on cell phones.

"I found a girl on Orkut, yeah it's a real story, so we used to chat, then she gave me her cell phone number quite easily within three days or four days. She gave [it to] me because I don't know she trusted me or not, she was from my college only, so she gave me and told me yeah, you can sms me anytime and you can call me anytime, we can meet and we can get to know each other better. So I told ok, now she is my friend, she is not a very good friend, but she is a friend, now I don't chat with her, even sometimes she is online also, but I don't chat with her that much, I can SMS her directly so why to chat in front of everybody, like in Orkut." – Varun, case #6

These four individual stories of friendships formed on social networking sites on Orkut show that most of these friendships are with the opposite sex. One of the female respondents, Ruchita, case #12, also mentioned that many of her friends talk to random people from opposite sex on cell phones and that one of her female friends gets easily carried away and ends up meeting strangers, which she thought was not safe.

"Many guy friends of mine do talk to random girls but they will never cross their line or say something offensive or push the girl to meet them or you

know something like that but a girlfriend of mine talks generally to people and she gets carried away and she ends up meeting those people and you never know it's just not safe. It's like any strange situation, if you are in a place with complete strangers, it's not safe for you. In a city like Bombay it's just a basic fact, the same rule applies when you talk to random people online or through phone." – Ruchita, case #12

Dating. In addition to using cell phones to support friendships with members of the opposite sex who they had never met personally, the young people said that they use cell phones to talk to friends of opposite sex, even if they could meet with them face-to-face. As one of the respondents, Pranay, case #5, mentioned it was easier to talk to females on cell phones because talking face-to-face is difficult.

"If you are new in my college, and I am interested in talking to you then first thing is that I will talk to you and then I will take your number because that's the way I can come into contact with you, there's no other way. If every day I come behind you then basically, the girls here have mentalities, if we go and talk to them directly, they think he is interested in me, he wants to talk to me, main thing is this. So the other way we can talk to them is exchange numbers call them up and talk to them. And the main thing, guys over here don't have guts to go and talk directly. They always try to get their numbers, they can't talk face to face. That's the main problem so it's easier to talk on cell phones." – Pranay, case #5

Further, the respondents said that they found it easier to flirt and express feelings through cell phones.

"Like if I like a particular girl, and if I am attracted to her and if I have infatuation, so obviously I will talk more to her through the cell phone. If I don't know you that much then I can only express my feelings through cell phone, some of the things which I really want to tell you and which I can't tell in front of everybody, I can tell this through cell phone. Like I want to tell somebody sorry, so I don't feel ashamed, I don't feel good, I can't stand in front of her and tell I am sorry, sorry and that it really hurt you but through cell phone, I can SMS her once or twice and if she says yes, then obviously everything is clear and we can meet and all. Yeah, cell phones help to build a

relationship with girls. My friends in hostel also their bill comes to 2800 or 3000 because they do talk to girls at night. You can't be with a girl at 11 or 12 at night. In such a city like Bombay you can be if her parents are allowing her to go but if their parents are not allowing then. Yeah, girls have more restrictions." - Varun, case #6

Another male respondent, Mukul, case #7, said that girls are less forthright with expressing themselves face – to – face so it's easier to have intimate conversations through cell phones.

"Cell phone is a major way to get in touch with girls because it's more personalized as I said for direct contact but if I am very comfortable with you it doesn't really matter whether I talk to you on phone or in person. Majority of the girls can't talk face to face until and unless they are really sure of what the outcome of the situation will be. It is the outcome of the situation which defines whether to talk personally or on phone." – Mukul, case #7

The young people also gave personal and social reasons as to why it was easier to talk to members of the opposite sex on cell phones than in person. One of the interviewees, Aditya, said that due to social reasons it is inappropriate to talk about intimate topics such as sex face-to-face. Therefore, it was easier for him to talk about them on cell phones. Thus, he used personal reasons to justify the discussion of personal topics on cell phones.

"Girls, girls…obviously, being a guy I'll go for most probably girls… Girls like talking. ….talking anyhow, even through landline…cell phones…there are personal things, which they need to discuss sometimes so they approach. Cell phone is the best medium because that's a personal thing again….What do you mean by cell phone is – live wirefree…so it's again personal. Anything about sex, lot of topics, anything that you want…face-to-face you can't because there are people around who are conservative and you cannot talk like that, crowded places so cell phone acts as the best medium… some parents do mind their girls going to guy's place so then it becomes difficult.

Girls' parents might take it in a wrong way. So that needs to be taken into consideration." – Aditya, case #1

The above responses show that the respondents in Mumbai used cell phones to stay in touch with friends on a daily basis, maintain friendships with individuals they met on social networking sites and to have private and intimate conversations with members of the opposite sex. This was despite the fact that males and females could meet with each other on college campuses or outside in cafes, or even at home. The respondents said that it was easier to express feelings or to converse about diverse topics with members of the opposite sex on cell phones than in person due to both personal and social reasons. Further, the interviews suggest that the respondents talked on cell phones with members of the opposite sex to maintain autonomy in such relationships by avoiding parental interference in the conduct of such friendships.

Negotiating independence from parents

In response to the questions in the parental jurisdiction section, the young people in Mumbai indicated that they were using cell phones to negotiate independence from parents in certain matters. Twelve of the respondents said that their parents were not very concerned about their cell phone usage but at least three of them said that they are themselves fairly conscious of their cell phone usage when they were with their parents. However, there were at least three respondents – two females and one male who gave specific examples of their parents restricting their cell phone usage and how they manage their cell phone usage to avoid confrontation with their parents. The responses to questions in this section showed that the young people used personal and social reasoning in their use of cell phones to avoid parental restrictions or social rules. While on the one

hand, they used personal reasoning to maintain personal autonomy in their cell phone usage, on the other, they used social reasoning in their use of cell phones to respect parents' wishes.

Choice of wallpapers. Vikram, case #8, who was the only child, said that his parents were quite liberal. He said that if his parents ask him to change the wallpaper on his cell phone, he is going to directly confront them because he said that his parents could not order him regarding his cell phone use. This shows that he used personal reasoning to maintain personal autonomy in his use of his cell phone because he considered it as his personal property.

> *"Not really, I will ask it's not your business you know. If they suggested a different wall paper and if I like it I will change it but I want to see a reason as to why they would ask such a thing. Why would they ask to change it? I think it's too controlling you know. You're nitpicking on everything and you should also have a wall paper that they want I think that's bit much you know. If it is that person's phone, at least let him decide the wall paper. So, no that is a bit too much. Suggestions are fine but orders are not. I mean if you suggest something and I do like it then very good, but I don't think it should be an order that you change it like that." – Vikram, case #8*

Talking to friends. However, a couple of female respondents said that their parents were fairly restrictive about their cell phone usage. It was interesting that both of these females were 18 years old and received their cell phones only after the Mumbai flood incident in 2006. Shuchi, case #11 described in great detail the kind of rules her parents had about cell phone usage in general and her conversations with other males. She said that she ends up having a lot of fights with her father and if he tries to check her cell phone she switches it off so that he doesn't come to know who she was talking to. Their responses indicated that, on one hand, they used personal reasoning to maintain

privacy and assert autonomy in their use of cell phones; on the other, they used social reasoning to understand their parents' point of view in restricting their cell phone usage. For example, Shuchi said that she has lots of fights with her parents regarding her cell phone use for talking to male friends, a behavior her parents did not approve of.

"There are so many rules, not to talk to your friends late at night, there should be no frequent calls again and again. Like you meet your friends in college then what is the need to talk to them on cell phones. There are some restrictions. Q: Do you agree with that? A: I do have fights with them, there are lots of fights. Like why shouldn't I talk to my friends at night, when they are free then only they can call you up. People are not free when you are free. I do have lots of fights. It's like my mom agrees to all my decisions but my dad doesn't agree. Q. Do they check when you are talking? A: they do do that sometimes. They feel like I am talking on my cell phone and they come to me and ask me give me your cell phone. I will take your cell phone. I want to see who calls u up at night. Who's got so much time to talk to you. I'll do something like I will switch it off like my dad doesn't know how to come out of it (restart it) so I do that so that he doesn't come to know off anything. Q: Do you think it's ok for them to have rules? A: From their side it's correct; from our side it's not correct. They feel they are correct in their place; we are correct in our place. Q: So you don't like them looking in your cell phone? A: No, like what's the need we are not doing something wrong in talking to people. And we are not talking to some unknown people or someone who is very bad. They are all your friends so what's the bad thing behind it. Q: So do you think it's ok for them to monitor your cell phone usage or no? A: No, because then they will start like this person calls you up again and again all guys' numbers are there in your cell phone. There are no female friends of yours, only guys call you and everything everything. Then they will start. This person calls you up at night what was the need. Kya kam tha (what was it regarding?) I think that's too interfering. They are getting too much into you. Q: What if your parents asked you to change wall paper on your cell phone? Is that ok? A: According to them it's correct, according to us what we are doing is correct… Cell phone is really your personal property and there are some things which are personal and you wouldn't like to share them with your parents. It's like you don't like sharing even with your friends sometimes. It should be with you only and the person you are personal with…". - Shuchi, case #11

Another female respondent, Gunjan, case #13 said her parents also had many rules regarding her cell phone usage. She said that her father always looked into her mobile phone for the messages so she uses a security code to lock them up so that he doesn't have access to them.

> "I have restrictions on my cell phone. Maximum I can have is 200 – 300 Rs. (around $4 – 6) cash balance. It's ok for me and even that message thing I have is for free. Yeah, I have a security code. Even this is because my parents don't like the messages that I keep, they go on deleting them, I tell them don't delete them (my messages)... I have seen my father reading all the messages in my inbox. Because he doesn't like, he doesn't have any messages in his inbox, he doesn't have any wallpaper, any images, any kind of music, my mom doesn't like cell phones. So they are always behind me, that you should not do that... Now they can't delete it (messages), because I have this security code, even if they want to, they can't delete them. I just tell them, that today it's a fashion, today people keep messages to forward them, so now they don't.... I have explained that people keep messages, because if someone sees your inbox, it's very embarrassing that you don't have any messages. Talking, I don't talk in front of my parents because I don't use my cell phone at home. Even if I use it, I talk very little because they say what is the use of talking on cell phone. So yeah, they have kind of restrictions. Yeah, I avoid having a fight. Now he (my father) doesn't use my cell phone but earlier he used to. Like we are very eager to see other's cell phone when it is new." – Gunjan, case #13

One of the male respondents, Varun, case #6, was living in a hostel in Mumbai while his parents lived in another town, so he had more independence in his cell phone usage. However, he said that when he was living at home with his parents, he would be more cautious in his use of his cell phone, because they did not like if he talked late at night. His responses indicated that he used social reasoning in his use of hid cell phone when he was around parents or his elder sister, out of respect for them.

When I stayed with them they told me that don't talk at nights because it's your 12th boards so it shouldn't happen that your percentage is very low. Once I was talking late at night, then my father blasted me. Then next day he was ok. And sometimes to buy a new cell phone… My parents, are like they have old values… I will be obviously cautious if I am living with my parents. Like before going to them I will obviously delete all my stuff. Because sometimes my sister has read my SMSes so before I go to her I delete all my messages that I have sent to girls and all. She says that how many girls you talk to. – Varun, case #6

A couple of respondents also mentioned that it was more convenient to talk on cell phones to their friends from home late at night because their parents may not like it, if they used landline. Ruchita's response indicates that while she used social reasoning to show respect for parental rules regarding not talking late at night to friends, she also used personal reasoning for talking to her friends late at night on her cell phone because in her view her cell phone was her personal item and parents should not interfere in its usage.

"You can't go in the middle of the night and use your landline because your parents will know yeah, it makes it lot easier for the basic reason like any friendship or any relationship becomes more convenient because it's your personal phone which you can use however much you want to." – Ruchita, case #12 from Mumbai

Besides the convenience, cell phones also afforded privacy to the respondents regarding who they were talking to. One of the respondents said that sometimes young adults may not want their parents to know about each friend they are talking to. Mukul's response showed that he used social reasoning to avoid talking to friends on a landline, because his parents might not approve of them. At the same time, he also used personal reasons in the use of cell phone to talk to those friends his parents might not have approved of.

"If we make friends and you don't have a cell phone, the first problem would be how do I contact you and secondly if I contact you it will definitely not be on your landline because people in India might question, parents usually question, who is this new friend, etc. etc. Cell phones actually helps you be in direct contact with the person. It is no third party involved in it so." – Mukul, case #7

The above interviews show that parents have restrictions on the cell phone usage of the respondents regarding talking long hours particularly late at night. Furthermore, the interviews revealed that parents were particularly concerned about their daughter's talking to males on mobile phones. However, the respondents used various strategies to avoid parental interference for example, by locking the contents in their cell phones using a secret code or by shutting off the cell phone. In some cases, respondents used the text messaging service so that their parents wouldn't come to know that they are talking on cell phone.

In addition, the responses from young people also showed that they used personal and social reasoning to negotiate independence from parents in their use of cell phones. For example, they used personal reasoning to use cell phones for behaviors their parents wouldn't have approved of such as talking late at night to friends or forming friendships with members of the opposite sex. At the same time, they used social reasoning to avoid situations that would lead to confrontations with parents.

Mobile use for Pornography

In response to the questions on socially inappropriate uses of mobile phones, young males said that they used cell phones to view pornographic materials, although they sometimes characterized this as a misuse of cell phones. Varun, case #6, who lived

in a boy's hostel, said that many of his friends used mobile phones for downloading porn images or circulating porn messages through their cell phones.

> *"One of the disadvantages I consider of mobile phones is that people can watch pervert in their mobile phones so if they don't want to watch TV then you can access the internet through the mobile phones and they can download porn and all and then they can watch porn on their mobile phones. And basically people do that." – Varun, case #6*

Naman, case #4, who lived with his parents, said that keeping nude pics and all is a trend among college students, which he thinks is not appropriate. His response indicated that he used social reasoning regarding the use of a cell phone for keeping and viewing pornography on his cell phone.

> *"Keeping nude pics and all on mobile phones is not appropriate especially if parents come to know of it, it's not good. Definitely in college groups all these things are present. Having nude clips, porn movies and clips is all socially inappropriate." – Naman, case #4*

While Aditya, case #1, described keeping pornography on cell phones as not an appropriate usage of cell phones, he and Mukul, case #7 agreed that mobile phones are personal items and if adults are carrying such images in their mobile phones, it is their personal choice and the police should not be checking it. The responses by Aditya and Mukul also showed that they used both social and personal reasons regarding the use of cell phones for pornographic material on cell phones by police is not appropriate because cell phones are personal items. Similarly Mukul used personal reasons, for example, he said that as long as you are using cell phones for your own needs and not affecting others it is all right to use them for pornography or taking pictures.

"But people tend to misuse it, pornography, keeping pics, that's pretty bad, which I feel people should avoid that. I have seen 12 – 13 years old carrying cell phones, which is not good… I have seen many friends, there are my couple of friends who have lost their relationships with their girlfriends, with their friends, because of carrying all those pornographic things. That's pretty bad. Because they carry pornographic pictures….you know (in) India, how it is, people don't like that…sometimes you also get into trouble, if police by mistake inspects your cell phone and they find out there is pornography, porno film on your mobile phone, so obviously they will call your parents, and then troubles are there. …..Yeah, there was this time, two years back, but now it is completely banned because checking on private and confidential thing (cell phones) is bad, so police have banned this inspection. It happened with my cousin brother, he had this Nokia 6681, which was completely a new phone, so once he was like having a talk, so policeman saw him with that phone and called him for inspection and he was checking out whether porno films are there are not. That way it's a bad impression, but if your parents come to know, you are in deep trouble. Anyone won't like it." – Aditya, case #1

"Using pornography for some might be unethical but for some it's a source of excitement. That's not a moral issue. I don't think so until and unless a person doesn't know it's ok to take their pictures. It doesn't become immoral. I don't think it's unethical until and unless you are trying to invade into someone's privacy. It again depends upon who is invading into whose privacy." – Mukul, case #7

Thus, the young people used cell phones for viewing and keeping pornographic materials and used personal and social-conventional reasoning for their use for pornography. For example, the respondents were aware that using cell phones for pornography was not appropriate according to social-conventions but they said that it was appropriate for personal use because cell phones were for their private use.

Mobile Use for Teasing and Harassment

In response to questions on the immoral or unethical uses of cell phones, the young people, particularly females, mentioned that it was very common for males to use

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mobile phones to take pictures and videos of females without their permission. They used social and moral reasoning to assess these behaviors as socially inappropriate or immoral. Vinita, case #10, mentioned that for males to click pictures of females without their permission is not morally appropriate.

"Boys they like a girl they click, they snap… They show it to their friends and they say she is such a babe and all that. It is so immoral I mean come on, haven't you seen girls? Aren't they humans or whatever?" – Vinita, case #10

Simiarly, Shuchi, case #11 described an incident in which a video of a nude girl was clicked through a key hole without her permission. She used moral reasoning to characterize this behavior as unethical.

"Clicking pictures is immoral; there are people who take out your videos. I had heard from someone, my friend used to stay in a building and she had a neighbor and this guy was there, and she used to get ready everyday in the morning (in her room) and this guy used to see (her) from the letterbox, and took a video out of it and he passed on this video to all his friends. It's nothing, this girl's name is getting spoilt, her character is getting spoilt. She is getting a bad name in front of other people, like she is not a good girl and she is something not approved of by the society." – Shuchi, case #11

In another instance, Vaani, case #9, described a situation when someone was trying to take her picture on a beach. She also described how men are using mobile phones to harass women by giving blank calls or blackmailing or threatening them. She also used moral reasoning to assess this behavior as inappropriate.

"Yeah, a guy might be taking a girl's pictures and the girl might not be liking it. It's a bad way…. Even when we go around people take our pictures and we just stare back. What the hell you are doing dude? Just walking around people take pictures. When we look at them they just stop and delete it and we say excuse me bhaiya hamare samne karo jo karma hai. (Excuse me, mister if you want to do something, do it in front of us). Once on the

beach…More incidents maybe something like. Giving a threatening call, giving messages which are not up to the mark….I have just received some calls but no messages. It's all kind of weird calls – I like you and stuff. I say shut up I don't care whether you like it or don't like. People keep on hunting and one day they suddenly get it's all luck. Q: And you think it's bad? A: Yes, because we don't want that person to be with us. So we can't even stop that, we can just ignore it. It's easy for a person to blackmail or threaten." – Vaani, case #9

One of the male participants, Aditya, case #1, said that once he clicked a picture of a girl without her permission and realized that it was not really appropriate to do that. Aditya used moral reasoning to characterize his own behavior as morally inappropriate.

"Even I didn't like it when I had taken a girls' pic without her permission. So that's pretty bad. Yeah, I apologized. I had apologized for that." – Aditya, case #1

Another male participant, Pranay, case #5 said that he had pictures of women in his cell phone, which were taken through mobile phones without their permission. He said that males usually click pictures of females to harass them. Pranay also used personal and moral reasoning to assess this behavior as incorrect. He used personal reasoning to say that taking others' pictures without their permission is inappropriate and circulating nude videos of others is morally incorrect, as it is harmful to their social image.

"If a girl doesn't want to talk to a boy and he takes out her pic without her permission it's wrong. One of the examples in the library only, and she is one of my friends, one guy in the library was interested in her and he kept his mobile like this (shows how) he was interested in taking out her pic and she just went and complained to staff over there and they took his mobile phone… See what happens - the case is, the guys they try to take nude pics and all and then they harass them… I have some clips with me so I can say that this has happened, but in front of me never. Q: So how did you get those clips? A:

*Through friends. Q: Who is there in these clips? A: College friends." –
Pranay, case #5*

A couple of respondents described how porn videos were created and circulated using mobile phones to harass women and malign their social image. They used social and moral reasoning to assess such behavior as socially and morally inappropriate.

"MMS (multi-media messages) and all you have heard. In Delhi Public School, there was a boy and a girl, and they were doing sexual activity, and the boy captured her while doing sexual activity and made a porn movie and the boy was very smart he didn't show his face in the movie, so the girl was screwed and I received that movie when I was in school, so basically this is a disadvantage. Ok, like you are watching porn it's ok. But you are playing with someone else's life, like she is 16 or 17 and she is indulging in such activities, ok fine ok, but that guy he made a video out of it and distributed it to people all around India and everybody knows about that video. After that, one MMS was of Preity Zinta (movie star) and another of Karina (movie star) and Shahid (movie star). Priety Zinta one was like she is nude and somebody had taken (her) picture through a key hole. And Karina and Shahid it was a lip kiss. So whoever had captured it forwarded to 4 or 5 people and they forwarded it 4 or 5 so 50 people and that's how it grew. Listen, my thing is that as far as MMS is concerned, it shouldn't be there because the operators can't check them because they don't know what it is about and they are not forwarded by mobile service but Bluetooth. So we don't have to spend money on that, it's free to do that. And in youth it becomes a big issue because everyone asks whether you have watched it or not and it becomes a big issue in media." – Varun, case #6

"There was this whole thing that some girl was being molested and someone (with a) video shot it, I think using a cell phone and basically circulate it all over that is wrong, that is unethical. That's like saying, it's a matter of the user not the technology if you give gun to a good cop it's going to be used in the right way but if you give the gun to the gangster it would be used in the wrong way that's all…They misused it for a purpose which was wrong." – Vikram, case #8

Vikram also used moral reasoning to assess the practice of creating and circulating mobile videos while ridiculing others as unethical.

"I have seen people getting into fights and people recording this just to make fun of the guy and later circulate around. Or you take a picture of a beggar around and you record it and circulate it and make fun of him, that's wrong. Q: Why do you think it's unethical? A: It's just wrong you know why do you make fun of the guy. It's wrong in terms of what you are doing." – Vikram, case #8

Ruchita, case #12 described another instance in which her friends called up one of the professors on his cell phone late at night and harassed him. Ruchita used social and moral reasoning to judge her friends' behavior as inappropriate.

"Oh we had a professor in school who had a cell phone, I don't know if that's appropriate, the guys used to call him at 2 at night to ask him doubts (about course) just because he had a cell phone and he gave it out in class so everyone used to harass him that's the only thing I can think of what we guys have done. We were girls so we were supposed to be those nice well mannered people so we never used to do anything but yeah they used to come the next day and tell us the story of what happened and we used to laugh about it and tell other people so yeah so we never snubbed them we kind of encouraged them." – Ruchita, case #12

Thus, the interviews revealed that cell phones were also used by males to click pictures and videos of females and to tease and harass others and that the interviewees used social and moral reasoning to assess such behavior as inappropriate or unethical.

Conclusion

The interviews indicated that the fast – paced life of Mumbai, where respondents traveled long distances by local trains every day and spent most of their day away from home, determined their use of mobile phones. They used the diverse functional capabilities of cell phones to keep themselves occupied on their daily travels. They found it easier to communicate via text messaging while traveling in crowded and noisy trains. Cell phones allowed them to remain connected with their family throughout the day and

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they used them to inform their family of their whereabouts throughout the day. Furthermore, they used them to coordinate and plan activities with friends. The females particularly found cell phones useful during emergency situations. Although most of the cell phone use happened on the streets, the young people used cell phones to have private conversations with friends when at home.

The young people also used cell phones to access news and information related to their personal interests and that they liked sharing with friends. However, the high cost of news services prevented respondents from subscribing. The use of mobile phones for entertainment was highly popular among respondents in Mumbai who used them to listen to music or play games while traveling. The respondents also liked to click pictures of their friends through mobile phones and store them for later use. The male respondents also mentioned that young adult males keep and view pornographic content on their cell phones. The young people used both personal and social reasons to assess the use of cell phones for keeping and viewing pornographic content. For example, they used social reasoning to indicate that while it may not be socially appropriate to keep porn material in their cell phones, according to their personal reasons it was permissible because cell phones were their private devices.

The young people also perceived cell phones as fashion and status objects but said that they did not really use them to look fashionable or rich. However, they mentioned that well- known expensive brands can enhance a person's status.

In Mumbai, young people viewed cell phones as personal items and used them to store private content and maintain privacy. The respondents viewed cell phones as a

marker of adulthood, as an extension of self and showed emotional bonding with them. They used ringtones and wallpapers to distinguish their cell phones from others and females used accessories to make their cell phones look fashionable. They also used cell phones to store private content and did not like others to look into their mobile phones.

The young adults in Mumbai also used cell phones to stay in touch with friends and maintain friendships with individuals they met on social networking websites. They also felt that it was easier to talk to members of the opposite sex on cell phones because they could express themselves more openly that way than in person. However, the young people also reported that males used mobile phones to take pictures and videos of females without their permission and circulated them. The young people used social and moral reasoning to characterize this behavior as socially inappropriate and unethical.

Young people in Mumbai also used cell phones to negotiate independence from parents. For example, they locked the private content in their cell phones with a security code so that their parents could not view them. They also used cell phones to create and maintain friendships, especially with members of the opposite sex, which their parents might not have approved of. They used personal and social reasoning to maintain privacy from parents without showing disrespect for them.

The next chapter presents the results of qualitative analysis of interviews conducted in Kanpur.

CHAPTER 5: RESULTS – QUALITATIVE ANALYSIS – KANPUR

This chapter presents the results from the qualitative analysis of the long interviews conducted in the city of Kanpur. This chapter is organized into two main parts, in the first part a brief description of each of the interviewees is presented and in the second part the results from the qualitative analysis of the interviews is presented under the following headings – mobile phone use for communication activities, mobile phone use for media-related activities, mobile phone use for social image, mobiles phones as personal items, mobile phone use in friendships, mobile phone use in negotiating independence from parents, and mobile use for teasing and harassment.

A few of these sections have been divided into sub-headings. For example, the section on mobile use for communication activities contain sub-headings such as emergency devices, to inform parents, coordination and planning, text messaging, and private conversations. The section on mobile use for media-related activities includes information under the following sub-headings - information and entertainment. The section on mobile use for social image has been divided into two sub-sections – fashion items and status symbols. The information in the section on friendships has been divided into sub-sections such as maintaining face-to-face friendships, cell phone friendships, and dating.

As in the case of the previous chapter, the themes in which the qualitative data is presented in this chapter correspond to the theoretical perspectives used in this

dissertation. For example, all the sections in this chapter provide evidence for the uses and gratifications theory, indicating that young people in Kanpur used cell phones for needs related to communication, media and age (for enhancing social image, for personal identity and privacy, for maintaining friendships and dating, for negotiating independence from parents and for pornography). In addition, the data presented in the sections on mobile phone use as personal items, mobile phone use in friendships, mobile phone use in negotiating independence from parents, mobile phone use for pornography and mobile phone use for teasing and harassment has been analyzed using the concepts from social-cognitive domain theory. It provides evidence that young people used all three forms of reasoning: personal, social and moral, in their use of mobile phones.

Description of the interviewees

Unlike Mumbai, where it was easy to recruit participants at college campuses, in Kanpur the interviewees were recruited with more difficulty through friends and relatives and a coaching institute. Coaching institutes are privately run centers where students go to take tuitions to prepare for entrance exams. The coaching institute, where the interviews were conducted for this study, gave tutoring for entrance tests for degrees Masters in Computer Applications (MCA). Six of the eight male respondents and two of the seven female respondents were interviewed at the coaching center. Two of the male respondents and four of the female respondents were interviewed at private residences and one of the female respondents was interviewed at an ophthalmologist's office. In this part, the description of male interviewees is presented and then the description of female interviewees is presented.

Description of Male Interviewees

     Case no. 16. Manish was contacted through relatives. Manish was 23 years old and was engaged in a full-time business of running a printing press. He was also enrolled in the third year of a Bachelors of Arts program at Bundelkhand University located in a town near Kanpur. He was living at home with his parents and a younger brother who were also engaged in business. He said he was traditional because he was very religious, he respected his elders and liked his girlfriend in traditional Indian clothes. He said he was modern because he kept up with fashion trends, smoked and liked to see girls, except his girlfriend, in short and revealing clothes. He said that he had TV at home which he shared with his family, and he rarely accessed internet from a cybercafé. He said he acquired his first cell phone using his own income when he turned 18 years old. At that time he was still completing his 12th grade, but he had already started his business. He said that the main reason for acquiring a cell phone at that time was for fashion, to show off, because everyone else around him had one. But after five years of having a cell phone, he said, he realized that he should not place so much importance on cell phones.

     Case no. 17. Anand was interviewed at the coaching institute. He was 21 years old and was enrolled in the third year of a Bachelors of Science program at a local college in Kanpur. He was living at home with his parents, one younger brother and a younger sister. In his part time, he gave private tutoring to school children to earn money. He said he was traditional because he respected his parents and believed in the traditional system of arranged marriages. However, he said he was also modern because he liked

using latest electronic gadgets. At home, he had a TV which he shared with his family and he rarely accessed internet from a cybercafé. He bought his first cell phone when he went away from home for a year in Chennai, a metropolitan city in the South India, for college education. However, when he came back he had to give up his cell phone and at the time of the interview he was sharing his parents' cell phone.

Case no. 18. Amit volunteered to be interviewed at the coaching institute. He was 22 years old and lived in Kanpur along with his family which consisted of his father, mother and two sisters. His elder sister was an information technology professional who was away from home for work. His younger sister lived at his parent's house. He said that he was a modern person because he lived his life in the present moment and did not worry about the future. At home he had a TV which he shared with his family and he rarely accessed internet from a cybercafé. At the time of the interview he had completed his Bachelors of Science degree from a college in Kanpur and was preparing for his Masters degree in Computer Applications (MCA) entrance exams. He bought his first cell phone when he was 20 years old after requesting his father to buy him one. He said that he wanted to buy a cell phone because his cousin and friends had cell phones.

Case no. 19. Nayan was also interviewed at the coaching institute. He was 22 years old and lived with his extended family in Kanpur, which consisted of grandparents, parents and sister. His father worked in the police force. At the time of the interview, he had completed his Bachelor's degree in Computer Applications from a university in Allahabad, another town, and was studying for his MCA entrance exams at the coaching institute. He said he was modern because he liked to wear clothes with name brands and

he drove a motorbike. At home he had a TV which he shared with his family and he rarely accessed internet from a cybercafé for work-related purposes. His father paid for his first cell phone, when he was 20 years old. Since then he has replaced his cell phone once because the first one did not work properly.

Case no. 20. Sanjeev was 21 years old and lived in an extended family in Kanpur. His family consisted of grandparents, father's brothers and their family, his parents and elder brother. At the time of the interview, he had completed his Bachelor's of Science degree from a local college in Kanpur and was taking coaching classes to prepare for his MCA entrance exams. He said that he was a traditional person because he did not smoke or drink and liked home-made Indian food. He said that he had a TV at home which he shared with his family and that he rarely accessed internet at his cousin's home. He said that he liked surfing through the net and reading about the latest electronic gadgets and catching up on news on his favorite sport, wrestling. He said that he acquired his own cell phone a week ago. His elder brother who had a job bought the cell phone for him. Previously, he said, he shared his brother's mobile phone. His main purpose for having a cell phone was to talk to his friends.

Case no. 21. Anil was a 25 years old student studying for his MCA entrance exam at the coaching institute. He had completed his Bachelor's of Science degree from a local college in Kanpur and was living with his parents. He said that he was a modern person because he wore modern clothes and used electronic gadgets such as a mobile phone. He said that he watched TV at home which he shared with his family and occasionally accessed internet from a cybercafé to check his exam results. He acquired a

cell phone a couple of years ago when he told his parents that he needed one. His parents paid for his mobile phone.

Case no. 22. Mohit was 21 years old and lived in Kanpur with his parents and elder brother. He was engaged in full-time business, managing a printing press along with his brother and was studying part-time in the second year of a Bachelor's in Commerce degree program at Christ Church College in Kanpur. He said that he did not need to go to college regularly for class instruction and went there only for exams. He said that he was a traditional person because he did not care about fashion or style. He said that he had a TV at home which he shared with his family. He also had a computer in his office on which he mostly played games. He sometimes accessed internet from a cybercafé for work-related purpose. He launched his business soon after finishing his high school and he acquired his cell phone around that time for business purposes.

Case no. 23. Rajeev was 21 years old and taking coaching at the institute for his MCA entrance exam. Although his parents lived in Kanpur, he stayed separately from them in a hostel so that he could concentrate on his studies better. His family consisted of his father, mother and a younger sister. His father ran a small business of making pickles and supplying them to local stores. He said that he was a modern person because he liked wearing fashionable clothes and he owned a motorbike. He said that although there was a TV in the hostel, he never watched it. He said that he rarely accessed internet from a cybercafé for study-related purposes. He said that he got his first cell phone a year back when his friend bought one for him. He later paid the money for it back to his friend.

Description of Female Interviewees

Case no. 24. Shalini was 21 years old and living with her parents in Kanpur. She is an only child and her father is a businessman. She was in the third year of her Bachelor's in Commerce degree program and also teaching at a coaching institute for high school students. Along with that she was also preparing for her Master's degree in Business Administration entrance exams. She said that she is a mixture of traditional and modern because, although she wears modern clothes, she listens to her parents and does not like to disobey them. She had access to TV at home which she shared with her parents. Unlike the other students in Kanpur, she had a personal computer with internet connection at home. She said that she acquired her first phone after 12th grade when she was transitioning from school to college. She said she needed it when she got a job because her work place was far from home. She had already replaced her cell phone twice.

Case no. 25. Shikha was 21-years-old and living with her parents in Kanpur. Her family consisted of a businessman father, homemaker mother and a brother, who was working in another city. She was studying for her Bachelor's of Arts degree, specializing in psychology and economics at a local college. She described herself as a mixture of traditional and modern; according to her, her values were traditional and her thinking was modern. That is, she respected her parents and took their advice in major decisions of her life; however, she said if need be she is willing to stand up against traditional society. She said that she had a TV at home which she shared with her family. She said that did not have access to internet at home but sometimes uses it at a cybercafé for her college

projects. She did not own a personal phone but was sharing one with her parents. She said, although her father has told her to buy a cell phone, she did not buy it because she didn't think she needed it.

Case no. 26. Rashmi was a 21-year-old female living in an extended family in Kanpur. Her family consisted of grandparents, parents and the father's brother's family. Her dad ran the traditional family business of making perfumes and running a newspaper delivery franchise. She was studying in the final year of a Bachelor's in Commerce degree program. She said that she was a mixture of a traditional and modern person. She said that she was traditional because she respected her parents and was modern because she liked wearing western clothes such as jeans, t-shirts and skirts. She acquired a cell phone when she attended college. Her dad decided that she needed a cell phone and gave her one as a gift on the festival of Rakshabandhan. This is a festival celebrated throughout India in which girls tie a thread to their brothers. The thread is a symbol for asking protection from the brother. Rashmi received the cell phone as a gift in the name of her brother who was one-year-old at that time.

Case no. 27. Shilpi was a 21-year-old female living in Kanpur with her mother. Her father died three years earlier and her brother lived in New Delhi because of his job. She had completed her Bachelor's of Science degree with a specialization in computer science from a local college in a city near Kanpur. After that, she returned to Kanpur with her mother for advanced studies. She was taking coaching in preparation for her MCA entrance exam. She said that she had a black and white TV at home without cable so she never watched it. She said that she rarely accessed internet from a cybercafé to chat with

her brother who worked in another town. She bought her mobile phone a year earlier because her aunt decided that if she was away from home, she needed to inform her family about her whereabouts.

Case no. 28. Reeti was 21 years old and lived with her family in Kanpur. Her family consisted of her father, mother, grandmother, younger brother and younger sister. She was enrolled in the first year of a Master's of Commerce degree program at a college in Kanpur. She was also running a part-time home business of making chocolates and packing wedding gifts. She said that she was traditional because she respected her parents and liked wearing traditional clothes. She said that she had access to internet at home but used it only once a week for recreation purposes. She also got her first cell phone on the occasion of Rakshabandhan in 2006, when she was 20 years old. Her father decided that she needed a cell phone because everyone around her had one.

Case no. 29. Deepali was 20 years old and was studying engineering in a college in Noida. In Noida, she was living in a girls' hostel. She was interviewed at the opthalmologist's office in Kanpur. The interview was arranged by the doctor who was a relative. She was visiting her parents for winter holidays. She said that she is not really a modern person but is trying to be one by speaking English, wearing modern clothes and using electronic gadgets and internet etc. She said that the hostel had a TV which was shared by all the residents; that is why she never watched it. She said that she had a laptop with internet connection, and she liked using it for work, recreation and social activities. She said that she received her cell phone from her parents when she left for the

hostel. Her parents thought that it was necessary for her to have a cell phone while staying in the hostel so that they could contact her easily.

Case no. 30. Rakhi was 20 years old and in the third year of her studies for a Bachelor's in Computer Applications degree at a college in Kanpur. She lived with her family which consisted of her father, mother and two younger sisters. Her father was retired from the Navy. She said she was both traditional and modern because she respected her parents, and also liked keeping up with the times. She shared her cell phone with her family and used it when she went out of the house. Her parents thought it was necessary for her to carry a cell phone for her safety when she went out.

Qualitative Analysis of the Interviews

Mobile Use for Communication Activities

The qualitative interviews showed that young people in Kanpur used cell phones as emergency devices, to inform parents, for coordination and planning, text messaging, and for private conversations.

Emergency devices. In Kanpur, four of the seven female respondents said that they acquired a cell phone for emergency situations. For example, one of the female respondents, Shalini, case #24, who was teaching at a coaching institute, said she needed a cell phone because her work place was quite far away from where she stayed.

> *"I got a job and my coaching place is very far away so I need a phone so that if there is a problem then I can contact my parents." – Shalini, case #24*

Two of the females who attended coaching classes were out until late at night and drove their own two-wheeler vehicles. They said that they acquired cell phones so that they could contact their families during an emergency.

"For my security, for example, if I am going somewhere and I know I am going to be late so I can tell my parents that I am going to be late." – Rakhi, case #30

None of the male respondents in Kanpur said that they bought a cell phone for emergency purposes. Perhaps this is because Kanpur is a small town and usually the distances between home and school are not as far as in Mumbai.

To inform parents. One of the female respondents said that she acquired a cell phone so that she could inform her parents when she was running late.

"My aunt and all said that if you are going out and you get late so how will we know where you are so you need a cell phone. Because sometimes I really run late so how do I inform them…"– Shilpi, case #27

Coordination and planning. It was very surprising that in Kanpur, only one of the male respondents, Mohit, case #22, said that he used cell phones to coordinate or plan out evenings with friends. Mohit, case #22, was a businessman and led a hectic lifestyle and rarely got time to socialize with friends. By contrast another respondent said he saw most of his friends daily, so had little need to converse with them via cell phones.

"Sometimes when I am done for the night and my friends are gathered at the cold drink shop they will call me to have a cold drink if I am free. So I just go have a cold drink and go home." – Mohit, case #22

"Normally if I have to talk, it is for few minutes, mostly for coordinating meeting plans. If I have to go and play a match so we talk about that. I don't have long conversations. Why should I have long conversations with them. I meet them every day." – Sanjeev, case #20

This appears due to the small town culture in Kanpur where people usually have fixed hangouts for evenings so they don't need to call each other to make plans. Also unlike Mumbai, there are very few areas where people can hang out, and in Kanpur shops and cafes close early and there are no nightclubs and bars. Since the distances are close, it is quite common for people to meet at their friends' places and then head out for the evening.

Text messaging (SMS). In Kanpur, the respondents communicated via text messages more than with voice calls. For example, Sanjeev, case #20, who had acquired a new cell phone a week ago, said that the main thing he checked before purchase was if he could send text messages (SMS) to his friends for free.

> *"The main thing I had looked for is SMS (text messaging). In TATA Indicom (name of the cell phone provider) I was getting 1000 SMS free so it was a good deal and secondly I bought it because I will have free TATA to TATA service (free calling within the same network) so I can talk to my friends easily. So even if I am not able to talk I can send SMS so there is a link, and mind is refreshed because we keep sending SMS to each other. Mostly we communicate through SMS. When we really need to talk, then we call up and talk. So when we need to talk it's a waste of time to type for half an hour. Usually we forward nice SMSes to each other. Through messages we just inquire how the other person is doing." – Sanjeev, case #20*

Rajeev, case #23, who was preparing for his Master's in Business Administration entrance exam, said he usually sends text messages (SMS) when he wants to express himself.

> *"I usually use text messages. Sometimes I talk also. Q: What do you do more? A: I talk more. Q: Why? A: Because I think that if you talk more then you will have different feelings and SMS is just a normal thing, for example, if you have some nice feelings and you might pen a poem and send it to your*

friends but if you want to tell them something then it is better to talk." –
Rajeev, case #23

Shikha, case #25, who shared her cell phone with her parents, also said that she

liked to send text messages because that way she could express her feelings.

"I like sending messages a lot, more than talking I like sending messages
through cell phone. I usually communicate through text messages (SMS)
because I like reading SMS. I think there are more feelings in SMS. When you
read them it feels like someone has send something. Yeah I receive a lot of
SMS. My SMS go on 24x7." – Shikha, case #25

A couple of female respondents, Rashmi, case #26, and Shalini, case #24, said

that they mostly communicated via text messages about mundane stuff. Rashmi, case

#26, said that she bought a text messaging package, so she got 1000 messages for around

Rs. 300 (roughly $6.00).

"Like I use mostly text messages (SMS). I do a lot of SMS, around 40 – 50
messages in a day. Mostly I do SMS as compared to voice. I call only when it
is absolutely necessary. Q: What kind of messages do you send? A: Like
'what's happening. What's going on'. Normally like the talk between friends,
like we haven't met or if there is some problem." – Rashmi, case #26

"Messages, now – a – days I am doing messages only, if I had to ask 'where
are you' then I will just use text messages." – Shalini, case #24

Rakhi, case #30, who was preparing for her MCA entrance exams, said that she

sends messages because she buys a text messaging package and has to finish using it by a

certain date so she keeps sending messages (SMS).

"If I get an SMS card then I keep sending SMS otherwise I just talk. Q:
During the day how many SMS do you send? A: If I put an SMS card then I
get 1000 SMS which I have to finish in a month so I keep sending them." –
Rakhi, case #30

It appeared that in Kanpur, the respondents used text messaging to keep in touch with friends, express their feelings and converse about day – to – day activities. They also mentioned that they liked to send messages because they got free messaging facility from their service providers or they could buy text messaging packages, which eventually turned out to be cheaper than calling.

Private conversations. There were a couple of respondents who said that they use their cell phone to socialize or have long conversations with friends. Rajeev, case #23, said that he used his cell phone to have long conversations with friends, especially at night, because he got a free calling service on his cell phone and that he could not go out at night to meet up with his friends.

> *"Generally to talk and now-a-days because night time talking is free so we discuss a lot of problems related to studies and life. Sometimes we make plans also. For example, I have a friend who lives a little far away but if I want to discuss something at 2 o'clock at night then I can't go and meet him at 2 a.m. So cell phone is one way through which we can call each other and talk. I don't have a girlfriend but I do talk to my friends till late in night. The most important thing is that you don't have awareness of time, once you start talking you keep on talking and it is difficult to remember that I need to eat also for example, if we start talking on some really very good topic. At that time, we are not really aware whether I am hungry or thirsty except that I am enjoying talking." – Rajeev, case #23*

Deepali, case #29, who lived in a hostel in another city, said that all her friends were out of town so she called them at night to catch up with them.

> *"I call my friends mostly… just sharing, talking…at night basically after I have had my dinner, then I get time to talk to everyone." – Deepali, case #29*

Reeti, case #28, who was living with her parents in Kanpur, said that most of her friends were out of town attending school. She said that she had long conversations only when her friends called up after a long time of not being in touch.

"Why do I need to have long conversations. Yeah, if I talk to my friends after a month or two then I do have long conversations. Some of my friends call me after 6 months, then we talk for almost an hour." – Reeti, Case #28

Therefore, it seems that in Kanpur students had long conversations mostly to catch up with friends late at night when they could not go out or to contact friends after a long period of not doing so.

Mobile phone use for media-related activities

The interviews with young people in Kanpur revealed that they used mobile phones for media-related needs such as accessing information and news and for entertainment.

Information and news. Only a couple of respondents in Kanpur said that they accessed news updates on their mobile phones. One of the respondents, Manish, case #16, who was a businessman and invested in stocks, said that he subscribed to news updates related to stocks.

"Stock market related. I was into stock market that time. Q: So you get updates of that? Yeah. Every 15 – 20 min I used to get updates on stock exchange. Q: How much did it cost you? 1500 Rs. per month." – Manish, case #16

One of the female respondents, Rashmi, case #26, said that she accessed cricket news on her cell phone mainly in situations when there was no electricity and when she is outside her home or college.

> *"I do access cricket news on cell phone. Q: How do you access that? A: It's by the service provider you have to pay some charges. Q: But why do you access on cell phone? A: For example, if there is no electricity and if we are outside, among friends, in college then I do it." – Rashmi, case #26*

It may be important to mention here, that power outages lasting hours are very common in Kanpur, and it possible that mobile phones may become popular for news in Kanpur for this reason.

Entertainment. Three of the female respondents in Kanpur said that they used their cell phones for entertainment. Interestingly, all three of them lived in the same building and had expensive cell phones. Shalini, case #24, and Reeti, case #28, said that they liked using their cell phones to listen to music and Rashmi, case #26, said that she liked to play games on her cell phone.

> *"Which features of your cell phone do you mostly use? A: FM radio. Q: Where do you use that? A: At home. When I am free from my work and my studies then I listen to radio. When I am feeling bored, then music is the best way to pass time. I don't have speakers or media players at home, so FM is the best. On computer I have limited songs only so radio is the best." – Shalini, case #24*

> *"For entertainment, I used to have music, listen to songs on my cell phone and play games. That's for passing time. Basically I use MP3 (music player), in my cell phone I have iTunes (a music software), you know, so I use iTunes and I have a little bit interest in having new ringtones. So I used to transfer many of them. Basically I just go for music that's all." – Reeti, case #28*

> *"When my phone was new, I used to play a lot of games, but now it has only 2-3 games so I get bored now. Q: So you have never downloaded games? A:*

No. Now I feel it's better to go and play on computers or somewhere else. Initially I used to play mostly at night, and since we don't really have college, I play for passing time or if I am sitting somewhere, everyone is getting bored so we use each other's cell phone to play games. If I play then I could play for two hours continuously. And in a whole day I could play for around 3 hours, not more than that." – Rashmi, case #26

It was interesting that none of the male respondents in Kanpur said that they used their cell phones for entertainment. This could be because respondents in Kanpur traveled on their own private vehicles such as scooters or motor bikes, hence could not really use their cell phones for entertainment during travel. Also at home they were living in extended families and probably needed to interact with family members; therefore they could not really find time for solitary entertainment.

Mobile phone use for Social Image

The qualitative data showed that young people used mobile phones as fashion and status items to enhance their social image.

Fashion items. One of the male respondents, Sanjeev, case #20, described how his friends used it as a fashion item.

"Yeah, I have a few friends who use it as a fashion item. Even they dress up fashionably like a movie star. For example, Emran Hashmi (movie star) has worn a band so they will also wear one whether it looks good or not, they will wear it. if you go to Swaroop Nagar, you will see that everyone is carrying a handset these days. Everyone will be wearing goggles on their eyes and carry a cell phone in their hands…. People plug earphones and listen to FM on their cell phones even if they have a cheap cell phone. So people do it for fashion. Yes, off course it is a status symbol. The kind of handset you use shows the kind of background you have." – Sanjeev, case #20

However, at least four of the male respondents said that they have friends who used cell phones as fashion item to impress girls. One of the male respondents, Mohit, case #22, said that people keep expensive cell phones to show off.

"Yeah, it is a fashion and what else. I mean they buy a palm top phone which has more functions than a laptop but you are mainly using it to send messages to girls and talk to them at night. But they will keep 50,000 Rs (approximately $1000) mobile phone. So it is mainly a fashion statement." – Mohit, case #22

One of the female respondents, Rakhi, case #30, said that it is important that people know that she is carrying a cell phone. She said that it feels good to have a cell phone.

"Like I keep it in my hand most of the time and listen to songs which is also for entertainment, maybe not so much but it should look like yeah I have. I mean if you have a cell phone then you feel good about yourself." – Rakhi, case #30

Another female respondent said that she uses her cell phone as an accessory and sometimes uses cell phone accessories such as hangings to make it look very fashionable.

"Yes, sometimes, when I used to wear a dress matching to my cell phone then I like to hold it in my hand, otherwise I would keep it in my pocket or purse. It's mentally I feel that if it is matching then I can hold it in my hand, what is the problem. Also I like hangings, I have a variety of hangings which I like. So I keep changing them and whenever I go to the market I am in search of a new sort of hanging. Sometimes people also use tattooing and sparkling effect. In the market, there are fashionable covers that are available to hang it up and sometimes people use that." – Reeti, case #28

However, two of the female respondents said that although they have seen people using cell phones as fashion items, they don't necessarily use them as such.

"I have seen a lot of people when they are walking on road they keep talking or keep their mobile in their hand all the time. Even in the coaching I have seen a lot of people using it as a fashion item. 60% people use mobile phones as a fashion item but I don't believe in it." – Shilpi, case #27

"I don't think it is a fashion item; if it was a fashion item then I would have carried it everywhere. I have seen that people don't really have a requirement but still they want that they should have a new handset with new technology. They don't really have a requirement yet they want a new cell phone with latest technology then what is this – fashion." – Shikha, case #25

Status symbols. Another male respondent, Rajeev, case #23, said that mobile phones are a status symbol; particularly, he said that brand of the cell phone people carry reflects their status.

"Another thing about brands is that it becomes a status symbol. If you are sitting somewhere for example, if you have a Motorola cell phone and I have a very simple, general cell phone so definitely this thought will come to mind that there is some difference in the thinking of two people. So even that's why brands are very important." – Rajeev, case #23

Another female respondent, Rashmi, case #26, said that it's important to have an expensive cell phone because it reflects the kind of family background you come from.

"If you have a good cell phone of a good brand, that means you belong to a rich family. If you use a cell phone worth 50,000 Rs. (approximately $1000), that means you belong to a rich family... I don't consider it a status symbol but now-a-days it is considered as a status symbol. I mean if someone doesn't have a cell phone, they will be looked down upon. Even an 8th grade kid needs to have a cell phone. It has been made into a status symbol." – Rashmi, case #26

Another male respondent, Anand, case #17, said that he thinks cell phones are fashion and status items and that having them boosts confidence levels.

"There was one time, when I was in 12th grade I used to feel that I need to have mobile phones, if I want to make friends with girls. It used to feel like

it's a fashion and status symbol both. It gives you a lot of confidence and you feel you deserve it and you can talk to anyone." – Anand, case #17

Two of the male respondents said that their friends buy expensive cell phones to impress girls.

"If you have a good and expensive set then you will be considered very stylish and handsome. Girls will be impressed with you. But girls don't get impressed only by mobile phone. If a girl is getting a bit impressed then the guys try to show their status through mobile phones." – Manish, case #16

"Some of my friends who are doing B.Tech (Bachelors in Technology) they say I have to go to college and even girls are also there. And girls look at all these things before becoming friends with you so I have to show them." – Sanjeev, case #20

One of the female respondents, Reeti, case #28, said some of her friends show off their expensive cell phones.

Yeah, some of them have a habit, they will say that please look at my new cell phone. I mean you can see that they are using a 20,000 Rs. (approximately $400) cell phone and showing off. I mean you can see that it is a status symbol. Yeah, many of my friends are like that, they say look this is my new cell phone, it has so many features and I paid so much for this cell phone. So it feels that I am showing my status symbol. – Reeti, case #28

One of the female respondents said that she really likes to show off her cell phone at parties. She said that it is important to have an expensive cell phone if someone wants to stand out, since cell phones are very common these days.

" You can say that, I really like to hold my cell phone and show it off that I have a good cell phone, in parties, not in coaching and all…. even the vegetable vendor or a maid has a cell phone so it matters if you have an expensive cell phone. That reflects your status. Now-a-days you can say that mobile is your status symbol… the faculty (at the coaching institute where she teaches) uses it as a status symbol. Because earlier they had cheaper sets

but now as the coaching is growing they are having good cells." – Shalini, case #24

Thus, the interviews revealed that the use of mobile phones as fashion and status symbols was very high. The respondents used cell phones to show off among friends and at parties, they used them to emulate movie stars, the males used them as a prop to impress females, females used accessories to make mobile phones look fashionable. Almost all the respondents said having an expensive cell phone shows that a person comes from a rich background.

Mobile as personal items for privacy

This section presents an analysis of the responses to questions in the section titled personal autonomy in the interviews. Three of the respondents in Kanpur said that they personalized their cell phones and considered them private items. They also used personal reasoning to assert personal autonomy in the use of cell phones. For example, Mohit said that he considered cell phone as a personal item.

> *"Yeah, it is a personal item, if you are using it for personal use then it is a personal item. I mean it is possible that everyone in the family is sharing cell phones but definitely it is a personal item only." – Mohit, case #22*

Two of the female respondents said that they considered cell phones as their private items and did not like any one checking their cell phones. Their responses indicated that they used personal reasoning to maintain privacy in the use of cell phones.

> *"I don't like people reading my messages, but normally people do it. But I don't like it. Q: Who reads your messages? A: Friends. I know that they will read it so I transfer all my messages to Trash. Yeah, it's a private item. Yes, I do keep a special ringtone and a wall paper to personalize my cell phone." – Shalini, case #24*

"I don't like when anybody picks up my cell phone and tries to go through my messages and my calls and all that. I don't like that. My laptop is completely public but my phones are completely private." – Deepali, case #29

Almost all the other respondents said that, although they used wallpapers and ringtones, they did not really personalize their cell phones. Therefore, in Kanpur, although a few respondents considered cell phones as their personal technology, they could not really use them as such, because many of them were sharing their cell phones with family or friends.

Mobile use in Friendships

This section presents the responses from the question on friendships in the interview schedule. The interviews revealed that in Kanpur, young people were using cell phones in friendships in a variety of different ways such as to maintain friendships, to create cell phone friendships, and for dating.

One of the female respondents said that cell phones gave an indication about a person's background and status and that determined whether he/she should be included in the respondent's circle of friends.

"But yes some people think that way that if you don't have a cell phone how will you afford the parties like you can't make contribution, maybe they have family restrictions, their parents might not want to give them money. If the person belongs to a good family then it doesn't matter that cell phone is needed or not. But yeah, now it has started affecting. For example, if someone doesn't have a cell phone then the first impression is what family background that person comes from. The first impression is whether a person can afford a cell phone or not." – Rashmi, case #26

Maintain friendships. The respondents, especially the female respondents, used their cell phones to catch up with friends on a very frequent basis. At least three of the respondents said that they talked to their friends almost every day.

"Frequently, it's almost an everyday event to talk to friends on cell phones. If I am absent, if I want to know what is going to be today." – Shalini, case #24

While Shalini, case #24, said that she talked everyday to find out what is happening, Rashmi, case #26, said that she kept talking to her friends through text messages throughout the day.

"I use it (cell phone) quite less when I am with friends. Mostly I use it at home. Usually I call my friends from home, even after meeting them we keep talking to each other, sending messages to each other, so all this goes on." – Rashmi, case #26

Shilpi, case #27, said she used cell phones to catch up with friends who were in another city.

"I have a friend who is in Pune now so to her I talk almost daily on cell phone but otherwise my coaching friends I meet them every day so I don't need to talk to them on cell phone." – Shilpi, case #27

Cell phone friendships: telefriends. Besides the mundane conversations that respondents had with offline friends who they already knew, in Kanpur the respondents described many instances of making friends via dialing random numbers. Amit, case #18, who used a prepaid mobile subscription, said that once someone recharged his mobile phone by mistake, which led the two of them to become friends. At the time of the interview, their friendship had already lasted for over six months.

"Once there was a guy who I didn't know but by mistake he recharged my cell phone for 200 Rs. Then he called up that please recharge my cell phone

it happened by mistake, then I recharged his cell phone and now we are good friends. He is a good friend now even though I have never seen him. It's been like 6 – 7 months so sometimes we talk and we wish each other well on some festivals. We talk that's all, I am not really interested in meeting him." – Amit, case #18

Another male respondent, Nayan, case #19, described how he has made several friends whom he has never met, through his mobile phones. One of his mobile friendships had already lasted two years at the time of the interview.

"I have a lot of friends whom I haven't seen to date. It's like by chance they got my number and now we talk and we are friends… For example, I have a friend who lives in another town called Mahoba, I haven't seen him, but we talk now. Q: Since how many days you have been talking to him? A: For last 2 years. Q: Don't you feel like meeting him? A: Of course, I want to but neither he gets time or I get time. He is also studying and I am also studying. Yeah, we are same age I think. Q: How many friends do you have whom you haven't met but you talk to? A: I have one or two. I know another guy who is also from Mahoba (another town). Q: How did you meet him? A: In a similar way. Q: What do you think is it ok to make friends on mobile phones? A: Yes, of course it's ok. Because if we have to take advice about something, we can take it from each other and we can give suggestions to each other. Q: What kind of advice? A: About our careers. Besides this, there could be many situations about which we may want to take suggestion. It is possible that we may not want to really use their advice, that is a different matter but at least we can know their point of view." – Nayan, case #19

One of the female respondents, Reeti, case #28, also said that her friends have cell phone friends, she called them "telefriends," who have never met each other, but they talk on the phone.

My friends tell me that they have made a telefriend without seeing, but I feel that if you haven't that person, then how do you know whether his mentality matches with you? How can you talk with that person? Everyone can talk properly and they will talk good about themselves, but you don't know what that person is in reality. – Reeti, Case #28

Dating. However, the respondents not only used mobile phones to make anonymous random friends, but also for sustaining friendships with people of the opposite sex. One of the male respondents, Mohit, case #22, who ran his own business, said that he did not have any opportunity to meet females, so he kept in touch with them via cell phone.

> *"I am not able to meet with girls at all. I don't have any contact with girls because after my 12th grade I left studies. I did B.Com. (Bachelors in commerce) privately so I didn't have any contact with girls now in 2nd year. When I went to take my half – yearly exams I saw the girls for the first time in one and a half years. Otherwise there is no contact with them. So it is easier to talk to them on phone. The girls say that you never call up and I say that I never remember to call you up. Usually I am always caught up with work so I forget to call them up so when they send me a message saying that you never call up I just tell them that give me a missed (blank) call and I will call you."*
> *– Mohit, case #22*

Another male respondent said that because he has a cell phone, females can call him.

> *"We had organized a function here, so during that time, so many girls called me up; I thought that because of cell phone many girls were calling up and I had lots of friends as girls. And now everyone knows about it and they talk about it. And if I didn't have a cell phone then I couldn't have talked so much. If you have a cell phone, then you can talk any time." – Rajeev, case #23*

One of the male respondents said that he already had a girl friend, and he made another one from a different city via cell phone.

> *"I had a made a friend. She was from Bareilly (another town), I got to know her only through cell phone. I have never met her to date. Q: How did you talk to her? A: Actually a friend of mine gave me the number. He said talk to her, then I called her and she picked up. Then we started talking almost every day." – Anand, case #17*

One of the male respondents, Rajeev, case #23, said that his friends talk to girlfriends at night when the calls become free. He used social reasoning to suggest that this behavior was not appropriate according to social rules. However, he also used personal reasoning and suggested that this behavior was not necessarily wrong.

> *"I have a few friends who have girlfriends. When the night calls become free they start talking at 11 at night and talk till 5 in the morning. So this is not appropriate according to society but according to them it is fine because the more they talk they will have a better understanding of each other. So the social rules are actually breaking because of mobile phones. But it is not necessarily wrong. But if society doesn't like it then what can we do. No one can do anything about it." – Rajeev, case #23*

One of the female respondents, Shilpi, case #27, said that one of her classmates has made a boyfriend by dialing random numbers. Although the guy has left the country they are still in touch with each other. She used personal reasoning to suggest that this practice of making cell phone friends is not safe because you don't know the persons you are talking to. She also used social reasoning to suggest that this behavior is not appropriate according to social rules.

> *"There is a girl who studies with me and she was dialing any random numbers and one day she called up this guy who is a college student and then they started talking and now they talk every day. If you don't know someone and talk to them daily so you make a very strong friendship. She has met that guy now. Now that guy is outside the country somewhere in Singapore, so they can't meet. They have met only once or twice but they still talk on phone. His home is somewhere here, I don't know her so well, but she is in my class so I have heard the rumor that he has gone outside the country." – Shilpi, case #27*

Overall, the interviews revealed that the respondents were using cell phones to keep up with their existing friends, to make anonymous friends by random dialing and to

have romantic conversations. Thus the data showed that at least one of the participants used personal and social reasoning to suggest that the use of cell phones for dating is not necessarily wrong from his point of view even if the society does not approve of it.

Negotiating Independence from Parents

The qualitative interviews showed that young people in Kanpur used personal and social reasoning to negotiate independence from parents in the choice of wallpapers in their cell phones, and in the use of cell phones by avoiding parental restrictions.

Choice of wallpaper. One of the male respondents, Sanjeev, case #20, said that there is a lot of a generation gap between parents and their children. He said that old values might not be applicable in today's world. He also used personal reasoning to indicate that he would use the wallpaper in his mobile phone as per his preference and would not necessarily change if his parents told him so. However, he also used social reasoning and said that he would change wallpaper on his mobile phone according to his parent's wishes but only when he was in front of them.

> *"I think it is wrong for them to interfere too much especially if they don't have much knowledge…. If they take examples of old times as to what used to happen in their time then it is wrong because today the world has changed a lot and we have to move with the times. Q: If your parents ask you to change the wall paper on your cell phone then is it ok? A: Yeah I will change it if they don't like it because it is possible that our tastes don't match because there is always a generation gap…. I will change it in front of them and then when I go outside I will change it back again. But I am not going to delete it." – Sanjeev, case #20*

Rajeev also said that if his parents asked him to change the wallpaper of a famous model he currently has on his cell phone to a religious picture, he will argue with them

about it. His response indicated that he used personal reasoning to use his cell phone according to his own rules rather than his parent's wishes.

> *"I have put Aishwarya Rai's (Bollywood actress and model) photo in my cell phone but my parents think I should have put God Shankar's photo there. So it may be that I should have put God's picture but that doesn't mean that by putting a photo only you will know how religious I am. I will definitely discuss this issue with my father that 'listen papa, it is not necessary that only if I put Shankar bhagwan's picture you will know how religious I am. I am the way I am and it doesn't matter what wall paper I have in my mobile phone.' – Rajeev, case #23*

Two of the female respondents said that their fathers have asked them to change the wallpaper on their cell phones to a religious picture. Both these females, Shalini and Rashmi, used personal reasoning to assert personal autonomy in their choice of wallpapers in their cell phones. Shalini, also used social reasoning to say that she respected her father's wishes when in front of him. Shalini, case #24, said that sometimes she clicks a God's photo and puts it as a wallpaper just to appease her father. However, she said that when he was out of sight, she changes it back to a wallpaper of her own choice.

> *"My father always says that you should put some religious picture in your mobile phone I usually have a nature photograph. I tell him that 'no papa I want this.' Sometimes I just tell him ok I will do that and I click some God's photo with my mobile camera and put it as a wall paper. I think it's a very cheap thing to fight with my parents." – Shalini, case #24*

Another female respondent, Rashmi, case #26, said that her father also asked her to change the wallpaper on her cell phone to a religious picture. She had put up a picture of a Bollywood film star.

"I like Shahrukh Khan (Bollywood actor and celebrity) so I have his wallpaper so my dad said jokingly that why have you put his photo maybe it's better to put some religious photo you wake up in the morning and see Shahrukh Khan and before you sleep you see his photo. That's not good. But he just said jokingly, it was not like he forced me to change my wall paper."
– Rashmi, case #26

Avoiding parental restrictions. The interviews showed that in Kanpur parents had restrictions on cell phone usage of their children. One of the male respondents said his parents have many rules and often mobile phones are the topic of contention between his parents and him. Amit described an interesting situation, in which he used personal reasoning to stop using his mobile phone after he had a fight with his parents. He also used social reasoning to keep his mobile phone with him to accede to his parent's wishes.

"Yes (my parents have rules), like pay more attention to studies, less attention to mobiles, send less messages, while eating don't use mobiles, sometimes you should sit at home and keep the mobile at your side, all the time you have a mobile in your hand and you are doing something on it… Last year I didn't get selected in MCA (masters in computer applications) so my parents thought that it was due to mobile phones. It is possible, I don't know about it. I don't think that it happened due to mobile phones. Then I had kept my phone at home and taken out the SIM card because I had a lot of contacts on that. (He was not using his mobile phone). Then my mom said you should keep it because they were having problems communicating with me. For example, if they wanted me to buy something (groceries for home), then they could call me on my cell phone. But now (without cell phone) they didn't know where I am, so how to tell me what to get (from the market). The family was having problems, then I thought it's ok, they have to say something, so I started keeping the phone." – Amit, case #18

Another male respondent, Manish, case #16, described his parents' rules but said he knew how to avoid them. Manish also used personal and social reasoning to avoid parental rules. For example, he used personal reasoning to talk on his mobile phone late

at night despite parental restrictions. At the same time, he used social reasoning to use his mobile phone discreetly to talk to his friends at night, so that his parents would not know of it.

> *"At night they used to check the balance and then let me go to my room and in the morning again they checked the balance. If the usage was for more than 2 or 3 Rs. then they would ask me who did you call and why. But there are ways around that too, I used to get a recharge coupon from beforehand and then talk for 2 hours and recharge the phone again so the balance would remain the same. I mean there are rules, but you also know how to break them." – Manish, case #16*

Nayan, case#19, who was living in a hostel in Kanpur, described an incident in which one of his friends' father had put restrictions on his friend to not to talk to his girlfriend. When his friend's father confiscated his cell phone, his friend went and bought a new cell phone. This anecdote described by Nayan indicated that his friend used personal reasoning to use a cell phone to talk to his girlfriend even though his father did not approve of it.

> *"I have one or two friends who…mostly talk to their girlfriend at night. Q: Do their parents get angry over them? A: No they stay away from home so why will parents get angry. But yes I have one friend who used to do this (talk to his girlfriend) so his father came and snatched away his mobile phone from him then he bought another phone, and again started talking till late night. So we used to explain to him that do talk but also study at the same time. So his father was also putting restrictions on him to talk but less." – Nayan, case #19*

One of the female respondents, Rashmi, said that it's all right for parents to monitor children's cell phone usage, but only up to a point. She said that if they want to know something they should ask the children and not impose their rules on them. Her

response showed that she used personal reasoning to contend that parents should not monitor cell phone usage.

> *"I think they should do it till a point but after that they shouldn't. They shouldn't do detective work but should directly ask children what they are doing because if they do detective work because then the children also lose trust on their parents. It's better for parents to ask the children. I don't think parents should monitor so much." – Rashmi, case #26*

The interviews revealed that in Kanpur parents do check their children's mobile phone. In fact, at least three respondents described incidents in which their parents had asked them to change the wallpaper on their cell phones. One of the male respondents, Amit, case #18, said that when his father asked him to change the wallpaper on his cell phone, he told him that it suits his lifestyle. Amit's response also indicated that he used personal reasoning to tell his father that he should not interfere with his cell phone. At the same time, he used social reasoning to suggest that he understand his father's point of view and that in the future he will try and manage his cell phone usage accordingly out of respect for him.

> *"In the beginning, I had put up a girl's photo. Then my father asked me to change it so I told him, 'papa, what is wrong with this? It's a lifestyle, there is nothing vulgar about it, it's a very simple photo.' Then my father didn't say anything…. I think he was right, because the photo was of a girl smoking a cigarette and it said' Both Kills!' In this age, we don't know what is right and what is wrong, but I think he was right to tell me to change it. So that there was no problem for future because I knew how much I can go further." – Amit, case # 18*

One of the female respondents, Deepali, also talked about the issue of talking to males. She said that her parents restrict her talking to males via cell phone. Her response indicated that she used both personal and social reasoning in this matter. For example,

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she used social reasoning to say that she understands her parents' point of view regarding talking to males; therefore she listens to them. However, she also used personal reasoning to indicate that she only complied with their wishes when she considered it suitable advice. . Therefore, she said that she tried to take a middle path and reduce her conversations with males, but that she did not fully stop them as her parents wanted.

"I don't think Kanpur is such a place that you can go to a guy's place and talk. On cell phone it is easy. Q: So your parents have restrictions about who you are talking to guys or girls? A: yeah, obviously, parents interfere on those things. Q: Do they ask you? A: yes. Q: What do you tell them? A: I tell them. I try to take a midway path. Not completely against them, not completely with them. Like if they say don't talk too much then I will not talk everyday but I will talk whenever I feel like talking. Ok I will not talk for that long but for 5 min or 6 min. Q: Do you think it's ok for parents to monitor your cell phone usage? A: yes. If you are immature then your parents should keep a watch. But when you are in college and all then I don't think that parents should interfere. Q: What if your parents ask you to change wall paper on your cell phone is that all right? A: I don't think that they will ever say that. They never touch my phone. If they want they can obviously touch it. There is nothing like that in it." – Deepali, case #29

Another female respondent, Rakhi, case #30, said that her parents restrict her in making friends with males and talking to them via cell phones. Unlike Deepali, Rakhi used social reasoning and complied with her parents' wishes regarding talking to males on her cell phone.

"Yes, because if we didn't have cell phones then our friendship would be limited to college only but with cell phones we can talk more openly and for more number of hours. But when we talk on phone then we can become really good friends. Q: Do you have any restrictions at home about talking to boys? A: They say that if you have to talk, then talk in front of everyone and if you make friends with boys, then you should limit talking to them in college only and not bring them to home. Q: So is it ok when you talk on cell phone to guys? A: No I am allowed to talk to guys only if I have some work. Q: So

what do you tell the guys when they call you? A: I just tell them that call me up only if you have some work otherwise don't call me up." – Rakhi, case #30

Thus the interviews revealed that parents in Kanpur monitored and put restrictions on cell phone usage of their children. However, the young people believed that their parents should not interfere regarding their cell phone usage. The above quotes describe how the young people used personal and social reasoning to negotiate their freedom by not going totally against their parents' wishes and at the same time maintaining independence in their usage of cell phones. For example, they used personal reasoning in the choice of wallpapers in their cell phones but also used social reasoning to comply with parents' wishes by changing wallpapers when they were in front of them. On the other hand, females used social reasoning to restrict their conversations with males to comply with their parents' wishes. However, they also used personal reasoning and did not completely stop their conversations with males.

Mobile Use for Teasing and Harassment

Almost all the respondents in Kanpur recounted instances in which they or their friends had experienced a situation in which cell phones were used for teasing or playing pranks on others. For example, one of the male respondents, Manish, case #16, said that his girlfriend had used her office cell phone card to send anonymous messages to her friends.

"Yesterday my girlfriend's boss gave her a corporate SIM card (card used in mobile phones to connect to a network) to her and she used that to send messages to all her friends and now their boyfriends are calling up that number to scold the mysterious guy. And her boss actually took the SIM card

back saying that he needs to give it to someone else, so now she needs to tell it to the person about the prank." – Manish, case #16

Another male respondent, Sanjeev, case #20, said that in his college, students use scary ringtones and then they play them in front of people particularly women to scare them.

> *"Sometimes, they put on a ringtone which embarrasses people, for example, a crying baby's ringtone. For example, there was a horn sound as a ringtone and if you play it near a girl she will get scared." – Sanjeev, case #20*

One of the male respondents, Amit, case #18, recounted an interesting scenario. He said that he and his friends use mobile phones to follow girls and then harass them at a lonely spot. He used moral reasoning to suggest that troubling someone by using mobile phones is immoral. He also used social reasoning to suggest that in India a girl is seen as a goddess, therefore, to trouble her, is socially inappropriate.

> *"Mostly to follow girls, like she is coming out from here, or going out in a friends' group or for some work, now all the guys know where she is and they will reach there in a group to harass her. This should not be there. The other misuses are to irritate someone, to flirt on phones, I mean calling up again and again and flirting with them, it's a misuse….. If someone is troubling anyone, then it is immoral. Because in India if there is a girl we call her Lakshmi (the goddess of wealth), if you are troubling her, then it is immoral, you are breaking the moral rules. It's both socially inappropriate and immoral. Like there are some guys they are giving missed (blank) calls at night, sometimes we do missed (blank) calls to disturb someone at night, among friends it's ok to trouble each other." – Amit, case #18*

One of the main issues raised by respondents was the use of cell phones for taking pictures of girls without their permission. One of the male respondents said that when males find a female attractive, then they will take a picture of her. It appears that he used

personal reasoning to suggest that this behavior was not appropriate, according to him, but could be right from someone else's perspective.

> *"I can tell you in college if some girl is walking away then the guys will be like oh such a nice girl and they will take out their mobile phones and click a photo. So these things are wrong, one must not do such things. Some people agree with that but some don't. If you don't know someone, then why you should take out someone's photo, but if you know someone then it is ok to keep their photo." – Sanjeev, case #20*

At least three of the female respondents recounted incidents in which they had experienced either their or their friends' pictures being taken without their permission. It appeared that Rashmi used personal reasoning to suggest that the practice of taking pictures of females through mobile phones is not appropriate.

> *"They are misusing mobile phone cameras – clicking the photos of girls and using them on vulgar sites and all. Or they make multi-media messages (MMS) so all this is not good. In a way they are increasing crime… Once we had gone to a mall so all of us friends were sitting, so there was this guy he was continuously trying to click a photograph of our group. So then we got up from there, but we decided that next time if we see him then we are going to report him. All of this is not a good thing. Either the camera should be banned or it should be only available in very expensive phones but it is also possible that if there is a rich man and he has a bad mentality, then he may also use it like this. I don't think it should be in a common man's cell phone. If there is a rich man, I don't think he will indulge in all these things. Yeah, but it should not be in cell phones for students. Camera should be banned somehow, I think." – Rashmi, case #26*

One of the female respondents talked about an incident in which a mobile video was leaked from a women's hostel and was available for everyone to see on the college server. Deepali used both personal and social reasoning to suggest that taking pictures and videos of females and circulating them on public communication platforms such as college servers was not appropriate. She used personal reasoning to say that behavior is

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wrong. She used social reasoning to say that this behavior was socially inappropriate because it iss wrong to circulate individuals' pictures on public communication platforms without their permission.

> *"I think it was in the library. I was sitting with my friends and I realized that someone clicked something, so I realized that the person who was sitting opposite me was trying to take pictures. I don't know what he was trying to do but he was doing something. So I went up to him and said show me your phone, he just ignored me so I went to the librarian over there and I told him that this person is having a phone and he is trying to take pictures, so I think you should interfere. So they interfered. They confiscated his phone and took his name and all. They asked him to come later to collect his phone. There are so many incidents. People are trying to make video recordings. Like in hostel just for the sake of fun we take videos of each other, you know in bathroom and all and I don't know somehow a video leaked and the next day it was in our college info center. Q: Were you there in that video? A: No, no it was seniors. It was in our wifi system so it could be accessed in anyone's PC on campus. It was on the server. It was not good. It should not be shown on the info center. There are incidents which are not good. It was leaked from the girls' hostel so definitely it was some girls who did that. Q: Why do you think these are socially inappropriate activities? A: You can't just show off videos and pictures publicly without taking permission from that person. If you take permission then it's fine. It's like cheating someone. Like you are trying to steal pictures of someone and you are trying to sell it."* – Deepali, case #29

Another female respondent said that in one of the instances someone manipulated a photo of a female and distributed to people. Rashmi also used moral reasoning to characterize this behavior as wrong.

> *"I had heard of one case from my friend that some relative of hers had clicked a wrong photo of hers and utilized it wrongly. Like he used her face and someone else's body and then it was circulated as MMS (multi-media message). So that was not good at all."* – Rashmi, case #26

One of the male respondents gave the example of the infamous Delhi school incident and said that it is very common among young people to distribute porn videos via mobile phone multi-media messaging services. Nayan used social reasoning to suggest that making video clips containing nudity and circulating them via mobile phones is not socially appropriate and that government should ban such activities.

> *"Lot of times people misuse mobile phones like sending MMS (multi-media message) or bad clippings etc. I mean there are things which they shouldn't be doing but they do and send MMS to their friends. Q: Can you give examples? A: Like in Delhi there was an incident where young kids had made some bad clippings showing nudity. There are a few people like that who make nude clippings and circulate among friends, or sending MMS containing nude pictures. So I think government should put restrictions on such activities." – Nayan, case #19*

A couple of respondents, Mohit and Shilpa, talked about how young males call and harass females. According to them, this behavior is more prevalent in mobile phone use because the phones allow easy accessibility to young females without the usual route of going through elders in the family. They used social reasoning to characterize this behavior as socially inappropriate because according to them calling up females and troubling them is not socially appropriate. They also used moral reasoning to suggest that the behavior of harassing someone is immoral.

> *"For example I had a friend who liked a girl who used to study in our class, so he proposed to the girl and when she said no he started calling up the girl and talking in abusive language. And then he distributed that girls' number to everyone among his friend's circle. Then that girl called me up at home, at that time I didn't have a cell phone, then I told her to change the cell number, and I went and got her a new number." – Mohit, case #22*

> *"There are many cases like that you take someone's number and just trouble them. If someone is not picking up your call, then they start calling from*

someone else's phone number. So if someone doesn't want to talk to you, then why are you troubling them. People even used landlines for such purposes, but now people have started using landlines a lot less. For example, once we had gone for a wedding and there was a guy in our (family) relation only he started calling on landline and talking rubbish. Whenever elders would pick up he would keep the phone down and when we would pick up he would talk. So we asked him to call up on mobile phone so that we got to know his number and then he was scolded." – Shilpi, case #27

Overall the interviews showed that in Kanpur, the young people used cell phones to tease and play pranks on other people by sending anonymous messages or scaring people by playing loud ringtones near them. They described instances in which cell phones were used to tease and harass females by clicking their pictures through mobile cameras and circulating them without permission. In addition, they also used personal, social and moral reasoning to characterize the behavior of using mobile phones for teasing and harassment as wrong, socially inappropriate and immoral.

Conclusion

In summary, the interviews with young people in Kanpur revealed that they had a different lifestyle than those living in Mumbai. Unlike the young people in Mumbai, they spent more time at home and had their own private vehicles such as scooters or motorbikes to go around the city. Also it appeared that they used mobile phones more at home than in public places, unlike those in Mumbai. Because the respondents spent more time at home, they did not need to inform parents on their whereabouts throughout the day. Furthermore, except for four females, none of the respondents in Kanpur had access to the internet at home. Although the respondents said that they could access the internet at a cybercafé, they did it very rarely for work-related purposes. This also impacted how

the respondents used cell phones to make friends. Unlike their counterparts in Mumbai, who made friends via online social networks, the respondents in Kanpur dialed random numbers to make friends with strangers.

Overall the interviews showed that the female respondents in Kanpur acquired a cell phone for contacting family during emergency situations, whereas male respondents said that they used cell phones for coordination and planning activities. On the other hand, the use of text messaging to stay connected with friends and to express feelings was very common among both male and female respondents. Similarly, respondents in Kanpur used cell phones to have private conversations with friends especially late at night since they could not go out. In addition to the communication activities, the respondents also used cell phones for accessing news which was related to their personal interests such as stock market performance or sports. One of the respondents highlighted the fact that mobile phones are the only source of news at times when there was no electricity which was quite often. In Kanpur, the popular entertainment activities on cell phones among the respondents were to listen to the radio, get music and play games.

The young people in Kanpur also used cell phones for displaying identity, a point6 that ranked very high among the respondents in Kanpur. As the interviews indicated, the respondents used cell phones to project a fashionable and stylish image. The male respondents said that they like to show off their cell phones to impress females. The female respondents said that they used accessories to decorate their mobile phones to match with their dresses. Several respondents mentioned that carrying an expensive cell

phone shows that a person belongs to a rich family and that it is an important factor in judging a person's status and background.

The young people in Kanpur also used cell phones to express individuality by personalizing their cell phones through ringtones and wallpapers. They also used personal reasoning to assert personal autonomy in the use of cell phones and considered them as their private property and did not like friends or family members checking their messages or stored content.

The interviews also indicated that in Kanpur, the cell phones played an important role in friendships. For example, cell phones were used to maintain friendships with out-of-town friends, make friends through random dialing and contact members of the opposite sex. It appeared that the cell phones were used to have intimate conversations with members of the opposite sex because the respondents mentioned that in Kanpur, it was not considered culturally appropriate to talk to members of the opposite sex. They used both personal and social reasoning in their use of cell phones in friendships. For example, they used social reasoning to show that they were aware of cultural rules that did not approve of interactions between members of the opposite sex. However, they used personal reasoning to use cell phones for talking with members of the opposite sex because they personally did not think that this behavior was wrong.

The interviews revealed that the young people in Kanpur used personal and social reasoning to assert their autonomy in the use of cell phones and to negotiate independence from parents. Although parents provided cell phones for the young people and had rules on their cell phone usage, the young people used personal reasoning to

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mention that they did not like interference from parents regarding their cell phone usage. For example, they used personal reasoning in their choice of wallpaper to indicate that they would not necessarily change wallpapers in their cell phones. At the same time they used social reasoning and mentioned that they would probably change the wallpapers in their cell phones if their parents wanted them to do so, but only when they were in the presence of their parents. Similarly, females used personal and social reasoning to negotiate independence from parents in the matter of talking with males on cell phones. They used social reasoning to say that they restricted their conversations with males on cell phones, to obey their parents' wishes. However they also used personal reasoning to say that they did not completely stop talking to males. Thus it appeared that while young people were aware of social rules, they used cell phones according to their own personal judgments but did not openly rebel against parents or social norms.

The interviews also highlighted that the cell phones were used for teasing and playing pranks on friends for harmless fun. However, both male and female respondents described instances in which cell phones were used to harass females by clicking their pictures and circulating them without their permission. They used persona, social and moral reasoning to characterize such behavior as wrong, socially inappropriate and immoral.

In conclusion, the interviews with young people indicated that they used them for a variety of communication, media and age-related needs. They used the mobile phones for communication needs during emergencies, for coordination and planning, for text messaging and for private conversations with friends. They also used mobile phones for

media needs such as to access news and for entertainment such as listening to music. They also used mobile phones for age-related needs. For example, they used them as symbols of fashion and status to build their social images, they used them to express individuality by personalizing their cell phones, in friendships for making friends and dating, for negotiating independence from parents and for teasing and harassment.

CHAPTER 6: RESULTS – QUANTITATIVE ANALYSIS

This chapter presents the results of the survey analysis. The survey was conducted in the two cities of Mumbai and Kanpur with young adults in the age-group of 18-25 years to examine the city-wide and gender differences regarding mobile phone usage. The survey was administered to 400 young adults, with 200 from each city. In Mumbai, 105 males and 95 females participated in the survey. In Kanpur, 99 males and 101 females completed the survey. Two criteria were kept in mind while choosing the participants for the survey: That the participants were college-going and were cell phone users.

Each of the survey responses was entered in a database and then analyzed using SPSS software. The percentages were calculated for each variable to study the city-wide and gender differences. In each section first the table is presented followed by discussion of city-wide differences. Then gender differences among young people in each city are discussed. Although the survey contained many items, this chapter presents results for only those sections which seemed pertinent in view of the research questions of this study.

The first section presents information on participants regarding their demographics. The second section presents information regarding socio-cultural orientation of the young people. The third section presents information regarding access to media by the participants. The fourth section presents information regarding the

acquisition and use of mobile phones for communication. The fifth section presents information regarding the acquisition and use of mobile phones for media functions. The sixth section presents information regarding the use of mobile phones for sharing content with others. The seventh section presents information regarding the use of mobile phones for social image. The eighth section presents information regarding the use of cell phones as personal items. The ninth section presents information regarding the use of cell phones in friendships. The tenth section presents information regarding the role of parents in the use of cell phones. The last eleventh section presents the conclusions of the quantitative analysis.

Demographic Information

This question was asked to gain background information on the participants to assess if the participants from the two cities were comparable in terms of their basic demographic information, since this may have an impact on their cell phone usage behavior. All the participants in the survey were between 18-25 years of age. The survey asked participants information about their marital status, student status, occupation and living status. Although these variables provide adequate information, there may be other demographic variables such as socio-economic status and educational level which may also impact cell phone use behavior but were not included in this study.

City-wide demographic description of the participants. As shown in Table 1, in Mumbai, all the respondents were students, 99% of them were single, 91.5% were not working, and 94% were living with parents. In Kanpur, 94% of them were students, 86% were single, 89% were not working, and 85% were living with parents. Thus, almost all

the participants were similar in terms of their demographic description. The main difference between the participants from two cities was that in Kanpur at least 12% of respondents were married and an almost equal percentage of them were living alone or with friends. Therefore, some of the results regarding mobile phone usage may be impacted by this difference between the two cities.

TABLE 1: DEMOGRAPHIC INFORMATION   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	Mmales n = 105	Mfemales n = 95	KMales n = 99	Kfemales n = 101
Marital Status									
Single	91.5	97	86	93.1	89.8	98.1	95.8	87.9	84.2
Married	6	0	12	5.9	6.1	0	0	12.1	11.9
In Relationship	2.5	3	2	1	4.1	2	4.2	0	4
Student	97	100	94	98.5	95.4	100	95	97	91.1
Occupation									
Full Time	3	0	6	4.4	1.5	0	0	9.1	3
Part Time	6.8	8.5	5	7.8	5.6	10.5	6.3	5.1	5
Not Working	90.3	91.5	89	87.7	92.9	89.5	93.7	85.9	92.1
Living Status									
Living with parents	89.5	94	85	83.3	95.9	89.5	98.9	76.8	93.1
Living alone	3.5	.5	6.5	5.4	1.5	1	0	10	3
Living with friends	7	5.5	8.5	11.3	2.6	9.5	1	13.1	4

Gender differences among participants within cities. The data in Table 1 shows that the males and females were comparable in terms of demographics in the two cities except on one of the variables in Kanpur. As compared to 93% of females, only 77% of males were living with their parents in Kanpur. This may impact the results especially when it comes to negotiation of independence with parents.

Socio-cultural orientation

This question was asked to see if young people in two cities and across genders were similar or different in their choice of clothes, food and social attitudes. This was done to gain understanding to see if the different social environment and expectations regarding gender in the two cities impact the socio-cultural orientation of the participants, which in turn might impact their cell phone usage.

TABLE 2: SOCIO-CULTURAL ORIENTATION (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	Mmales n = 105	Mfemales n = 95	Kmales n = 99	Kfemales n = 101
Clothes									
Traditional	24.3	25.5	23	2.5	46.9	1.9	51.6	3	43.1
Western	33	26	40	52.9	12.2	41	9.5	65.7	14.7
Both T & W	42.8	48.5	37	44.6	40.8	57.1	38.9	31.3	42.2
Food									
Indian	24.8	11	38.5	23.5	26	11.4	10.5	36.4	41.2
Western	11.8	15.5	8	19.1	4.1	27.6	2.1	10.1	5.9
Both I & W	63.5	73.5	53.5	57.4	69.9	61	87.4	53.5	52.9
Social Attitudes									
Arranged Marriage	63.8	39.5	88	57.8	69.9	34.3	45.3	82.8	93.1
Pre-Marital R	29.5	5	54	37.7	20.9	6.7	3.2	70.7	37.3

City-wide differences in socio-cultural orientation of respondents. The data presented in Table 2, shows the city-wide differences about preferences for food, clothing and social attitudes of young people. A larger percentage of participants in Mumbai, 48.5%, preferred both traditional and western clothes, whereas in Kanpur, the figure was 37%. However, in Kanpur a larger percentage, 40%, favored only western clothing as compared to 26% in Mumbai. In addition, a large percentage of participants in the two cities, 73.5% in Mumbai and 53.5% in Kanpur liked both Indian and western food. However, 15.5% in Mumbai favored only western food and 38.5% in Kanpur liked only Indian food. Thus, it appeared that in both the cities the majority of the participants favored both traditional Indian and western clothes and food. However, in Kanpur the participants were more likely to favor western clothes and Indian food. This could be due to the limited number of western food choices available in the city of Kanpur. While Mumbai has major multinational chain restaurants such as McDonalds, Dominos, Pizza Hut etc., in Kanpur none of these chains were available at the time of the survey. Further, it is important to note that overall males did not prefer traditional clothing because acceptable dress code for males across urban India is western clothes such as shirts and trousers.

Regarding the questions of whether the participants believed in the traditional system of arranged marriages, in which parents choose a spouse for their children, and if they considered it all right to have a pre-marital relationship, it was surprising that the majority of participants in Kanpur, believed in arranged marriages (63.8%) and also thought that it was all right to have a pre-marital relationship (54%). Contrastingly, a lower percentage of respondents in Mumbai believed in arranged marriages (39.5%) and

almost none, (5%) of the participants thought that it was all right to have a pre-marital relationship. This difference could be also due to the difference in understanding the concept of pre-marital relationships; for example, the participants in Mumbai may have thought that it involves having sexual relationships and those in Kanpur may have thought of it as only romantic relationships. Because the survey was administered in English in Mumbai and in Hindi in Kanpur, the difference in language may have elicited this difference in meaning of the term.

Gender differences in socio-cultural orientation of respondents. The data in Table 2 shows that the majority of males, 52.9% preferred western clothes as opposed to only 12.2% of females who did so. On the other hand, a majority of females, 46.9% favored traditional clothes compared to only 2.5% of males. This difference in preference for Indian and western clothes among genders was also true within cities. This difference across genders could be because of socio-cultural expectations of women to confirm to Indian traditions and it could also be because of prevailing fashion trends. In terms of food choices, a larger percentage of both genders, 57.4% males and 69.9% females liked both Indian and western food. This gender difference in choice of food was also true within cities. Therefore, it can be concluded that while both genders were similar in their food preferences, they differed when it came to clothes. Females preferred traditional clothes and males preferred western clothes.

The male and female respondents were also very similar in their attitudes towards arranged marriages and pre-marital relationships. While the majority of males (57.8%) and females (69.9%) said that they believed in arranged marriages, females in both cities

were more likely than males to believe in arranged marriages. Only a minority of males (37.7%) and females (20.9%) across both cities thought that it was all right to have a pre-marital relationship. While in Mumbai the males and females were similar in their attitude towards pre-marital relationships, the gender difference were quite apparent in Kanpur, with the majority of males (70.7%) compared to females (37.3%) agreeing that having a pre-marital relationship was all right.

Access to Media

The data in Table 3 pertains to access of different media by young people. This question was designed to gain an understanding regarding access to different media such as television, radio, computer with internet connection and cell phones. It was assumed that access to these media for personal use may have an impact on use of cell phones for media purposes, especially at home.

TABLE 3: ACCESS TO MEDIA   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
TV									
Personal	23	11.5	34.5	24	21.9	10.5	12.6	38.4	30.4
Sharing	74.8	88.5	61	73	76.5	89.5	87.4	55.6	66.3
Don't have	2.3		4.5	2.9	1.5			6.1	2.9
Radio									
Personal	27.5	16.5	38.5	29.9	25	20	12.6	40.4	36.3
Sharing	59	83	35	58.3	59.7	80	86.3	35.4	34.7
Don't have	13.5	.5	26.5	11.8	15.3	0	1.1	24.2	28.4
Comp with Internet									
Personal	57.8	93	22.5	61.3	54.1	94.3	91.6	26.3	18.6
Sharing	11	3.5	18.5	8.8	13.3	2.9	4.2	15.2	21.8
Don't have	31.3	3.5	59	29.9	32.7	2.9	4.2	58.6	58.8
Cell Phones									
Personal	91	93.5	88.5	92.6	89.3	97.1	89.5	87.9	89.1
Sharing	9	6.5	11.5	7.4	10.7	2.9	10.5	12.1	10.9

City-wide differences regarding access to media. The survey results showed that there were city-wide differences regarding access to different media by the participants. For example, as compared to the respondents in Mumbai (11.5%), a larger percentage of respondents in Kanpur (34.5%) had a TV for their personal use. Similarly, as opposed to only 16.5% of the respondents in Mumbai, 38.5% of the respondents in Kanpur had a radio for personal use. Contrastingly, almost all 93% of respondents in Mumbai had a computer with internet connection for personal use, as compared to 22.5% in Kanpur. Similarly, a smaller percentage of respondents in Mumbai (6.5%) shared their cell phones compared to those (11.5%) in Kanpur.

Overall, the figures indicate that the majority of respondents in both cities shared mass media devices such as TV and radio with their families and a larger percentage of respondents in Kanpur owned these devices for personal use as compared than those in Mumbai. However, when it came to new media digital devices such as internet and cell phones, a larger percentage of respondents in Mumbai than in Kanpur owned these devices for personal use. This also correlates with the findings from the long interviews, which showed a majority of participants in Kanpur did not have access to computers with internet at home and rarely accessed internet from a cybercafé. The fact that some of the participants did not have access to electronic media and computers with internet for personal use except for cell phones may explain their use of cell phones for media-related activities.

Gender differences in access to media. Surprisingly, the results showed there were no gender differences across the two cities when it came to owning or sharing

media devices in both the categories. A majority of males (73%) and females (76.5%) shared a TV with their family. Similarly, a majority of males (58.3%) and females (59.7%) shared a radio with their families. In addition, almost similar but slightly higher percentage of males (61.3%) compared to females (54.1%) owned a computer with internet connection. Also, a larger percentage of both males (92.6%) and females (89.3%) owned a mobile phone for their personal use. The gender differences regarding access to all media devices were also comparable across genders within cities except for access to TV in Kanpur. In Kanpur, more females (66.3%) than males (55.6%) reported as having shared access to TV.

Mobile Use for Communication

The data presented in Tables 4, 5, 6 and 7 reveal information about the importance and use of mobile phones for communication purposes. The data presented in Table 4 corresponds to question 3 in section III on acquisition and ownership of cell phones. This question was asked to gain an understanding as to why young people acquired cell phones. The data presented in Table 5 is from question 1 in section V of the survey on the frequency of use of cell phone for different activities. In both these Tables 4 and 5, information pertaining to only those variables that related to the use of mobile phones for communication has been presented. The data presented in Table 6 is from question 5 and question 7 in section VIII of the survey form. The data in this Table particularly shows the use of mobile phones for public communication purposes such as Voting.

TABLE 4: REASONS FOR ACQUISITION OF CELL PHONES (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
Safety									
Very Important	85.8	100	71.5	81.9	89.8	100	100	62.6	80.2
Fairly Important	11	0	22	13.7	8.2	0	0	28.3	15.8
Important	3.3	0	6.5	4.4	2	0	0	9.1	4
Emergency									
Very Important	88.3	100	76.5	85.3	76.5	100	100	83.2	69.7
Fairly Important	7.5	0	15	7.8	15	0	0	13.9	16.2
Important	3.3	0	8.5	6.9	8.5	0	0	3	14.1
Call Family									
Very Important	94.8	96	93.5	95.1	94.4	94.3	97.9	96	91.1
Fairly Important	3.3	2	4.5	2.9	3.6	2.9	1.1	3	5.9
Important	1.5	2	1	2	1	2.9	1.1	1	1
Not Important	.5	0	1	0	1	0		0	2
Call friends									
Very Important	85.8	86	85.5	81.4	90.3	81	91.6	81.8	89.1
Fairly Important	12.3	12	12.5	15.7	8.7	15.2	8.4	16.2	8.9
Important	2	2	2	2.9	1	3.8	0	2	2

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TABLE 5: COMMUNICATING THROUGH CELL PHONES   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
Voice Calls									
Very Frequently	64.5	37.5	91.5	60.8	68.4	33.3	42.1	89.9	93.1
Sometimes	30.3	53	7.5	33.3	27	57.1	48.4	8.1	6.9
Rarely	5	9.5	.5	5.4	4.6	9.5	9.5	1	0
Never	.3	0	.5	.5	0	0	0	1	0
Text Messages									
Very Frequently	69.5	100	39	73.5	65.3	100	100	45.5	32.7
Sometimes	26.5	0	53	21.6	31.6	0	0	44.4	61.4
Rarely	3.5	0	7	4.4	2.6	0	0	9.1	5
Never	.5	0	1	.5	.5	0	0	1	1
Sending MMS									
Very Frequently	7	0	14	9.8	4.1	0	0	20.2	7.9
Sometimes	42.8	45	40.5	44.6	40.8	52.4	36.8	36.4	44.6
Rarely	32.3	48	16.5	30.9	33.7	45.7	50.5	15.2	17.8
Never	18	7	29	14.7	21.4	1.9	12.6	28.3	29.7
Micro blogging									
Very Frequently	.5	0	1	.5	.5	0	0	1	1
Sometimes	9.5	.5	18.5	8.8	10.2	1	0	17.2	19.8
Rarely	20.8	32.5	9	27.5	13.8	42.9	21.1	11.1	6.9
Never	69.3	67	71.5	63.2	75.5	56.2	78.9	70.7	72.3

TABLE 6: PUBLIC COMMUNICATION ACTIVITIES   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	Mfemales n = 95	KMales n = 99	Kfemales n = 101
Social Networking									
Twitter	5.8	0	11.5	10.3	1	0	0	21.2	2
SMSGupshup	13.3	2	24.5	16.2	10.2	2.9	1.1	30.3	18.8
Google SMS	4.8	0	9.5	6.9	2.6	0	0	14.1	5
Vakow	1.5	0	3	2.9	0	0	0	6.1	0
Voting									
Reality TV Shows	42.3	24	60.5	42.2	42.3	20	28.4	65.7	55.4
News programs	10.5	10.5	10.5	10.8	10.2	12.4	8.4	9.1	11.9
Other TV shows	2.5	0	5	2.9	2	0	0	6.1	4
No TV shows	55	76	34	56.4	53.6	80	71.6	31.3	36.6

City-wide differences in the use of mobile phones for communication. The data in Table 4 shows that all the respondents in Mumbai said safety and emergency needs were very important reasons for acquiring a cell phone. By contrast, in Kanpur only 71.5% cited safety and 76.5% cited emergency needs as very important reasons for acquiring a cell phone. This indicates that the more respondents in Mumbai than in Kanpur, considered cell phones as important during emergencies. This could be due to the fact that young people in Mumbai spend most of their time outdoors on the busy streets of Mumbai for long hours and that the city is prone to emergency situations, as has been evident in the past few years due to terrorist attacks in 2009 and floods in 2006.

The results in Table 4 also show that a majority of participants in both the cities said that calling family and friends was a very important reason for acquiring a cell phone, thus emphasizing the importance of cell phones for communication purposes. An almost equal proportion of respondents in both the cities cited calling family (Mumbai, 96%; Kanpur, 93.5%) and calling friends (Mumbai, 86%; Kanpur, 85.5%) as important reasons for acquiring a cell phone.

The data in Table 5 pertains to the use of mobile communication for communication activities. It shows that a smaller percentage of respondents in Mumbai (37.5%) than those in Kanpur (91.5%) made very frequent voice calls from their cell phones. Contrastingly, all in Mumbai (100%) in contrast to only 39% in Kanpur sent text messages (SMS) very frequently from their mobile phones. Furthermore, none of the respondents in Mumbai sent multi-media messages (MMS) very frequently via their mobile phones as opposed to 14% in Kanpur (Table 5). However, an almost similar

percentage of respondents in Mumbai (45%) and Kanpur (40.5%) sent MMS sometimes from their mobile phones. The results from the qualitative study had also pointed out the heavy practice of text messaging among respondents in Mumbai.

In addition, the data in Table 5 also provides evidence for the use of cell phones for micro-blogging. Micro-blogging is an emerging function of mobile phones. It usually involves mobile users sending text messages to websites such as Twitter and SMSGupshup which is posted on a public timeline. Although users can post private messages to be read only by few chosen ones, usually these are considered to be public communication platforms. The results indicate that a large percentage of respondents in both cities (67% in Mumbai and 71.5% in Kanpur) never used cell phones for micro-blogging. The data indicates that a smaller percentage of respondents in both the cities used it either sometimes or rarely suggesting that few young people were using mobile phones for public communication activities such as micro-blogging.

The results in Table 6 indicate that participants in Kanpur were more likely than those in Mumbai to use mobile social networking applications for group messaging. For example, in Kanpur almost 11.5% said that they used Twitter, 24.5% said they used SMSGupshup and 9.5% used Google SMS. This could be because participants in Kanpur did not have access to a home computer with internet connection, whereas in Mumbai the participants had and probably used it for group messaging.

The results also show that a larger percentage of participants in Kanpur (60.5%) than in Mumbai (24%) used cell phones to vote in reality TV shows. A small percentage, but surprisingly almost an equal number of participants (10.5%) in both the cities used

cell phones to vote in news programs. This suggests that mobile phones can be seen as important devices to solicit public opinion in India especially in areas where individuals don't have access to internet on computers. However, more participants in Kanpur than in Mumbai used mobile phones to express their opinion through voting. This difference could be because as indicated in their interviews, participants in Mumbai spent most of their time outdoors, hence did not get time to watch TV.

Gender differences in mobile use for communication. The data in Table 4 indicates that there were almost no gender differences among young people in the reasons for acquiring cell phones except in the case of calling friends. In Mumbai, almost all the young people irrespective of their gender said that safety, emergency and calling family were important reasons for acquiring cell phones. However, in Kanpur the males and females differed in the reasons for which they acquired cell phones. A larger percentage of males (83.2%) than females (69.7%) said that emergency need was an important reason. On the other hand, a larger percentage of females than males said that safety (males 62.6%; females 80.2%) and calling friends (females 89.1%; males 81.8%) were important reasons. In Mumbai too a higher percentage of females (91.6%) than males (81%) said that calling friends was an important reason for acquiring cell phones. This indicates that calling friends was a more important reason for females than males across cities. Chi-square tests used for significance testing confirmed the difference as significant. This could be because as the qualitative interviews conducted in phase one of the study showed that females in both cities had more restrictions than males on going out and meeting friends, hence they were using cell phones to talk to friends.

The data in Table 5 shows that in Mumbai there were no gender differences regarding the use of mobile phones for text messaging. However, more males than females used cell phones for sending very frequent multi-media messages (MMS). Similarly, more males than females used cell phones for micro-blogging. However, in Kanpur, males and females were similar in their use of mobile phones for voice calls and micro-blogging. But a larger percentage of males than females used them for very frequent text messaging and multi-media messaging. This shows that more males than females across cities were likely to use cell phones for multi-media messaging.

The data in Table 6 shows that in Mumbai almost all the respondents irrespective of gender did not use mobile social networking for group messaging. However, in Kanpur, more males than females used the different mobile social networking platforms for group messaging. The data in Table 6 also shows that in Mumbai, a very high percentage of males and females did not use mobile phones for voting purposes. In contrast, a higher percentage of both males and females used mobile phones for voting purposes and more males (65.7%) than females (55.4%) used mobile phones to send votes to reality television programs. Thus, the data suggests that the use of mobile phones for public communication activities was particularly high among males in Kanpur compared to all the other groups.

Mobile for Media Needs

Mobile use for news. The results from questions 1, 2, and 3 of section VIII (media function: accessing news) are presented in Table 7. These questions were asked to

investigate whether young people used mobile phones for accessing news and if they did, what kind and how often.

TABLE 7: ACCESSING NEWS ON CELL PHONES   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	Mfemales n = 95	KMales n = 99	KFemales n = 101
Form of News									
SMS	7.3	6	8.5	6.4	8.2	4.8	7.4	8.1	8.9
Video	2	.5	3.5	2.9	1	0	1.1	6.1	1
TV	4.3	7	1.5	4.4	4.1	6.7	7.4	2	1
Radio	7.8	15	.5	6.9	8.7	12.4	17.9	1	0
Others	.8	0	1.5	.5	1	0	0	1	2
No Access	81.5	77.5	85.5	84.3	78.6	83.8	70.5	84.8	86.1
Kind of news									
Current Events	14.8	22.5	7	10.3	19.4	15.2	30.5	5.1	8.9
Politics	2.3	4	.5	2	2.6	2.9	5.3	1	0
Business	3.8	7.5	0	4.9	2.6	9.5	5.3	0	0
Sports	36.5	69	4	42.2	30.6	81	55.8	1	6.9
Fashion	29.8	59.5	0	19.6	40.3	38.1	83.2	0	0
Entertainment	45.5	88	3	44.1	46.9	85.7	90.5	0	5.9
Others	54	100	8	54.9	53.1	100	100	7.1	8.9
Frequency									
Once an hour	2.3	0	4.5	2	2.6	0	0	4	5
Once a day	3.3	3.5	3	3.4	3.1	2.9	4.2	4	2
Once a week	5.5	11	0	3.4	7.7	6.7	15.8	0	0
Once a month	2	2.5	1.5	1.5	2.6	2.9	2.1	0	3
It varies	41.5	83	0	45.1	37.8	87.6	77.9	0	0

City-wide differences in the use of mobile for news. The results in Table 7 show that a slightly larger percentage of respondents in Mumbai, (22.5%) than in Kanpur (14.5%) reported that they accessed news on their cell phones. The most popular form of accessing news on cell phones among Mumbai respondents was radio (15%) followed by TV (7%) and text messages (SMS) (6%). On the other hand, the most popular form for accessing news on cell phones for Kanpur respondents was SMS (8.5%) followed by videos (3.5%) and TV (1.5%). However, since the percentages are so small, it's difficult to draw any conclusions at this time.

The question on the kind of news respondents liked to access on cell phones yielded surprising results in Mumbai, because even those 77.5% of respondents who reported that they did not like to access news on their cell phones reported that they accessed news on entertainment (88%), sports (69%) and fashion (59.5%). Another 22.5% said that they liked to access news on current events, followed by 7.5% who accessed news on business and 4% who accessed news on politics. In Kanpur, the respondents liked to access news on current events (7%), followed by news on sports (4%), entertainment (3%) and politics (.5%). Because it appears that respondents in Mumbai didn't really understand the question properly, the percentages are not compared to suggest city-wide differences.

Regarding the frequency of access of news on cell phones, in Mumbai, a majority (83%) said that it varied, citing once a week (11%), once a day (3.5%) and once a month (2.5%). In contrast, in Kanpur the respondents were less interested, citing access of news on cell phones once an hour (4.5%), once a day (3%) and once a month (1.5%). Overall

the data shows that access of news on cell phones is not a mass phenomenon among this age-group, the few who do, seem to prefer radio and SMS (text messages).

Gender differences in Mobile use for news. The data presented in Table 7 shows that in Mumbai, more females (29.5%) than males (16.2%) accessed news on mobile phone. On the other hand, in Kanpur, there were almost no gender differences regarding accessing news on cell phones. Regarding the kind of news, the data shows that in Mumbai, most young people accessed entertainment news. However, more females than males accessed news on fashion and current event whereas more males than females accessed sports news. In Kanpur, the percentages of those accessing news were too small to calculate any differences. Regarding the frequency of accessing news on cell phones, in Mumbai, more females than males reported that they accessed news once a day. Thus the data shows that more females in Mumbai as compared to other groups accessed news on their cell phones especially on current events and fashion.

Access of news during Mumbai attacks. The survey was conducted immediately after the Mumbai attacks during which mobile phones were used very effectively for spreading news about the attacks. Therefore, special emphasis was placed on gaining more understanding about the role of cell phones for information and news during the attacks. Table 8 provides information from questions 4 and 5 in section VIII (media function: accessing news) which were asked to compare the use of different media for news during attacks by young people.

TABLE 8: ACCESSING NEWS DURING MUMBAI ATTACKS   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	Mfemales n = 95	KMales n = 99	Kfemales n = 101
Heard of Attacks on									
TV	83.5	75.5	91.5	83.3	83.7	76.2	74.7	90.9	92.1
Radio	8	11	5	7.8	8.2	11.4	10.5	4	5.9
Computer Internet	1.5	3	0	1.5	1.5	2.9	3.2	0	0
Cell phone Internet	0	0	0	0	0	0	0	0	0
Cell phone via friend	4	8	0	3.4	4.6	6.7	9.5	0	0
Word of mouth	1.3	2.5	0	1.5	1	2.9	2.1	0	0
Followed news on									
TV	98.8	100	97.5	99	98.5	100	100	98	97
Radio	27.5	5.5	49.5	22.1	33.2	1.9	9.5	43.4	55.4
Computer Internet	5.5	8.5	2.5	7.4	3.6	11.4	5.3	3	2
Cell phone internet	4.5	0	9	5.9	3.1	0	0	12.1	5.9
Cell phone friend	39.8	8	71.5	39.2	40.3	4.8	11.6	75.8	67.3
Word of mouth	35.3	5.5	65	38.7	31.6	8.6	2.1	70.7	59.4
Others	12	0	24	16.2	7.7	0	0	33.3	14.9

City-wide differences in access of news during Mumbai attacks. The survey results presented in Table 8, show that television was the medium on which the majority (83.5%) of respondents heard about the news of Mumbai attacks. In Mumbai, 75.5% of the respondents said that they heard about the attacks on TV, followed by 11% on radio, 8% on cell phones via friend, 3% on Internet accessed by computer, and 2.5% by word-of-mouth. However in Kanpur, 91.5% of the respondents said they heard it on TV and 5% said they heard it on radio.

Similarly, television was also the main medium by which the majority of respondents (98.8%) followed the news on Mumbai attacks. Surprisingly, cell phones were the second main medium of news during the attacks with 39.8% of the respondents following the news on attacks through calling a friend. In Mumbai, all the respondents followed the news of the attacks on television. In addition, 8.5% of the respondents followed the news of the attacks on computers via Internet, 8% followed the story on cell phone via friends, and 5.5% followed it on radio and by word-of-mouth. In Kanpur too, a majority of the respondents (97.5%) followed the news of attacks on television; however, unlike Mumbai, 71.5% of the respondents said that they followed the news of attacks on cell phones via friends. Similarly, 65% of the respondents in Kanpur said that they followed the news by word-of-mouth, 49% said that they followed it on radio and 9% said that they followed it on cell phones via Internet.

Gender differences in access of news during Mumbai attacks. The data in Table 8 indicate that there was no gender differences across cities regarding the medium on which respondents heard about the Mumbai attacks. An equal majority of males

(83.3%) and females (83.7%) heard the news of the attacks on television. However, the data also showed that, in Mumbai, although extremely few, still 6.7% of the males and 9.5% of the females heard about the attacks on cell phones from a friend.

Similarly, there were almost no gender differences across cities regarding the media on which respondents followed the news of the Mumbai attacks except in the case of radio. Almost all the males (99%) and females (98.5%) said that they followed the news of the attacks on television followed by 39.2% males and 40.3% females who also followed the news through cell phone calls from friends. A slightly larger percentage of males (38.7%) than females (31.6%) used word-of-mouth to follow the news about the attacks. On the contrary, a larger percentage of females (33.2%) than males (22.1%) used radio to follow the news about the attacks. This was also true within cities, but it was mostly the females in Kanpur who used radio to follow news about the attacks. Further, in Mumbai more females than males used cell phones (by calling friends) to follow the news on attacks, whereas more males than females used internet on computers to follow news on attacks. In Kanpur, more males than females used cell phones and word of mouth to follow news on attacks.

Mobile use for entertainment

The data presented in Tables 9, 10 and 11 of the survey questionnaire provided information regarding the importance and use of mobile phones for entertainment. Question 8 in section III (acquisition and ownership) asked the respondents about the various features they considered as important in their mobile phones. The information gathered from variables on media features were organized in

200

Table 9. Question 1 in section V (general cell phone usage) was asked to gather information regarding the use of cell phones for a variety of media and communication activities. The variables that informed about the use of mobile phones for media functions are presented in Table 10. Question 3 in section VIII (downloading, forwarding, voting) was asked to gather information regarding the use of cell phones for downloading media content. The information gathered from this question is presented in Table 11.

TABLE 9: IMPORTANT MEDIA FEATURES　　　　　　　　　　　　　　　　　　(All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	Mfemales n = 95	KMales n = 99	Kfemales n = 101
Music Player									
Very Imp	75.5	100	51	79.9	70.9	100	100	58.6	44.1
Fairly Imp	18.5	0	37	12.7	24.5	0	0	26.3	47.1
Important	4.5	0	9	4.9	4.1	0	0	10.1	7.8
Not Imp	1.5	0	3	2.5	.5	0	0	5.1	1
Camera									
Very Imp	64.8	100	29.5	66.2	63.3	100	100	30.3	29.4
Fairly Imp	15.8	0	31.5	17.2	14.3	0	0	35.4	27.5
Important	7.5	0	15	5.9	9.2	0	0	12	17.6
Not Imp	12	0	24	10.8	13.3	0	0	22	25.5
Radio									
Very Imp	66.5	100	33	72.5	60.2	100	100	43.4	22.5
Fairly Imp	12.3	0	24.5	13.2	11.2	0	0	27.3	22.5
Important	12	0	24	6.9	17.3	0	0	14.1	33.3
Not Imp	9.3	0	18.5		11.2	0	0	15.2	21.6
Video Recording									
Very Imp	59	99.5	18.5	64.2	53.6	100	98.9	26.3	10.8
Fairly Imp	9.3	.5	18	8.8	9.7	0	1.1	18.2	17.6
Imp	9.3	0	18.5	11.3	7.1	0	0	23.2	14.7
Not Imp	22.5	0	45	15.7	29.6	0	0	32.3	56.9
TV									
Very Imp	49.8	83	16.5	51	48.5	80	86.3	20.2	12.7
Fairly Imp	13.8	12	15.5	16.7	10.7	14.3	9.5	19.2	11.8
Important	8	3	13	10.3	5.6	3.8	2.1	17.2	8.8
Not Imp	28.5	2	55	22.1	35.2	1.9	2.1	43.4	66.7

TABLE 10: ENTERTAINMENT ON CELL PHONES (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
Listening to Music									
Very Frequently	61.8	96	27.5	66.8	56.9	93.3	98.9	18.2	36.6
Sometimes	29.3	4	54.5	24	34.3	6.7	1.1	63.6	45.5
Rarely	3.3	0	6.5	4.6	2	0	0	4	8.9
Never	5.8	0	11.5	4.6	6.9	0	0	14.1	8.9
Clicking Pictures									
Very Frequently	18	31	5	25.5	10.2	41.9	18.9	8.1	2
Sometimes	47	55.5	38.5	44.1	50	53.3	57.9	34.3	42.6
Rarely	15.5	13.5	17.5	8.3	23	4.8	23.2	12.1	22.8
Never	19.5	0	39	22.1	16.8	0	0	45.5	32.7
Playing Games									
Very Frequently	54	94	14	58.8	49	100	87.4	15.2	12.9
Sometimes	27.3	6	48.5	24	30.6	0	12.6	49.5	47.5
Rarely	5	0	10	3.4	6.6	0	0	7.1	12.9
Never	13.8	0	27.5	13.7	13.8	0	0	28.3	26.7
Watching TV									
Very Frequently	2.5	3.5	1.5	4.4	.5	6.7	0	2	1
Sometimes	31	27	35	41.2	20.4	41.9	10.5	40.4	29.7
Rarely	26.3	41	11.5	16.2	36.7	24.8	58.9	7.1	15.8
Never	40.3	28.5	52	38.2	42.3	26.7	30.5	50.5	53.5
Listening to Radio									
Very Frequently	55.3	97	13.5	52	58.7	96.2	97.9	5.1	21.8
Sometimes	28	3	53	28.9	27	3.8	2.1	55.6	50.5
Rarely	5.3	0	10.5	2.9	7.7	0	0	6.1	14.9
Never	11.5	0	23	16.2	6.6	0	0	33.3	12.9

TABLE 11: DOWNLOADING MEDIA CONTENT   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
Games	31	35.5	26.5	32.8	29.1	41.9	28.4	23.2	29.7
Music	39.3	45.5	33	38.7	39.8	41.9	49.5	35.4	30.7
Pictures	33	44	22	31.9	34.2	39	49.5	24.2	19.8
Videos	37.5	55	20	38.2	36.7	56.2	53.7	19.2	20.8
Others	4.3	0	8.5	2	6.6	0	0	4	12.9
Don't download	14.8	13.5	16	13.7	15.8	12.4	14.7	15.2	16.8

City-wide difference in the importance of media features in cell phones. The data presented in Table 9 shows that almost all the respondents in Mumbai considered a music player (100%), camera (100%), radio (100%), video recording (99.5%) and television (83%) as very important features in their cell phones. In contrast, a relatively lower percentage of respondents in Kanpur considered a music player (51%), camera (29.5%), radio (33%), video recording (18.5%) and television (16.5%) as very important features.

City-wide differences in mobile use for personal entertainment. The data in Table 10 shows that while young people in both the cities used the media features on their cell phones, a larger proportion of those in Mumbai than in Kanpur did so. An overwhelmingly higher percentages of young people in Mumbai than in Kanpur said that they listened to music (Mumbai 96%; Kanpur 27.5%), took pictures (Mumbai 31%; Kanpur 5%), played games (Mumbai 94%; Kanpur 14%) and listened to radio (Mumbai 97%; Kanpur 13.5%) very frequently on their mobile phones. It was not that the respondents in Kanpur did not use the media features on their cell phones, but a larger percentage of them appeared to do it sometimes as compared to those in Mumbai. Further, it also appeared that while in Mumbai almost all the participants used media features with some frequency, in Kanpur there were few who never accessed any of the media features.

Similarly, the data in Table 11 shows that a relatively larger percentage of respondents in Mumbai than in Kanpur downloaded entertainment-related content such as games (Mumbai 35.5%; Kanpur 26.5%), music (Mumbai 45.5%; Kanpur 33%), pictures

(Mumbai 44%; Kanpur 22%) and videos (Mumbai 55%; Kanpur 20%) on their cell phones.

Overall the data showed that more young people in Mumbai than in Kanpur considered media features as important in mobile phones and also used them for media functions. This difference can be attributed to the different lifestyles of the respondents in the two cities and their access to personal media. The data in Table 3 showed that a lesser proportion of young people in Mumbai than in Kanpur had personal access to electronic media. Although they had access to personal computers and other media which they shared with family members, they remained outdoors for long periods during the day, hence used cell phones for media functions. Other reason could be possession of multi-media cell phones and access to media-related services.

Gender differences in the importance of media features in cell phones. The data in Table 9 shows that in Mumbai, almost all the males and females considered music players, cameras, radio and video-recording as very important features in their cell phones. Also a majority of males and females in Mumbai considered television as a very important media feature in their cell phone. While there were not gender differences in Mumbai regarding the importance of media features in cell phones, the gender differences existed in Kanpur. In Kanpur, a higher percentage of males than females considered music player, radio, video-recording and television as important media feature in their cell phones.

Gender differences in Mobile use for personal entertainment. The data in Table 10 shows that in Mumbai more males than females used cell phones very

frequently for personal entertainment activities such as playing games, taking pictures and watching TV. On the other hand, almost all the males and females used cell phones very frequently to listen to music and radio, whereas in Kanpur, more females than males used cell phones very frequently to listen to music and radio. The data in Table 11 indicate that in Mumbai, a higher percentage of males than females downloaded games on their cell phones, whereas more females than males downloaded pictures. Surprisingly, in Kanpur there were no gender differences regarding download of media content on cell phones. Overall, the results revealed that across groups, a higher percentage of males in Mumbai considered cell phones as media devices and used them for personal entertainment especially for playing games, and listening to music and radio.

Mobile use for sharing media content

The information from questions 1, 2 and 4 in Section VIII of the survey questionnaire are presented in Table 12. The questions on forwarding content to friends and receiving content from friends were asked to gain an insight regarding the use of mobile phones for sharing content with friends. And the question on uploading content on internet was asked to gain insight into whether young people used cell phones to share content with the larger public.

TABLE 12: SHARING MEDIA CONTENT VIA SMS (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
Forwarding									
Jokes	91	100	82	90.2	91.8	100	100	79.8	84.2
Poetry	89.8	100	79.5	87.3	92.3	100	100	73.7	85.1
Romantic messages	92.8	100	85.5	94.6	90.8	100	100	88.9	82.2
Important news	58.3	97.5	19	59.8	56.6	96.2	98.9	21.2	16.8
Porn Images	3.5	5	2	5.4	1.5	9.5	0	1	3
News about marches	7.3	11	3.5	5.9	8.7	9.5	12.6	2	5
Don't forward SMS	3.5	0	7	3.4	3.6	0	0	7.1	6.9
Receiving									
Jokes	92.3	100	84.5	95.1	89.3	100	100	89.9	79.2
Poetry	92.3	99.5	85	93.6	90.8	100	98.9	86.9	83.2
Romantic messages	90.5	91	90	95.6	85.2	97.1	84.2	93.9	86.1
Important news	53.3	96	10.5	54.9	51.5	97.1	94.7	10.1	10.9
Porn Images	11.8	19.5	4	16.7	6.6	29.5	8.4	3	5
News about marches	9	15.5	2.5	9.3	8.7	18.1	12.6	0	5
Don't receive SMS	3	0	6	.5	5.6	0	0	1	10.9
Uploading									
News	2.3	3	1.5	4.4	0	5.7	0	3	0
Pictures	8.8	9.5	8	11.8	5.6	10.5	8.4	13.1	3
Videos	10.5	5.5	15.5	14.7	6.1	7.6	3.2	22.2	8.9
Others	.3	0	.5	0	.5	0	0	0	1
Don't upload	80.3	88	72.5	72.5	88.3	84.8	91.6	59.6	85.1

Mobile use for sharing media content. The use of cell phones to forward and receive text messages (SMS) and multi-media messages (MMS) and upload content on internet illustrates that respondents not only accessed media content on cell phones for personal use but also shared it with others. The data in Table 12 shows that in Mumbai almost all the respondents reported that they shared (forwarded and received) content such as jokes, poetry, romantic messages and important news via text messages (SMS) with friends. Very few in Mumbai, but a higher percentage than in Kanpur forwarded and received porn images and news about marches in the form of text messages (SMS). However, more young people in Kanpur (27.5%) than in Mumbai (12%) used cell phones to upload media content such as news, pictures and videos on internet via cell phones. This indicates that very few, but a higher percentage in Kanpur than in Mumbai, used cell phones for public communication purposes.

Gender differences in mobile use for sharing media content. The data in Table 12 shows that there were no gender differences in the use of cell phones for forwarding and receiving content such as jokes, poetry, romantic messages, and important news. However, in Mumbai, although there were very few, more males than females used cell phones to forward and receive porn images. This finding confirms the results from the qualitative study as well, in which only young males in Mumbai reported using cell phones for pornographic purposes. In Kanpur, more females than males forwarded content such as jokes and poetry, whereas more males than females received jokes via text messages (SMS). Overall, across both cities, very few but more males than females uploaded content on internet. Thus, indicating that more young males than females used cell phones for public communication.

Mobile use for Social Image

The information gained from question 1 in section IV (Cell phone as an object/technology) was organized in Table 13. This question was asked to gain an insight into young people's perceptions and uses of mobile phones as symbolic devices to enhance their social images. From the interviews it was gathered that young people perceived and used cell phones as fashion items and status symbols. Additionally, the interviews informed the researcher that young people were more likely to think that others (not themselves) used them as fashion items and status symbols.

TABLE 13: SYMBOLIC PERCEPTIONS AND USES OF CELL PHONES   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
Perceptions									
Western Tech	63	66.5	59.5	60.8	65.3	61.9	71.6	59.6	58.8
Fashion Item	52.8	50.5	55	59.8	45.4	61.9	37.9	57.6	52.9
Status Symbol	74.5	94.5	54.5	78.4	70.4	94.3	94.7	61.6	47.1
I use it to look…									
westernized	38.8	47	30.5	33.8	43.5	35.2	60	32.3	28.4
fashionable	58	55	61	63.7	52	67.6	41.1	59.6	62.7
rich	42.5	79	6	45.1	39.8	81	76.8	7.1	4.9
Others use it to look…									
westernized	32.8	34	31.5	30.9	34.7	27.6	41.1	34.3	28.4
fashionable	59.3	60	58.5	58.8	59.7	67.6	51.6	49.5	67.6
rich	60	86	34	62.7	57.1	89.5	82.1	34.3	34.3

City-wide differences in perceptions and uses of cell phones for social image.

The survey results presented in Table 13 show that while almost similar percentages of participants in both cities perceived cell phones as western technology and fashion items, a larger percentage of participants in Mumbai (94.5%) than in Kanpur (54.5%) perceived cell phones as a status symbol. Similarly, while an almost equal percentage of participants in both the cities said that they use cell phones as fashion devices, there were differences in the use of cell phones as western technologies and status symbols by themselves. A larger percentage of young people in Mumbai than in Kanpur used cell phones as western technology to look westernized and as status symbols to look rich. In response to the question of whether others use mobile phones as status symbols, the only difference between the two cities was in the use of status symbols. More young adults in Mumbai than in Kanpur said that others use cell phones as status symbols.

This indicates that the perception and use of cell phones as status symbols were much higher among the participants in Mumbai than in Kanpur. The reason for this could again be attributed to the fact that all the participants in Mumbai unlike those in Kanpur had cell phones for personal use and therefore used them to project a social image.

Gender differences in the perception and use of cell phones for social image.

The data in Table 13 indicates that across cities more males than females perceived and used cell phones as fashion items. While equal percentages of males and females perceived cell phones as western technology, more females than males used them to look westernized. Within cities, there were more gender differences in the perception and use of cell phones for social image in Mumbai than in Kanpur.

In Mumbai, more females than males perceived and used cell phones as western technology to look westernized and also thought that others used them to look westernized. On the other hand, more males than females perceived and used cell phones as fashion items to look fashionable and thought that others used it to look fashionable. The males and females were comparable in their perception and use as status symbols to look rich.

In Kanpur, more males than females perceived of cell phones as status symbols and although more males than females also used them to look rich, the percentages of those using cell phones were too small to compare. On the other hand, more females than males thought that others used cell phones as fashion items.

Overall, the data shows that there are clear gender differences in Mumbai where the perception and use of cell phones as fashionable technology was higher among males than females. And the perception and use of cell phones as western technology was higher among females than males. It's difficult to explain what may have contributed to this gender difference, however, it is possible that females possibly wore traditional clothing and hence used cell phones to look westernized. And males possibly couldn't use clothing as fashion statements so they used cell phones for that purpose.

Mobile use as Personal Item

The results from long interviews indicated that the use of cell phones as personal objects for expressing individuality and storing private materials was an important aspect of cell phone ownership among young people. Therefore, the questions 1 and 2 in Section

VI (cell phones as personal media device) were asked to gain information whether young people considered and used cell phones as personal media devices. The variables used in this question were identified from the qualitative responses collected in the first phase of the study.

TABLE 14: CELL PHONES AS A PERSONAL ITEM   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
Personal Property	96	100	92	96.1	95.9	100	100	91.9	92.2
My Ringtone	82.8	94	71.5	82.8	82.7	93.3	94.7	71.7	71.6
My Wallpaper	59.5	58.5	60.5	66.2	52.6	73.3	42.1	58.6	62.7
Possessive	78.5	76.5	80.5	77.5	79.6	73.3	80	81.8	79.4
Emotionally Attached	66.3	75	57.5	62.7	69.9	65.7	85.3	59.6	55.9
Privacy	79.5	85	74	77	81.9	85.7	84.2	77.8	70.6
Lock with Code	70.8	79	62.5	71.4	70.1	81	76.8	58.6	66.7

City-wide differences in the perception and use of cell phones as personal items. The data in Table 14 shows that almost all the respondents in Mumbai (100%) and in Kanpur (92%) considered cell phones as their personal property. Additionally, the data indicates that a higher percentage of respondents in Mumbai (94%) than in Kanpur (71.5%) used a particular ringtone to distinguish their cell phones from others. Also three- fourths of the participants in Mumbai (75%) compared to only 57.5% of those in Kanpur agreed that they were emotionally attached to their cell phones. Furthermore, more young people in Mumbai (almost 85%) than in Kanpur (74%) said that they do not like other people to go through the contents of their cell phones. Similarly, a higher percentage of young people in Mumbai (79%) than in Kanpur (62.5%) said that they lock their cell phones with a secret code so that others cannot read their messages. Thus, the data shows that while in both the cities almost all the young people considered cell phones as personal property, more in Mumbai than in Kanpur used various strategies to personalize their cell phones, showed emotional bonding with them and maintained privacy in their use.

Gender differences in the perception and use of cell phones as personal items. The data in Table 14 shows that across cities, males and females were almost comparable in the perception and use of cell phones as personal items. However, in Mumbai, more males than females used wallpapers in their cell phones, whereas more females than males said that they were emotionally attached to their cell phones. In Kanpur, the genders were comparable in the perception and use of cell phones as personal devices.

Mobile Use in Friendships

  The survey also investigated the role of cell phones in friendships. The responses from questions 2, 3, 5 and 6 in section VII (cell phones as social technology) of the survey questionnaire were organized in Table 15. The questions 2 and 3 were developed to understand the use of cell phones in already existing friendships. The question 5 was designed to compare the use of internet and cell phones to create technology-based friendships. The question 6 was asked to gain an insight into the use of cell phones for creating friendships with members of opposite sex.

TABLE 15: ROLE OF CELL PHONES IN FRIENDSHIPS (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	Mfemales n = 95	KMales n = 99	Kfemales n = 101
In existing friendships									
All friends have	83.3	73.5	93	86.3	80.1	77.1	69.5	96	90.1
Attract friends	50.5	22	79	50	51	21	23.2	80.8	77.2
Co-ordinate plans	90.3	96	84.5	97.1	83.2	96.2	95.8	98	71.3
Socialize	86	92	80	87.3	84.7	92.4	91.6	81.8	78.2
Technology friendships									
Social networking	26.3	35.5	17	27.9	24.5	43.8	26.3	11.1	22.8
Random Dialing	6.5	5.5	7.5	9.3	3.6	6.7	4.2	12.1	3
Cell phone reference	15.3	0	30.5	24	6.1	0	0	49.5	11.9
Mobile Applications	5.3	0	10.5	6.9	3.6	0	0	14.1	6.9
None of the Above	57.5	66	49	46.6	68.9	57.1	75.8	35.4	62.4
Friends w opposite sex									
Positive impression	45.5	32	59	49.5	41.3	35.2	28.4	64.6	53.5
Make friends	55.5	38	73	65.2	45.4	43.8	31.6	87.9	58.4
Dating	42.3	14.5	70	54.4	29.6	25.7	2.1	84.8	55.4
Relationships	64.5	60.5	68.5	69.6	59.2	71.4	48.4	67.7	69.3

City-wide differences in the use of cell phones in friendships. The data presented in Table 15 shows that more young people in Kanpur (93%) than in Kanpur (73.5%) said that all their friends have a cell phone. Similarly, more in Kanpur (79%) than in Mumbai (22%) said that cell phones help them to attract new friends. However, more young people in Mumbai (92%) than in Kanpur (80%) said that they use cell phones to socialize with friends, whereas a very high percentage of respondents in both cities 92% in Mumbai and 84.5% in Kanpur said that they use cell phones to coordinate plans with friends. This shows that cell phones played a greater role in friendships for more young people in Kanpur than in Mumbai. Further, young people in Mumbai were mainly using cell phones for communication with friends rather than using them as symbols to attract friends.

In addition, to maintaining friendships with their existing friends, the survey reported that young people used internet and cell phones to form new friendships. However, overall more young people in Kanpur than in Mumbai used technology to make friends. When compared separately, more young people in Mumbai (35.5%) than in Kanpur (17%) used social networking websites to make friends. On the other hand, more young people in Kanpur (30.5%) than in Mumbai (10.5%) used cell phones to make friends through calling. This confirms the finding from the qualitative study that young people in Mumbai made friends online on social networking website and young people in Kanpur used cell phones to make friends. This could be because more young people in Mumbai than in Kanpur had access to computer and internet connection at home for personal use.

The survey results in Table 15 also indicated that the respondents in both the cities used cell phones to support friendships with members of opposite sex. Overall the survey indicated that more young people in Kanpur than in Mumbai used cell phones for friendships with members of opposite sex. More young in Kanpur than in Mumbai used cell phones to create a positive impression on the opposite sex, to make friends with members of the opposite sex and for dating and in relationships with members of opposite sex. In Mumbai, the young people mainly used cell phones for supporting relationships with members of the opposite sex. This could be because of the conservative socio-cultural environment males and females had fewer opportunities to interact with each other, hence they used cell phones to socialize with them.

Therefore, overall the survey indicated that more young in Kanpur than in Mumbai used cell phones in friendships with already existing friends, in technology-based friendships and in friendships with members of opposite sex for different purposes.

Gender differences in the use of cell phones in friendships. The information presented in Table 15 shows that across cities, there were gender differences in the use of cell phones for friendships. Across cities, more males than females used cell phones for coordinating plans with friends. However, in Mumbai there were almost no gender differences in the use of cell phones in friendships. However, in Kanpur more males than females used cell phones for coordinating plans with friends. This indicated that while all the groups were comparable in the use of cell phones in friendships, relatively fewer females in Kanpur used cell phones for coordinating plans with friends across groups. This could be because of the restrictive rules for females in Kanpur which prevented

them from going out and socializing with friends; hence they used cell phones less for coordinating plans.

The data in Table 15 also indicates that across cities, males and females were comparable in the use of internet for making friends, whereas the use of cell phones was much higher among males than females for forming technology-based friendships. For example, more males (24%) than females (6.1%) used cell phones for forming friends through cell phones. With regard to the use of online networking websites, in Mumbai more males than females used them to make friends, whereas in Kanpur more females than males used them to make friends. With regards to the use of cell phones, in Kanpur more males than females used cell phones in various ways particularly through random dialing to make friends.

The data in Table 15 also indicates that more males than females used cell phones for making friends with females, for dating and supporting relationships with females. Across cities, almost 49.5% of males as compared to 41.3% of females said that they used cell phones to create positive impressions on members of the opposite sex. In addition, a larger percentage of males (65.2%) than females (45.4%) said that they used cell phones to make friends with members of opposite sex. More males (54.4%) than females (29.6%) were also using cell phones to date members of opposite sex. And approximately 70% of the males, as opposed to 59% of the females, used cell phones to maintain relationships with members of opposite sex.

There were high gender differences within cities in the use of cell phones in friendships with members of opposite sex. In both the cities, more males than females

used cell phones for creating a positive impression and making friends with members of the opposite sex, and dating and supporting relationships with members of opposite sex. However, across groups fewer females in Mumbai were using cell phones in friendships with members with opposite sex. This could be due to the safety concerns regarding using cell phones for making friends with members of the opposite sex or their attitude towards such friends. In the qualitative interviews, females in Mumbai had expressed concerns about using cell phones for making friends with members of opposite sex.

Furthermore, across groups more males in Kanpur were using cell phones to make friends with members of the opposite sex and for dating purposes. This could be because young people in Kanpur, especially male respondents, agreed that having a pre-marital relationship was all right. Therefore, it is possible that their attitude towards such relationships impacted their cell phone usage for such purposes.

Role of parents in cell phone usage

The qualitative study showed that young people used cell phones to negotiate independence from parents. In the survey, questions were asked to gain insight regarding the role of parents in mobile phone usage by young people and whether young people negotiated independence from parents in their use of cell phones. Questions 4 and 5 in section III organized in Table 16 (acquisition and ownership) provided information about the payments made for mobile phones and the services used. Question 1, 2, and 3 in section IX. A. (parental jurisdiction) is organized in Tables 17, 18 and 19, provided information regarding the restrictions put by parents on the cell phone usage of young

people, the conflicts young people had had with parents regarding their cell phone usage, and what young people thought about parents monitoring their cell phone usage.

TABLE 16: PAYMENTS FOR CELL PHONES AND CELLPHONE BILLS   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	MFemales n = 95	KMales n = 99	KFemales n = 101
Cell phones									
Parents	76.5	73.5	79.5	71.6	81.6	73.3	73.7	69.7	89.1
Self	14.3	9.5	19	19.6	8.7	9.5	9.5	30.3	7.9
Friend	3	5.5	.5	2	4.1	3.8	7.4	0	1
Sibling	6.3	11.5	1	6.9	5.6	13.3	9.5	0	2
Cell phone bill									
Parents	72	72	72	64.7	79.6	73.3	70.5	55.6	88.1
Self	26.3	26	26.5	33.3	18.9	23.8	28.4	43.4	9.9
Friend	.3	0	.5	0	.5	0	0	0	1
Sibling	1.5	2	1	2	1	2.9	1.1	1	1

TABLE 17: PARENTAL RULES REGARDING CELL PHONE USAGE   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	Mfemales n = 95	KMales n = 99	Kfemales n = 101
Parental Rules									
Don't talk late night	82.8	100	65.5	76.5	89.3	100	100	51.5	79.2
Don't talk long hours	81.3	100	62.5	75.5	87.2	100	100	49.5	75.2
No high bills	35.3	0	70.5	31.9	38.8	0	0	65.7	75.2
Don't talk w family	71	99.5	42.5	66.7	75.5	99	100	32.2	52.5
Don't talk w studying	81.3	99	63.5	76.5	86.2	99	98.9	52.5	74.3
No rules	14	0	28	13.7	14.3	0	0	28.3	27.7

TABLE 18: CONFLICTS WITH PARENTS REGARDING CELL PHONE USAGE   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	MMales n = 105	Mfemales n = 95	KMales n = 99	Kfemales n = 101
Conflicts for									
talking long hours	60	100	20	63.2	56.6	100	100	24.2	15.8
buying new cell phone	57.5	100	15	56.9	58.2	100	100	11.1	18.8
poor academic	63.3	100	26.5	66.7	59.7	100	100	31.3	21.8
cell phone bill	66.3	100	32.5	67.2	65.3	100	100	32.3	32.7

TABLE 19: PARENTS SHOULD MONITOR CELL PHONE USAGE   (All values are in percentages)

Variables	Overall N = 400	Mumbai n = 200	Kanpur n = 200	Males n = 204	Females n = 196	Mmales n = 105	Mfemales n = 95	Kmales n = 99	Kfemales n = 101
Parents should monitor cell phone usage because…									
young people can go in wrong direction	86.3	82	90.5	87.7	84.7	83.8	80	91.9	89.1
young people use to pursue romantic relationships	76.5	70.5	82.5	77.5	75.5	69.5	71.6	85.9	79.2
they know what is right or wrong for us	67.3	51.5	83	60.8	74	44.8	58.9	77.8	88.1
Parents should not monitor because it is intrusion of privacy	54.5	58	51	55.9	53.1	53.3	63.2	58.6	43.6
It is all right for parents to ask me to change wall paper on my cell phone	58.5	46	71	59.3	57.7	47.6	44.2	71.7	70.3

City-wide differences in the role of parents in cell phone usage. The survey results presented in Table 16 show that majority of young people (76.5%) acquired their first cell phone through their parents. Additionally, parents pay the cell phone bills for the majority of young people (72%). This was also true across cities. In both cities, parents of a majority of young people paid for their first cell phones and paid their cell phone bills.

Regarding restrictions put on cell phone usage by parents, the data in Table 17 shows that more young people in Mumbai than in Kanpur reported as having rules by parents on their cell phone usage. In Mumbai almost all reported having rules regarding talking late at night on mobile phones or forbidding talking when being with family or while studying. In addition, parents in Mumbai also posed limits on the amount of money the participants could spend on their cell phone usage. On the other hand, in Kanpur almost 60 – 70% of young people reported as having parental rules of various kinds regarding cell phone usage.

In addition, the data in Table 18 shows that all the participants in Mumbai had had conflicts with parents regarding talking long hours on cell phones, buying new cell phones, paying cell phone bills and viewing cell phones as a cause of poor academic performance. On the other hand, in Kanpur a relatively smaller percentage of participants had had conflicts with parents regarding their cell phone usage. For example, only 20% of the participants said that they had conflicts regarding talking long hours, 15% said that they had conflicts regarding buying new cell phones, 26.5% said that they had conflicts about cell phones being a cause of poor academic performance and 32.5% said that high cell phone bills was a cause of conflicts with their parents.

Furthermore, the data in Table 19 shows that a high percentages of respondents agreed that parents should monitor cell phone usage because young people can go in the wrong direction (82% in Mumbai; 90.5% in Kanpur); because young people use cell phones to pursue romantic relationships (70.5% in Mumbai; 82.5% in Kanpur); because parents know what is right or wrong for young people (51.5% in Mumbai; 83% in Kanpur). However, more than half the respondents in Mumbai (58%) and in Kanpur (51%) agreed that their parents should not monitor their cell phone usage because this would intrude on their privacy. Interestingly, a smaller percentage of participants in Mumbai (46%) than in Kanpur (71%) agreed that it was all right for their parents to ask them to change wallpapers on their cell phone.

The above results indicate that most young people acquired their first cell phones through their parents who also paid their cell phone bills. In addition, the parents also put restrictions regarding their cell phone usage. The city-wide differences showed that more young people in Mumbai than in Kanpur had restrictions and had had conflicts with their parents regarding their cell phone usage. Further, more young people in Kanpur than in Mumbai agreed that their parents should monitor their cell phone usage for various reasons. Also it appeared that more young people in Mumbai than in Kanpur were concerned about their privacy and therefore suggested that parents should not monitor their cell phone usage. Thus the results suggested that more young people in Mumbai than in Kanpur gave indication that they negotiated independence from parents.

Gender differences in the role of parents in cell phone usage. The data in Table 16 shows that across cities, more females than males reported that their parents

paid for their first cell phones and their cell phone bills. While in Mumbai, parents of almost equal percentage of males and females paid for their cell phones and bills, in Kanpur the higher percentage of females than males reported the same.

The data in Table 17 shows that across cities, more females than males reported having rules on their cell phone use by parents. Almost 89.3% of females as compared to 76.5% of males said that their parents told them to not talk late at night on their cell phones. Similarly, 87.2% of females as opposed to 75.5% of males said that their parents asked them to not talk for long hours. A higher percentage of females (75.5%) than males (66.7%) reported that their parents told them to not talk on cell phones when they were with family. More females (86.2%) than males (76.5%) also had rules about not talking on cell phones while studying. When compared within cities, in Mumbai almost an equal percentage of males and females had parental rules regarding cell phone usage. However in Kanpur, more females than males reported having parental rules regarding their cell phone usage. This could be because a higher percentage of males than females in Kanpur paid for their own cell phones and cell phone bills.

The data in Table 18 shows that across cities, almost an equal percentage of males and females, but in some cases a slightly higher percentage of males, reported having conflicts with their parents regarding their cell phone usage. Almost 63.2% of males and 56.6% of females said that they had had a conflict with their parents regarding talking long hours on cell phone. Similarly, 66.7% of males and 59.7% of females said that they had had a conflict regarding cell phone use being seen as a cause of poor academic performance. However, within cities, all the young people irrespective of their gender

had had conflicts with their parents. On the other hand, in Kanpur, more males than females had had conflicts for talking long hours and for cell phone being a cause of poor academic performance. It is possible that females in Kanpur had less conflicts because their parents paid for their cell phone bills and also because they were socialized not to talk back to their parents.

The data in Table 19 indicates that across cities, males and females were almost comparable in their views about whether parents should monitor cell phone usage, except for one reason. More females (74%) than males (60.8%) agreed that parents should monitor cell phone usage because they know what is right or wrong for young adults. This was also true within cities. However, surprisingly, in Mumbai more females than males also said that their parents should not monitor cell phone usage because it was an intrusion of their privacy. On the other hand, in Kanpur more males than females agreed that parents should not monitor cell phone usage because it was an intrusion of their privacy.

Conclusions

City-wide differences. The survey results showed that young people in the two cities differed in terms of their demographics, socio-cultural orientation and access to media. For example, in Kanpur 12% of the young people were married while in Mumbai there were none. In Kanpur, young people preferred only western clothing and believed that it was all right to have pre-marital relationships. Further, the quantitative analysis also showed that there were many city-wide differences in the use of cell phones among young adults. For example, a larger percentage of young adults in Mumbai than those in

Kanpur acquired cell phones for safety and emergency needs; used text messaging; considered media features as important; used cell phones as media devices for news, personal entertainment and for sharing content; perceived and used cell phones as status symbols for enhancing their social image; used cell phones as personal items to maintain privacy; used cell phones to co-ordinate plans and socialize with friends; had parental rules and conflicts with parents regarding their cell phone usage. On the other hand, a larger percentage of young adults in Kanpur than those in Mumbai used the calling facility on cell phones; used mobiles for public communication activities such as group messaging or social networking and for voting in TV programs; agreed that parents should monitor cell phone usage; used cell phones to attract and make new friends and used them for dating and maintaining relationships with members of opposite sex. These differences could be due to different socio-cultural environment in two cities, lifestyle factors, and access to other media such as computers and internet.

Gender differences. The quantitative analysis showed that males and females within the cities were comparable in terms of demographics. However in both the cities, they differed in their socio-cultural orientation with more females than males preferring traditional clothing and believing in arranged marriages, indicating that more females than males were traditional probably because of the parental or social expectations.

Regarding using mobiles for communication, across cities, more females than males acquired cell phones for calling friends; whereas more males than females used multi-media messaging. Across groups, males in Kanpur were the most likely to use cell phones for public communication activities such as group messaging through mobile

social networks and for voting on TV programs. Regarding accessing news, across groups, females in Mumbai were most likely to use cell phones to access news related to current events and fashion. Regarding the use of cell phones for personal entertainment, in Mumbai, there were no gender differences, but in Kanpur more males than females used cell phones for most media functions. Regarding the use of cell phones for enhancing social image, in Mumbai more males than females used them as fashion item to look fashionable whereas more females than males used them as western technology to look westernized. Regarding the use of cell phones as personal items, in Mumbai more females than males were emotionally attached to their cell phones. Regarding the use of cell phones in friendships, in Kanpur more males than females used cell phones to make friends in general and for making friends with members of opposite sex and dating. Regarding the role of parents in cell phone usage, in Kanpur more females than males had parents paying for their cell phones and cell phone bills and had more parental rules regarding their cell phone usage. Overall the data showed that there were more gender differences in Kanpur than in Mumbai probably because of the restrictive socio-cultural environment.

Overall, this study found that young adults in India irrespective of city and gender considered cell phones as their personal items and used them to maintain privacy. Further this study showed that there are more regional differences in the use of cell phones by young people probably because of the differences in urban ecology, socio-cultural environment and lifestyle factors. For example, young people living in Mumbai who remained away from home for long hours and traveled in crowded local trains used them for text messaging and for personal entertainment. Similarly, those who lived in Mumbai

and had access to internet at home used them less for social networking than those living in Kanpur who did not have access to internet at home. Additionally, this study also found that there were more gender differences in Kanpur than in Mumbai possibly because of the relatively more restrictive cultural environment in Kanpur.

The next chapter discusses the main findings, theoretical implications, practical implications and limitations of the study and provides directions for further research.

CHAPTER 7: DISCUSSION AND CONCLUSIONS

The purpose of this dissertation was to investigate the use of mobile phones among college-going young adults in Mumbai and Kanpur in India. The study also examined the city-wide differences and gender differences in the use of mobile phones by young people in two cities. The research, using long interviews and survey methodology, showed that young people, who participated in the study, used their cell phones in a variety of different ways to fulfill their communication, news and entertainment needs. Additionally the participants used cell phones to fulfill age-related needs such as expressing individuality, negotiating independence from parents and creating and maintaining friendships. This chapter provides a discussion of the main findings and presents the conclusions of the study and notes the contributions to the academic literature. Then the main limitations of the study are given and the topics for further research are outlined.

Summary and Discussion of the Main Findings

The main purpose of this dissertation was to examine the use of mobile phones among college-going young adults in two cities, Mumbai and Kanpur, in India. The study investigated the use of mobile phones for communication and media-related purposes. The sample of college-going youth was specifically chosen to see whether in addition to communication and media related needs young people were using mobile phones to fulfill age-related needs such as expressing individuality, negotiation of independence

from parents and creating and maintaining friendships. The two cities were selected to explore whether different urban ecology and disparate socio-cultural environment impacted the use of mobile phones by young people. The study also investigated the impact of gender on mobile phone usage among young people. Findings related to each of these specific questions will be discussed in this section.

Research Questions and Hypothesis Revisited

Q. 1. What are the different communication and media-related needs that young people in India may be fulfilling through the use of mobile phones?

The first research question for this study was to identify various communication-related, media-related and age-related needs that young people fulfill through the use of mobile phones. The findings revealed that young people in Mumbai and Kanpur used cell phones for various needs related to communication, media and age. The following sections mobile use for communication-related needs, mobile use for media-related needs and mobile use for age-related needs will discuss the findings pertaining to each.

Mobile use for communication-related needs

The communication needs for which the participants used cell phones were: to connect with family and friends, to contact family and friends during emergency, to inform family regarding their whereabouts, to coordinate plans and activities with friends, and to have private conversations with friends. The findings also showed that communicating with family and friends and safety were the main reasons why participants acquired and used cell phones. Furthermore the findings showed that the

voice calling option was more popular for communicating with family, whereas text messaging was more used when talking to friends because it was cheaper and convenient.

Earlier studies conducted on cell phone usage in other countries have revealed similar findings. For example, studies have revealed that young adults used cell phones for safety and security across countries (Campbell, 2007) and in India (David, unpublished). Studies conducted on teens in Norway (Ling & Helmersen, 2000), on school children in United Kingdom (Green, 2006), and on adults in America (Campbell & Russo, 2003) have indicated that cell phones are used for coordination. In addition, the studies have found that in Japan (Ito, 2004), in Finland (Oksman & Turtiainen, 2004) and in Russia (Lokila & Gladarev, 2008) young people used mobile phones to have private conversations with friends. Previous researchers have also found that in United States, young adults staying away from family on college campuses use cell phones for parental contacts (Aoki & Downes, 2003). A cross-cultural comparison of college students from India and United States showed that young people used cell phones to talk to friends (Aoki & Downes, 2003; Chakraborty, 2006, Wei, 2006b).

The survey results also provided evidence that young adults in the two cities had begun to use cell phones for public communication activities such as group messaging through mobile social networks such as Twitter and SMSGupshup and for voting on reality TV programs.

Mobile use for Media-related needs

In addition, the findings showed that respondents used cell phones to fulfill media-related needs such as accessing news and entertainment activities. The respondents also used cell phones to access news which catered to their personal interests and which they enjoyed sharing with friends to build conversations. The young people accessed news on topics such as fashion, stock market performance, or sports that represented their personal interests and which they shared with friends. An earlier study by Leung and Wei (1998) in Hong Kong also reported that young adults used pagers to access news updates. Hoplamazian and Feaster (2009) have also found that American university students used mobile phones for accessing news.

Further, the survey results indicated that participants liked to access news on cell phones in the form of radio, television, text messages and multi-media messages. However, the frequency with which the participants accessed news on cell phones varied. The interviews and survey results showed that cell phones were not really considered the main source of news. Westlund (2008) also found that Swedes used mobile phones as supplementary news device. They became a significant source of news for topics that catered to their personal interests and that which they wanted to access on the go. Further, it can be said that access of news was probably seen as an added benefit of having a cell phone and not necessarily the main reason for acquiring a cell phone.

The study also suggested that probably one of the important benefits of accessing news on cell phones was that participants could share important news with their friends by exchanging text or multi-media messages on cell phones. It is possible that young people liked sharing news with people they already know because it allowed the

opportunity to have conversations and share opinions with friends on that topic. This is probably one of the reasons why online social networking tools such as Twitter are becoming popular for news. They offer an opportunity for sharing comments and giving feedback on news items. On the other hand, while cell phones provided an opportunity for users to be citizen journalists by uploading important news items on to the internet, the results indicated that users were not really using cell phones for this purpose.

The survey also investigated the use of cell phones to access news during the Mumbai attacks. The results indicated that there were very few participants who heard about the attacks on cell phones from their friends. However, there were a large number of participants who followed the news of the attacks on cell phones by calling friends. This indicates that although cell phones may not be used to access news regularly, in certain situations they become an important source of news from friends and family. This suggests that cell phones are not necessarily replacing the use of mass media for news, but that they are actually used as supplementary and convenient devices through which people can receive news anytime anywhere when they cannot have access to other mass media devices.

The respondents used enhanced features and services in their cell phones for entertainment during their free time when they were alone by choosing to listen to music. When they were with friends, they took pictures with their mobile cameras. Economides and Grouspoulou (2008) also found that in Greece university students used cell phones for taking photos. The interviews and survey results revealed that within the young adult age-group the use of cell phones for listening to music was extremely popular, especially

in Mumbai. In Mumbai, several participants said that they used their cell phones as iPods or music players while traveling by local trains to college daily. In Kanpur, participants who did not have a computer to download music said that they listened to radio via cell phones. Similarly, participants said that cameras were important features in their mobile phones.

Q. 2. Whether young people use mobile phones for age-related needs such as expressing individuality, in friendships and for negotiating independence from parents?

The findings revealed that young people were using cell phones to fulfill age-related needs such as expressing individuality, in friendships and negotiating independence. First, of all the interviews revealed that cell phones were seen as a coming of age presents from parents and a marker of adulthood, a must-have device when an individual turns 18 years old. This indicated the importance of cell phones for individual identity formation during the young adult phase. This was true in both cities, despite the fact that respondents in Kanpur received cell phones at a later age.

Second, this study found evidence for the perception and use of cell phones as fashion and status items to enhance social image by young adults. Several of the respondents in both cities mentioned that the cost of the cell phone adds to the perception of the social status and background of an individual. Thus the carrying of cell phones was not only associated with a display of personal identity, but also an important factor in how an individual was judged socially. A study conducted by Ling (2001) also reported that teens used cell phones as an object of display and that having a cell phone of a

particular brand and model impacted their identity within the group. Further the study also found evidence for the use of mobile phones as fashion items. Previous studies conducted on cross-cultural samples from United States, Japan, Hawaii, Taiwan and Sweden have shown that young adults use cell phones as fashion statements (Campbell, 2007; Katz & Sugiyama, 2006).

Third, the respondents also used cell phones to express their individuality by personalizing their cell phones and maintained personal autonomy in the use of cell phones. They used particular ringtones and wallpapers that set their cell phones apart from others. Young adults also used cell phones to maintain privacy and negotiate independence from parents in their use of mobile phones. The respondents, who lived with their families, used mobile phones to have private conversations, or to store private content or to create and maintain friendships which their families might not approve of. The young adults also used mobile phones to support friendships with existing friends and support friendships created online or through cell phones. In addition, they used mobile phones to create and maintain friendships and to have romantic conversations with members of opposite sex. However, they did so privately in order to avoid breaking social rules. A study conducted by Ling (2000; 2005) and Ling and Helmersen (2000) also reported that the teens in Norway felt that having a cell phone allows them to interact with peers outside of parents surveillance.

Although their parents had restrictions on cell phone use, the respondents in both cities used various strategies to assert their autonomy regarding the use of mobile phones. For example, they locked the contents in their cell phone so that their parents couldn't

have access to them. At home they used text messaging to have conversations with friends so that their parents couldn't overhear their conversation. Further, the respondents used cell phones to maintain friendships with members of opposite sex, which their parents might not have approved of. The young adults especially the males in Mumbai said that they used cell phones to view or store pornographic material, because they felt that their cell phones were for their private use.

H1: Young people in India will use all different forms of reasoning such as personal, social and moral to assess their use of mobile phones.

There was only one hypothesis in this study which suggested that young people will use all the three different forms of personal, social and moral reasoning to assess their use of mobile phones. The study found ample evidence that young people used all three different forms of reasoning especially when assessing the use of mobile phones for age-related activities and needs. For example, young people used personal reasoning to maintain personal autonomy and privacy in the use of mobile phones. They used personal and social reasoning to negotiate independence from parents especially in the use of mobile phones for creating friendships with members of opposite sex which their parents might not have approved of. They also used personal, social and moral reasoning to characterize the behavior of using cell phones for viewing pornography and for teasing and harassment as wrong, socially inappropriate or unethical.

Q. 3. What are the city-wide differences in the mobile phone use of young people
residing in two cities of Mumbai and Kanpur in India?

The third research question was to identify city-wide differences in the use of mobile phone by young people in the two cities of Mumbai and Kanpur. The results from qualitative and quantitative study are used to discuss the city-wide differences in the use of mobile phones.

The qualitative and quantitative study indicated that the young adults in Mumbai were more likely to use cell phones for safety and emergency and for text messaging. The reason could be because young people in Mumbai spent long hours away from home throughout the day and hence were more likely to have the need to contact during emergency situations. Also in the recent past, Mumbai has experienced many tragedies such as floods in 2006 and bomb blasts and the terrorist attacks in November 2008. Since most young adults travel by local trains in Mumbai which are quite crowded, therefore probably it was easier for them to text rather than have long conversations.

Further the quantitative study noted that the use of mobile phones for public communication activities such as group messaging through mobile social networks and voting on reality TV programs was much higher among respondents in Kanpur than in Mumbai. This could be because the young adults in Kanpur did not have access to computer-based internet for personal use; therefore they used mobile phones for such activities. It is possible that young adults in Mumbai were probably using computer-based internet for such activities.

The quantitative analysis also showed that more young people in Mumbai than in Kanpur considered media features as very important in cell phones. In addition, they also used cell phones for personal entertainment very frequently and for sharing media content. This could again be explained that because young people in Mumbai stayed away from home for long hours they found it convenient to use mobile phones to pass time. Additionally it could also be because young adults in Mumbai had more sophisticated mobile phones with multi-media features. It is difficult to explain the exact cause but it is supposed that many factors may have contributed to this. This could also be the reason why more young adults in Mumbai than in Kanpur used mobile phones as status symbols to enhance their social image.

Further, the quantitative study showed that more young adults in Mumbai than in Kanpur used mobile phones to coordinate plans and socialize with friends. This could be because of the long distances in Mumbai and the crowded spaces. It is possible that since young adults traveled long distances everyday it was difficult to meet their friends every day, therefore they used mobile phones to keep in touch with them and to coordinate plans so that they did not waste time while traveling.

In addition, the survey showed that more young adults in Mumbai than in Kanpur used cell phones as personal items to maintain privacy. The reason for this could be that in Mumbai all young people had cell phones for personal use while in Kanpur some of them were sharing. Another reason could be the use of cell phones for pornography. The qualitative study revealed that young males in Mumbai were the only ones using mobile

phones for storing and viewing pornographic content and therefore they wanted to maintain privacy.

The survey also reported that more young adults in Mumbai than in Kanpur had parental rules and had had conflicts with parents regarding cell phone usage. One explanation for this could be because almost all young adults in Mumbai had rules so they had conflicts. Another could be because it was more acceptable in Mumbai than in Kanpur to express your individual needs and wants. This could also be the reason why more young adults in Kanpur than in Mumbai agreed that parents should monitor cell phone usage.

Finally the survey results indicated that more young adults in Kanpur than in Mumbai used cell phones for making new friends and for dating and maintaining relationships with members of opposite sex. The main reason could be the socio-cultural environment and norms which were more restrictive in Kanpur than in Mumbai. In the qualitative interviews, many young adults in Kanpur said that they are not able and are not allowed to meet with members of opposite sex. It is also possible that young adults in Mumbai were using computer-based internet for such activities and many of them indicated in the qualitative interviews that they mostly formed such friendships on online social networks such as Orkut. In Kanpur, both the qualitative and quantitative studies indicated that majority of young adults did not have access to internet at home.

Q. 4. What are the gender differences in the use of mobile phones by young people in India?

The fourth question for this study was to investigate gender differences regarding cell phone usage among young people. As expected the survey results indicated that across cities, more females than males indicated that they preferred wearing traditional clothes. This suggests that females were more traditional than males and probably more likely to conform to social norms.

The survey results showed that across cities, there were two main gender differences, one that more females than males acquired cell phones for calling friends. It is possible that females had more strict parental rules about going out and socializing with friends therefore, they used mobile phones for that purpose. Secondly, more males than females used multi-media messaging (MMS) services. This could be because as qualitative study indicated mainly males were using mobile phones for pornographic content and most of such content is only available through MMS. Therefore more of them used it.

In Mumbai, the study showed that more females than males accessed news pertaining to current events and fashion, showed emotional attachment to mobile phones and used them to look westernized. On the other hand, in Mumbai more males than females used them as fashion items to look fashionable. It is difficult to say why these gender differences existed in Mumbai, probably future research may investigate these issues.

In Kanpur, however, more males than females used mobile phones for public communication activities such as group messaging and voting on reality TV programs, for media functions, and to make friends with members of opposite sex and dating. One of the reasons for this could be safety concerns. For example, females may feel more concerned about using cell phones on public communication platforms and for making friends on cell phones and for dating because they were probably concerned about talking to strangers and revealing personal information. It could also be due to the socio-cultural and parental expectations that females should not engage in dating or romantic relationships prior to marriage. Therefore they were probably more concerned that their parents may get to know about such activities because the survey also indicated that more females than males in Kanpur had parental rules regarding cell phone usage. Overall, the study found some evidence that the patriarchal culture that allows less freedom to females than males was probably affecting the use of mobile phones in Kanpur. And the study indicated that probably more females in Kanpur were adhering to socio-cultural expectations and norms and parental norms.

Theoretical Implications

There were three theoretical perspectives used in this study to examine the cell phone usage of young adults in the cities of Mumbai and Kanpur in India. First, the study used the uses and gratifications perspective to investigate the benefits associated with the use of cell phones for young adults. Second, the social-cognitive domain theory was used to explore if young people asserted autonomy in their use of cell phones. It was also employed to propose that young adults will use all three different forms of personal,

social and moral reasoning in the use of mobile phones. Third, the social construction of technology (SCOT) framework was applied to see if the socio-cultural environment impacted the use of cell phones among young adults. The study found evidence for all the three theoretical frameworks.

Previous studies that have investigated the use of mobile phones using the uses and gratifications perspective have revealed that cell phones are mainly used for interpersonal communication gratifications such as communication with family and friends for sociability and displaying affection (Leung & Wei, 2000; Auter, 2007). One of the studies conducted in the context of Turkey also revealed that status, business, security and sociability were the important motives associated with cell phone acquisition and usage (Ozcan & Kocak, 2003). The studies have also shown that young people use mobile phones as fashion statements to express their individuality. This study also found the evidence to support claims that interpersonal communication motives such as safety, emergency and sociability (communicating with friends and family) were important gratifications associated with cell phone usage among young people in the two cities. Further the study also showed that young adults used cell phones for accessing news and for personal entertainment. Both the qualitative and quantitative study provided strong evidence for the use of mobile phones as personal entertainment devices for listening to music and taking pictures.

In addition, the study also showed that young adults also used cell phones for age-related needs for expressing individuality by using them as fashion items, status symbols and to look westernized. In addition, the study also noted that the symbolic usage of

mobile phones was not only for expressing individuality but also for enhancing social image because they were considered important devices in how an individual was judged socially. The study also showed that young adults used mobile phones as personal technology to store private contents and maintained privacy in their use. They also used cell phones in friendships to maintain friendships, to create cell phone friends with members of opposite sex and for dating. Thus the study showed that in addition to communication and media related benefits, the mobile phones were also used to fulfill many important developmental needs which young adults were unable to fulfill due to the restrictive cultural norms of Indian society. One of them was the use of mobile phones for storing and viewing pornography and for dating both of which are not socially appropriate behavior as young adults themselves mentioned.

The second theoretical perspective used in this dissertation was the social-cognitive domain theory from the human development literature. The theory posits that individuals in every society develop individualistic concerns such as personal autonomy but may not express them for fear of going against social norms. This theory was used to explore whether young people used cell phones to fulfill age-related personal needs such as expressing individuality and asserting independence. The study found ample evidence to support the assumption that young people used cell phones to express individuality and negotiate independence from parents in matters that were of personal importance to them. For example, the findings revealed that young people were aware that social norms in India do not allow members of the opposite sex to socialize with each other publicly. Hence, they used cell phones to talk to members of the opposite sex privately so that their parents wouldn't know about it. Similarly, the participants locked private contents in their

cell phones so that their parents could not have access to them. They changed the names of their boyfriends and girlfriends when they stored their numbers in their cell phones so that their parents could not tell who they actually were. Several participants mentioned that it was not all right for their parents to ask them to change wallpapers on their cell phones because cell phones were their private property. Some said that they might change wallpapers in front of their parents but would change them later back to what they want. This indicated that the respondents maintained privacy and asserted their autonomy regarding their cell phone usage while remaining within the public boundaries of social norms.

In addition, the social-cognitive domain model was employed to examine the reasoning used by young people to assess their mobile phone behaviors. The qualitative analysis of justifications given by young people for their mobile phone usage showed that young people used all three different forms of personal, social and moral reasoning to assess their mobile phone usage. For example, they used both personal and social forms of reasoning when judging their use of mobile phones for dating purposes or for pornographic purposes. While they agreed that engaging in both of these behaviors was socially inappropriate, they personally did not think it was wrong and therefore they used mobile phones for dating or for viewing pornography privately and not publicly so that they did not really break the social rules. In addition, the young adults used social and moral reasoning while judging the use of mobile phones for taking pictures of women or for teasing and harassment. The young adults were of the view that these behaviors were socially inappropriate as well as unethical.

The third theoretical perspective used in this study was the social construction of technology (SCOT) framework. Previous studies on mobile phone usage have shown that the socio-cultural environment within which individuals live shapes the use of technology (David, 2007). This study also found supporting evidence to show that the socio-cultural environment of the individuals shapes the way individuals use technology. For example, the study found that the use of mobile phones for dating and making friends with members of opposite sex was quite high especially among the young adults in Kanpur, probably because the socio-cultural rules in Kanpur prevented the members of opposite sex to mingle and interact with each other and therefore they used mobile phones for such purposes. However, the study also found that in Kanpur these behaviors were much higher among the males than females. This could be because of the patriarchal cultural norms which are more restrictive for females than males. Because the study also found that more females than males in Kanpur had parental rules regarding mobile phone usage. During the qualitative study, the females in Kanpur mentioned that their parents restricted them from talking to males and they also showed more need to confirm to socio-cultural expectations probably because of high consequences.

Thus the study showed that while on one hand mobile phones allowed more freedom to both males and females, females especially in Kanpur were probably not taking advantage of it because of higher consequences of exercising their personal freedom. Whereas males in both cities were taking advantage of the personal freedom available through mobile phones, for example, males in Mumbai used them for pornography and males in Kanpur used them for dating. Females in Mumbai were also using this personal freedom to some extent for example, they locked the contents or

changes names of their boyfriends to store their phone numbers or they met them outside. However, all the young adults who used mobile phones for personal freedom and autonomy did so discreetly so that they were not really breaking social rules.

On the basis of the findings and the news reports on the use of mobile phones by young adults, this study suggests a theory, in the area of "public-private media use" of new media. The theory is illustrated in Figure 1. The results revealed that on the one hand, cell phones created private spaces within which young adults conducted their private lives without interference from parents, and on the other, they created social spaces with friends, within which they could have access to each other and share their innermost thoughts and feelings. For example, the young adults said that because they could not socialize with the members of the opposite sex either at home or in public places, they used the opportunity provided by cell phones to interact with members of the opposite sex without the risk of being perceived as violating social conventions. In addition to the social spaces in which young people interacted with friends in their immediate social network, cell phones also opened up a public space or platform, where youth created and maintained online friendships with strangers they had never met. The results showed that young adults especially males in Kanpur were also using mobile applications such as Twitter to network with the larger public. However, the study showed that majority of young adults used cell phones for their private needs and did not use cell phones for collaboration or to network with larger public on social issues.

Therefore, this theory suggests that a majority of individuals will not necessarily use the public communication option provided by cell phones either for citizen

journalism or for collaboration with others, unless there is a catalyst in the form of an event or a crisis. For example, individuals used new media to upload pictures during the Mumbai tragedy because there was a crisis. A young woman from Bangalore used blogs and Facebook, online social network, to create a nation-wide campaign for violence against women when a bunch of males beat up young girls in pubs in India (Mackey, 2009).

FIGURE 1: PUBLIC-PRIVATE USE OF NEW MEDIA

Social Space II

Social space I

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L
Y

Cell phone user's
private space

Personal
Consumption

Storing & locking
content

Accessing media
content

F
R
I
E
N
D
S

Immediate social
network

Public Sphere

252
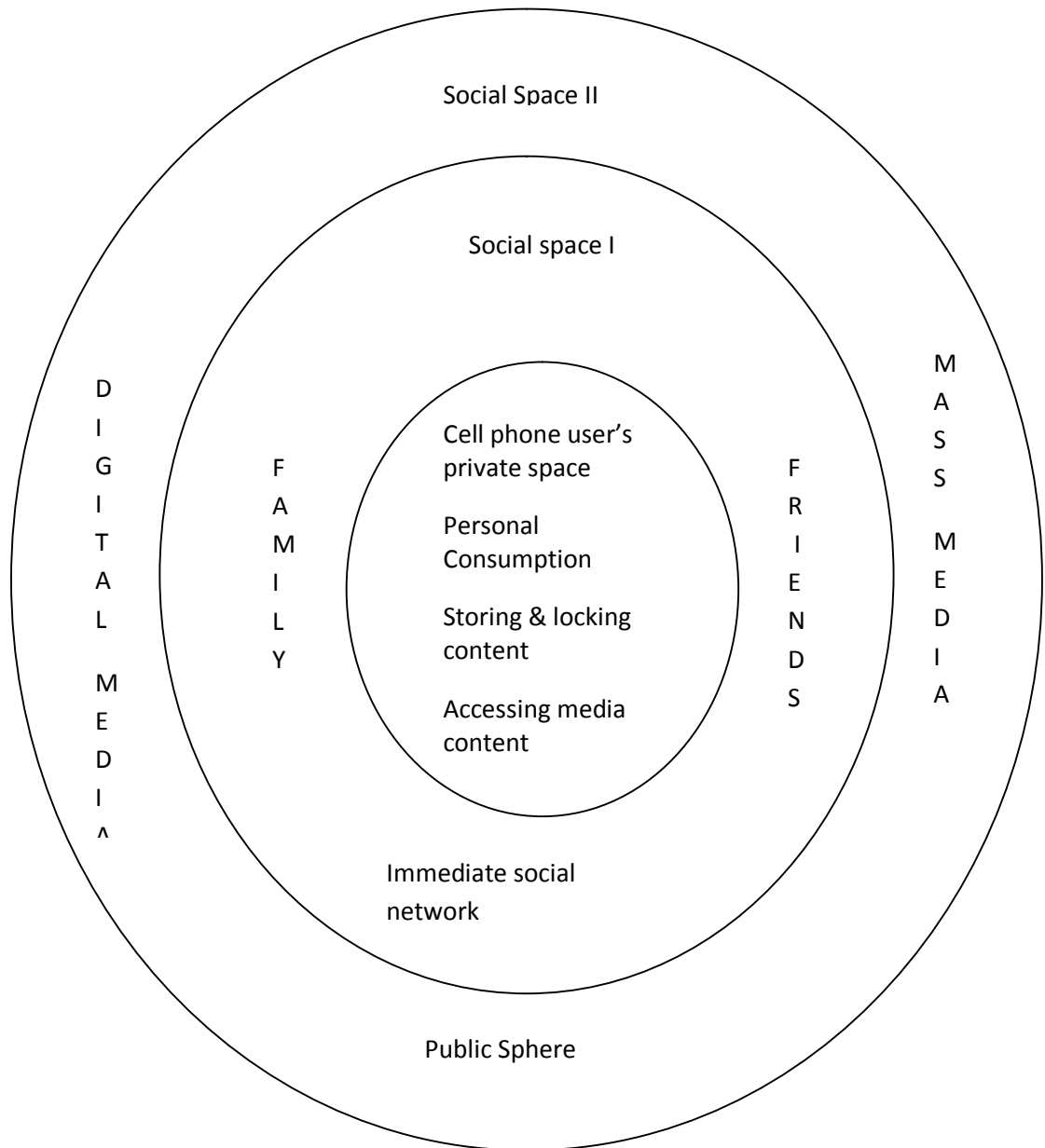
Practical Implications

The insights gained in this study provide valuable information for media educators, media practitioners, internet and mobile industry professionals, and diverse audiences.

First of all, the study has a variety of practical applications for media practitioners and mobile applications developers. Industry reports have pointed out that mobile media is increasingly becoming popular across the world for accessing news and entertainment-related content. This study provides an insight into the young adults' use of mobile media for accessing news and media – related content. Thus, developers can use these insights to build applications that will cater to the interests of the growing needs of young adults.

Secondly, the research showed that despite accessibility to technology, young people are not really using it for citizen journalistic initiatives. This study provides evidence that young people are using multi-media functions on their cell phones for their entertainment. However, with sufficient training they can also be taught to report on community-relevant issues, for which there is a high need in developing countries such as India. Such initiatives have already begun in Africa. Voices of Africa Media Foundation, a Netherlands-based organization, is training young reporters in Africa to create video news reports through their cell phones (Heatwole, 2009). These citizen journalists in Africa have reported on a variety of issues such as illiteracy and women's rights. Young people can be taught how to report on crime and human interest stories that might be pertinent to their communities.

Third, as the consumption of mobile media grows, it is important that educators address the subject and educate children and young people regarding the use of digital media. As mobile phones are being integrated with micro-blogging services such as Twitter, the information communicated through them is available to the larger public. There are both up and down sides to the use of mobile media for public communication. For example, in one instance, Nisha Susan, a young woman from Bangalore, India, used social networking platforms, such as blogs and Facebook to create a nation-wide campaign in response to violence against women in a Bangalore pub (Mackey, 2009). In another instance, a 19-year-old student was arrested for allowing the members of his Orkut community page to post defamatory remarks against a prominent politician (Mishra, 2009). This study also showed that young adults, particularly males, were using mobile phones to tease and harass those of the opposite sex. In the United States, employers check employees' social networking profiles, and there have been a case where a young woman was suspended from her teaching position because of her pictures on her Facebook page. Therefore, educators can teach young people about how to use mobile media effectively to collaborate and promote causes that are pertinent to them and to avoid situations which may be detrimental to their future.

Limitations of the study

Although this research provides interesting findings regarding the use of mobile communication and media among young adults, there are several limitations to this study.

One of the main limitations of this study is that the results cannot be generalized to all young adults in India. This study has used a small sample of college-going youth

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living in two cities, Kanpur and Mumbai. India is a land of disparities and as the study has shown, young people living in two different cities display very different behaviors regarding the use of mobile phones. Therefore, the results may not be applicable to young people living in other parts of India. Further the study used a convenience sampling method so the sample was not representative of all young people living in two cities. Therefore, the results may not be applicable to young people living in the same city but belonging to different demographic groups.

Further, this is an exploratory study that was conducted to identify variables that might be impacting the use of mobile phones. So although this study identifies variables such as urban ecology, socio-cultural environment, lifestyle factors and access to media that might be responsible for differential use of mobile phones in two cities, the analyses have not been conducted to show the exact relationships between the two variables. For example, the study identified that lifestyle factors or access to other media may be impacting the use of mobile phones. However, at this time it is difficult to define the exact relationship between the variables. Therefore, future studies are needed to test the relationships between the variables.

Another limitation to this study is the time-period during which this study was conducted. Mobile phones are advancing at a rapid pace, and by the time this dissertation is written, the technology may have changed from that in use when the research was conducted. Similarly, the cultural environment in India is changing and it is possible that in few years' time the socio-cultural environment of the cities in which this study was

conducted may have changed. And then perhaps the results of this study may not be applicable.

Directions for Future Research

While this study found many similarities with previous researches conducted on the use of mobile phones by young people, it also showed surprising findings. For example, the study revealed that young males in Mumbai were using mobile phones for pornographic purposes. Future studies may investigate this issue in cultures which traditionally classify such activities as socially inappropriate.

Another very important area for research would be to test the findings of this study in other countries to define the impact of predictors identified in this study on mobile phone usage. For example, future researchers may want to study the ways in which access to other media and lifestyle factors impact the use of cell phones. Does access to other media increase or decrease the amount of mobile phone usage and in what areas? There are many mobile applications that require the use of internet and these may change how individuals use mobile phones. For example, Indian and American students studying in universities in the United States that provide 24-hour wireless access may use mobile phones very differently than those who lack it. Similarly, having a separate iPod may reduce the amount of mobile usage for listening to music. Students who have access to laptops with internet connection may not use cell phones for private conversations. Additionally, those living in cultures where young people reside away from family and do not have social restrictions on forming romantic relationships may use cell phones differently than those in more restrictive environments.

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Another very important area of research would be to test the theory of "public-private media use." Further studies may be conducted to find out what are the social and individual triggers that lead people to use new media for public communication. This study mainly provides evidence for the use of mobile phones for private needs and communication. Further, as the significance of mobile media is increasing in the public arena and mainstream media organizations are adopting it for mass delivery of content, it may be pertinent to learn how the mobile media tools are used by both the industry and users.

Future studies may also investigate the use of mobile phones for accessing news especially during crisis situations. As this study showed, young people in Kanpur followed news of Mumbai attacks on their cell phones by calling friends. The use of cell phones and internet and social networks to acquire news throws up interesting debate about what exactly is considered news and whether individuals check for news sources when obtaining news through cell phones and internet.

Conclusions

This study was conceptualized in 2006, when the popularity of cell phones among young people in India was making international headlines. However, it was not clear why cell phones were so popular among young people. Several questions emerged at that time – were cell phones popular because young adults were influenced by media promotions or was it because they served an integral need? As the research progressed, it became clear that the emergence of youth culture around cell phones in India was not necessarily be a result of advertising and marketing, but that cell phones were probably becoming

popular because they were serving a variety of needs for young people. Around the same time, the launch of multi-media cell phones transformed them from communication devices to media devices. Although citizen journalism initiatives had begun much earlier, the heavy use of cell phones and Twitter during Mumbai attacks for reporting news provided the first major evidence of their significance for journalism and public communication. Therefore, this research project was designed to understand the significance of cell phones for young people in India and, in part, to assess whether they were being used for journalism and public communication activities.

The first major conclusion of this research, when looked at from a uses and gratifications perspective, is that in addition to a variety of communication needs such as safety, emergency, contacting family and communicating with friends, the cell phones were also used to access news and personal entertainment by young people in India. However, the study found that the use of mobile phones for communication and personal entertainment was much higher than for news.

The second important conclusion was that young adults used mobile phones for age-related needs for expressing individuality by using them as fashion statements. They also used them as status symbols to enhance their social image. In addition, they used cell phones in friendships, for dating and for creating cell phone friendships with individuals they had never met.

The application of social-cognitive domain theory showed that young adults used mobile phones as personal items and maintained privacy in their usage by negotiating independence from parents. Finally, the research showed that young people used cell

phones to have private conversations with friends and to support friendships with members of opposite sex. The study also showed that young adults used personal, social and moral reasoning to assess their mobile phone behaviors. One of the most surprising findings of this study was the use of mobile phones for accessing pornography and using them to tease and harass others especially females.

The study also found evidence that the different socio-cultural environment in the two cities of Mumbai and Kanpur and the patriarchal cultural norms impacted their use. For example, the study showed that young people, especially males in Kanpur were using mobile phones for dating in Kanpur probably because the socio-cultural rules did not allow them to date. However, the study also showed that young women were not necessarily taking advantage of the personal freedom afforded by cell phones probably because of socio-cultural expectations and the fear of high consequences if they went against social norms.

APPENDICES

APPENDIX A: IN-DEPTH INTERVIEW SCHEDULE

This interview schedule is designed to examine the mobile phone usage by Indian youth. The questions in this interview schedule pertain to following topics – background information of the interviewee, acquisition of cell phones, general usage of cell phones, mass media and internet usage of cell phones, perceptions of cell phones, social functions which includes questions on personal autonomy, friendships, parental jurisdiction, college authority jurisdiction, governmental jurisdiction, social – conventional transgressions and morality. The questions are given below:

I. Background Information: Name, Age, Sex, City, Education, Socio-economic status, Occupation – working/ non-working, student, Marital Status – married/ unmarried, living status – with parental family/ with spouse/ single/ with friends;

1. How would you describe yourself – a traditional or a modern person or both?

II. Acquisition of cell phones

2. Why did you buy a cell phone?

3. Who made the decision to buy you a cell phone - you, your parents, friend or spouse?

4. Where did you get the money to buy cell phones? Did you pay for it yourself? Did your parents buy you a cell phone?

5. When did you buy your cell phone? Since then, how many times have you changed your cell phone?

6. Do you upgrade or replace your cell phone often? Why?

7. What are the factors did you consider when you bought your cell phone?

8. What kind of features did you look for when you bought your cell phone?

9. Which brand of cell phone do you use? Do you consider brand name to be an important factor when buying a cell phone? Why?

10. Do your friends think cell phone brands are important? Why?

III. General usage of cell phones

11. What do you use your cell phone for?

12. Why do you use cell phones?

13. Where do you mostly use your cell phone – at home, in college, in public places, while traveling? Why?

14. Do you use your cell phones when you are with other people or only when you are alone? Why?

15. Which features of your cell phone do you mostly use? What do you use them for?

IV. Mass media & Internet usage of cell phones

16. Do you use cell phones to access TV or internet or both? Why? Where do you access TV or internet on cell phones?

17. Do you have TV at home? Are you allowed to use it? Can you watch the programs you like?

18. Do you have a computer at home? Do you have access to internet at home? Do you share your computer with other family members?

19. Do you use cell phones to access news? What kind of news do you access on cell phones – sports, current affairs, films etc.?

20. Do you download stuff from internet on your cell phones? What kind of stuff do you download from internet? Do you share downloaded stuff with others? Who are they? What kind of downloaded stuff do you share with others?

V. Perceptions of cell phones

21. How do you view cell phones?

22. Do you think cell phones as a western technology? If yes, why? If no, why not?

23. Do you think cell phones are a fashion item? Why do you think so?

24. Do you use it as a fashion item? How do you use it as a fashion item?

25. Do you think others use it as a fashion item? Why do you think cell phones are used as a fashion item? How?

26. Do you think cell phones are a status symbol? Why do you think so?

27. Do you use it as a status symbol? How do you use it as a status symbol?

28. Do you think others use it as a status symbol? How?

VI. Social functions

A. Personal autonomy:

29. Do you personalize your mobile phones? How? Why?

30. Do you think mobile phone tells others who you are? How?

B. Friendships:

31. Does everyone in your friends circle have a mobile phone?

32. Do you think it is important to have mobile phones to be able to make friends?

33. Do you often talk to your friends on your cell phones?

34. Do you usually know the friends personally you talk to on your mobile phones?

35. Do you talk to people you haven't met on your mobile phones? Why? Do you think it's okay to talk to people you haven't met on your mobile phones?

36. Most of the friends that you talk to on mobile phones are from the same sex or opposite sex?

37. How do you communicate to your friends through mobile phones – through text messaging or voice calls?

C. Parental Jurisdiction

38. Do your parents have rules regarding your mobile phone usage? What kind? Can you give examples?

39. Do you ever have fights with your parents about mobile phone usage? Can you describe some situations?

40. Do you think its okay for parents to monitor your mobile phone usage?

D. College authority jurisdiction

41. Do you carry your mobile phones to college?

42. Do you keep your mobile phones switched on during classes?

43. Are there any rules regarding mobile phone usage in your college? Can you describe them?

44. Do you think that it is okay for colleges to have rules regarding mobile phone usage on campus or in classes?

E. Government Jurisdiction

45. Do you think government should have any rules and regulations regarding mobile phone usage in public? Why or why not?

46. Do you think government should have any rules regarding mobile phone usage by young people like you? Why or why not?

F. Social – conventional transgression

47. Do you think young people like you use mobile phones in socially appropriate manner? Can you give some examples? Why do you think these are socially appropriate activities?

48. Do you think young people like you use mobile phones in socially inappropriate manner? Can you give some examples? Why do you think these are socially in appropriate activities?

G. Morality

49. Can you describe any examples of unethical or immoral usage of cell phones by people? Why do you think people use cell phones for unethical purposes? Do you think its okay to do unethical activities through cell phones?

50. Have you or any of your friends personally experienced a situation in which you think mobile phones were used unethically? Can you describe that situation and your role in it? Why do you think it was an unethical situation? Do you think it was okay to use mobile phones for unethical purposes?

APPENDIX B: Survey Questionnaire – Cell phone usage among youth in India

MUMBAI

I. Background Information:

1. Age (in years):   _____years

2. Gender: ____male   _____female

3. Relationship Status: _____single   _____ married _____ in a relationship

4. Are you a student?   ____ Yes _____No

5. Are you working?   ____Full-time ____ part- time ____not working

6. Living status: _____with parents _____ alone _____ with friends

7. What kind of clothes do you like to wear on a regular basis? Tick just one answer.
   a. Traditional (e.g. kurta- pyjama, salwar kameez, etc.)
   b. Western (e.g. Jeans, shirts, trousers, etc.)
   c. Both traditional and western

8. What kind of food do you like to eat when you go out with your friends on a casual basis?
   Tick just one answer.
   a. Indian
   b. Western (e.g. pizza, burger)
   c. Both Indian and western

9. Which language do you mainly use to talk with your friends? Tick just one answer.
   a. English
   b. Hindi
   c. Other regional languages

10. Where do you mainly hang out with your friends after college? Tick top three choices.
    a. Nightclubs

     b. Bars

     c. Restaurants/ cafes

     d. Streets

     e. Cinema halls

     f. Shopping malls

     g. Others, please specify _____

11. Do you believe in arranged marriages? ____ Yes _____No

12. Do you think it is alright for a girl and a guy to be in a relationship before marriage?

                                      ___ Yes ___ No

13. Ownership and access to various media. <u>For each question, tick just one answer</u>.

     a. TV ____ personal _____ sharing with family _____ don't have one

     b. Radio _____ personal _____ sharing with family _____ don't have one

     c. Computer with internet _____ personal _____ sharing with family ____ don't have one

     d. Cell phone _____ personal _____ sharing with family _____ don't have one

II. Getting Started

1. What are the first three (3) words you think of when you think of cell phones?

        1. _____

        2. _____

        3. _____

III. Acquisition & Ownership:

1. How many cell phones do you <u>now own</u>?

        _____cell phones

2. How many SIM cards do you <u>now have</u>?

        _____SIM cards

3. How important were the following reasons for buying (or receiving) a cell phone?
   (Tick just one answer for each)
   a. Necessity

   ____very important ____fairly important ____important ____not at all important

   b. Because everyone has one

   ____very important ____fairly important ____important ____not at all important

   c. Safety/Security

   ____very important ____fairly important ____important ____not at all important

   d. Emergency

   ____very important ____fairly important ____important ____not at all important

   e. Connect with family

   ____very important ____fairly important ____important ____not at all important

   f. Communicate with friends

   ____very important ____fairly important ____important ____not at all important

   g. Convenient

   ____very important ____fairly important ____important ____not at all important

   h. Gift from parents

   ____very important ____fairly important ____important ____not at all important

4. Who paid for your first cell phone? <u>Tick one.</u>
   a. Parents – father, mother
   b. Self
   c. Friend
   d. Sibling – brother, sister

5. Who pays for your current cell phone bill? <u>Tick one.</u>
   a. Parents
   b. Self
   c. Friend

d. Sibling – brother, sister

6. At what age did you buy (or receive) <u>your first</u> cell phone?
   _____ years

7. How important were the following factors in buying a cell phone? <u>(Tick just one answer for each)</u>

   a. Brand _____very important _____fairly important _____important _____not at all important
   b. Model _____very important _____fairly important _____important _____not at all important
   c. Design/Looks _____very important _____fairly important _____important _____not at all important
   d. Features _____very important _____fairly important _____important _____not at all important
   e. Cost _____very important _____fairly important _____important _____not at all important

8. How important to you are the following features of a cell phone? <u>(Tick just one answer for each)</u>

   a. Music player _____very important _____fairly important _____important _____not at all important
   b. Ease of texting _____very important _____fairly important _____important _____not at all important
   c. Camera _____very important _____fairly important _____important _____not at all important
   d. Radio _____very important _____fairly important _____important _____not at all important
   e. Video recording/playback _____very important _____fairly important _____important _____not at all important
   f. MMS – multi-media messaging services _____very important _____fairly important _____important _____not at all important
   g. TV _____very important _____fairly important _____important _____not at all important

9. How many cell phones have you had?
   _____1 _____2 _____3 _____4 _____5 _____>5

IV. Cell Phone as an Object / Technology

1. Which of the following statements do you agree or disagree with? (Tick just one answer for each)

   a. I think the cell phone is western technology because it was invented in the West. ___Agree ___Disagree

   b. I use a cell phone to show that I am westernized. ____ Agree ___ Disagree

   c. Other people use cell phone to show that they are westernized. __Agree ___Disagree

   d. I think cell phones are a fashion item. ____Agree _____Disagree

   e. I use a cell phone to show off that I am fashionable. _____Agree ___ Disagree

   f. Other people use cell phones to show that they are fashionable. __Agree __ Disagree

   g. I think cell phones are a status symbol. _____Agree _____Disagree

   h. I use a cell phone to show how rich I am. _____Agree _____ Disagree

   i. Other people use cell phones to show how rich they are. __Agree __Disagree

V. General Cell phone Usage:

1. How often do you use your cell phone for (Tick just one answer for each)

   a. Making voice calls
      ____very frequently ____sometimes _____rarely _____never
   b. Sending text messages
      ____very frequently ____sometimes _____rarely _____never
   c. For sending MMS
      ____very frequently ____sometimes _____rarely _____never
   d. Listening to music

_____very frequently _____sometimes _____rarely _____never

   e. Clicking pictures through camera

       _____very frequently _____sometimes _____rarely _____never

   f. Playing Mobile games

       _____very frequently _____sometimes _____rarely _____never

   g. Using Internet

       _____very frequently _____sometimes _____rarely _____never

   h. Watching TV

       _____very frequently _____sometimes _____rarely _____never

   i. Listening to radio

       _____very frequently _____sometimes _____rarely _____never

   j. For micro blogging for e.g. on Twitter

       _____very frequently _____sometimes _____rarely _____never

2. Do you think it is acceptable to talk on your cell phone while <u>(Tick just one answer for each)</u>

   a. Eating dinner with your family at home

          _____always _____usually _____occasionally _____never

   b. Sitting with people you know in an informal café (e.g. college canteen)

          _____always _____usually _____occasionally _____never

   c. Sitting with people you know in a formal restaurant

          _____always _____usually _____occasionally _____never

   d. Paying at the cash register at a store

          _____always _____usually _____occasionally _____never

   e. Walking in public (e.g. on the street, at the train station)

          _____always _____usually _____occasionally _____never

   f. Riding in a public transport (e.g. rickshaw or a tempo)

          ___always ___usually ___occasionally __never

   g. Riding a train (for e.g. Kanpur to Varanasi)

          ___always ___usually ___occasionally __never

3. Do you think it is acceptable to send a text message from your cell phone while <u>(Tick just one answer for each)</u>

   a. Eating dinner with your family at home

          ___always ___usually ___occasionally _____never

b. Sitting with people you know in an informal café (e.g. college canteen)
___always ___usually ___occasionally ____never

c. Sitting with people you know in a formal restaurant
___always ___usually ___occasionally ____never

d. Paying at the cash register at a store
___always ___usually ___occasionally ____never

e. Walking in public (e.g. on the street, at the train station)
___always ___usually ___occasionally ____never

f. Riding in a public transport (e.g. rickshaw or a tempo)
___always ___usually ___occasionally ____never

g. Riding a train (for e.g. from Kanpur to Varanasi)
___always ___usually ___occasionally ____never

VI. Cell phones as a personal media device:

1. Do you think of cell phone as your personal property?
_____Yes _____No

2. Which of the following statements do you agree or disagree with? (Tick just one answer for each).
a. I use a particular ringtone so that people know it is my cell phone.
____Agree ____Disagree
b. I choose particular wallpaper so that others will know it is my cell phone.
____Agree ____Disagree
c. I am very possessive about my cell phone.
____Agree ____Disagree
d. I am emotionally attached to my cell phone.
____Agree ____Disagree
e. I do not like other people to go through the contents of my cell phone.
____Agree ____Disagree
f. I lock my cell phone with a security code so that no one can read my messages.
____Agree ____Disagree

VII. Cell phones as a social technology:

1. How do you mostly communicate with your friends through cell phones? (<u>Tick just one answer</u>)

    a. Text messages
    b. Voice calls

2. Which of the following statements do you agree or disagree with? (<u>Tick just one answer for each</u>)

    a. All of my friends have a cell phone. _____Agree _____ Disagree
    b. Having a cell phone allows me to attract new friends. _____ Agree _____ Disagree
    c. Cell phones help me to create a positive impression on people from opposite sex.
          ____Agree ____ Disagree

3. How do you use cell phones to maintain friendships with your friends? (<u>Tick just one answer for each</u>)

    a. I use my cell phone to co-ordinate plans with my friends. _____Agree _____Disagree
    b. I use my cell phone to socialize with my friends. _____ Agree _____Disagree

4. Which of the following factors affect your decision to send a text message or make a voice call?
   (<u>Tick all that apply</u>)
    a. Cost
    b. Nature of friendship (e.g. cell phone friend and real life friend)
    c. Convenience
    d. Topic of conversation
    e. None of the above

5. Which of the following methods have you used to create friendships with people you haven't met? (<u>Tick all that apply</u>)

    a. Social networking websites on internet (e.g. Facebook, Orkut)
    b. Random dialing through cell phones
    c. Using a reference to establish contact through cell phones

d. Mobile applications (e.g. Twitter, SMS Gupshup)

e. None of the above

6. Which of the following statements do you agree or disagree with? (<u>Tick just one answer for each</u>).

   a. Cell phones help me to create friendships with people from the opposite sex.

   _____ Agree _____ Disagree

   b. Cell phones allow me to date or flirt with people of opposite sex.

   _____ Agree _____ Disagree

   c. I use cell phone to maintain my relationship with a girlfriend/ boyfriend.

   _____ Agree _____ Disagree

7. Which of the following methods is appropriate for breaking a friendship? <u>Tick just one answer.</u>

   a. Through text messages via cell phone

   b. Through voice calls via cell phone

   c. Face – to – face

8. Which of the following do you agree or disagree with? (<u>Tick just one answer for each</u>)

   a. I send text messages to friends to convey my anger. _____Agree _____ Disagree

   b. I shout at a friend while talking on cell phone if I am angry. _____ Agree _____Disagree

VIII. Media function: Accessing news

1. In which of the following form do you access news on your cell phone? <u>Tick all that apply.</u>

   a. SMS updates

   b. Videos

   c. TV

   d. Radio

   e. Others / please specify _____

   f. I do not access news on cell phone

If you do not access news on your phone, skip Q: 2 & 3 and proceed to Q 4.

2. If you access news on cell phone, then what kind of news do you access on your cell phone?
   (Tick all that apply)
   a. Current events
   b. Politics
   c. Business
   d. Sports
   e. Fashion
   f. Entertainment
   g. Others/ please specify_____

3. How often do you access news on your cell phone? (Tick just one answer)

   a. Once an hour
   b. Once a day
   c. Once a week
   d. Once a month
   e. It varies

4. On which media did you first hear about the Mumbai terror attacks? Tick just one answer.

   a. On TV
   b. On the radio
   c. On a computer via internet
   d. On a cell phone via internet (e.g. twitter, news updates from websites)
   e. On a cell phone from a friend
   f. Word of mouth
   g. Other (please specify) _____

5. On which of the following media did you follow the news about Mumbai terror attacks? Tick all that apply.
   a. On TV
   b. On the radio
   c. On a computer via internet
   d. On a cell phone via internet (e.g. twitter, news updates from websites)
   e. On a cell phone from a friend
   f. Word of mouth

g. Other (please specify) _____

VIII: Downloading, forwarding, voting

1. Have you ever <u>forwarded</u> any of the following to your friends in the form of SMS / MMS?
    <u>(Tick all that apply)</u>

    a. Jokes
    b. Poetry / Shayari
    c. Romantic messages
    d. Important news
    e. Pornographic images
    f. News about marches or rallies (e.g. for peace marches after Mumbai terror attacks)
    g. I don't forward SMS/MMS

2. Have you ever <u>received</u> any of the following from your friends in the form of SMS / MMS?
    <u>(Tick all that apply)</u>

    a. Jokes
    b. Poetry / Shayari
    c. Romantic messages
    d. Important news
    e. Pornographic images
    f. News about marches or rallies (e.g. for peace marches after Mumbai terror attacks)
    g. I haven't received any SMS/MMS

3. What do you <u>download</u> on your cell phone? (<u>Tick all that apply</u>)

    a. Ringtones
    b. Wall papers
    c. Games
    d. Music / Songs
    e. Pictures
    f. Videos
    g. If others, please specify _____

h. I don't download

4. Which of the following have you <u>uploaded</u> from your cell phone on internet?
    (<u>Tick all that apply</u>)

    a. News
    b. Pictures
    c. Videos
    d. If others, please specify _____
    e. I don't upload

5. Which of the following mobile applications have you used for group messaging
    using your cell phone? (<u>Tick all that apply</u>).

    a. Twitter
    b. SMS Gupshup
    c. Google SMS
    d. Vakow
    e. None

6. Which of the following genre of TV programs do you enjoy watching most? (<u>Tick
    just one answer</u>)

    a. Programs that ask the audience to text message after the show (e.g. reality
        shows such as Indian Idol)
    b. Programs that do not require the audience to text message
    c. I don't watch TV at all.

7. Do you use your cell phone to participate in polling or voting on the following?
    (<u>Tick all that apply).</u>

    a. Reality TV shows (e.g. Indian Idol)
    b. News programs
    c. Others, please specify _____
    d. None of the above

IX. Jurisdiction

IX. A. Parental Jurisdiction

1. Do your parents have any of the following rules regarding your cell phone usage? <u>Tick all that apply</u>
    a. Do not talk on your cell phone late into the night
    b. Do not spend too much time talking on your cell phone
    c. Your cell phone bill should not go over certain limit
    d. Do not talk on cell phone while you are with parents/relatives
    e. Do not use cell phones when you are studying for your exams at home
    f. No rules

2. Have you ever had fights/ conflicts with your parents about the following? <u>Tick one answer for each.</u>
    a. Talking long hours on cell phone _____ Yes _____ No
    b. Buying a new cell phone _____ Yes _____ No
    c. Because your parents blamed cell phone usage for poor performance in studies ___ Yes ___No
    d. Over cell phone bill _____ Yes ____No

3. Which of the following statements would you agree or disagree with? (<u>Tick just one answer for each</u>)
    a. Parents should monitor cell phone usage because young people can go in the wrong direction.
                                                    _____ Agree _____ Disagree
    b. Parents should monitor cell phone usage because young people use cell phones to pursue romantic relationships.   _____ Agree _____ Disagree
    c. Parents should monitor cell phone usage because they know what is right or wrong for us.
                                                    _____ Agree _____ Disagree
    d. Parents should not monitor cell phone usage because it is intruding on our privacy.
                                                    _____ Agree _____ Disagree
    e. It is alright for my parents to ask me to change the wall paper on my cell phone.
                                                    _____ Agree _____ Disagree

IX. B. College Authority Jurisdiction

1. Do you carry your cell phone to college everyday?

    _____Yes _____ No

2. On which of the following modes do you keep your cell phone during classes? (<u>Tick just one answer</u>)

    a. Switched on
    b. Switched on but silent
    c. Switched off

3. Do you use your cell phone when you are in class for any of the following? <u>Tick all that apply.</u>

    a. Sending SMS in class
    b. Reading SMS in class
    c. Answering a voice call in class
    d. Making a voice call in class

4. Which of the following rules are there in your college regarding cell phone usage? <u>Tick all that apply.</u>

    a. Do not use cell phones on college premises
    b. Do not use cell phones in classes
    c. No rules
    d. Any other, please specify_____

5. In your opinion, should colleges have rules regarding cell phone usage?

    _____ Yes _____ No

IX. C. Government Jurisdiction

1. Do you think government should have any of the following rules regarding mobile phone usage in public places? Check all that apply.
    a. Do not use cell phones in hospitals
    b. Do not use cell phones at petrol pumps
    c. Do not use cell phone while driving or while walking on the road
    d. Any other, please specify_____
    e. No rules

2. Do you think government should have any rules regarding cell phone usage by young people?

   a. Yes, young people should not be given cell phones before the age of 18 years
   b. There should be rules about circulation of MMS containing adult content by young people on cell phones
   c. There should be rules about the kind of pictures that people can click of others through their mobile phones
   d. Any other, please specify

   _____

   e. There should be no rules

X. Acceptable / Unacceptable behaviors

   1. Which of the following behaviors would you classify as acceptable or unacceptable?
   a. Talking very loudly on their cell phones in public places.

   ____Acceptable ____Unacceptable
   b. Using abusive language on cell phones in public places.

   ____Acceptable ____Unacceptable
   c. Having intimate conversation on cell phones in public places.

   ____Acceptable ____Unacceptable
   d. Pursuing a romantic relationship over a cell phone.

   ____Acceptable ____Unacceptable
   e. Circulating MMS having adult content through cell phones

   ____Acceptable ____Unacceptable
   f. Watching pornographic material on cell phone in a private space (e.g. personal room).

   ____Acceptable ____Unacceptable
   g. Watching pornographic material on cell phones in public places (e.g. at a train station).

   ____Acceptable ____Unacceptable
   h. Using cell phones to store pornographic content.

   ____Acceptable ____Unacceptable
   i. Calling up random numbers to talk to people.

   ____Acceptable ____ Unacceptable
   j. Calling up girls and sexually harassing them on cell phones.

   ____Acceptable ____ Unacceptable

XI. Likes / Dislikes

   1. What is the <u>one thing</u> that you like <u>most</u> about having a cell phone?

      _____
      _____
      _____

   2. What is the <u>one thing</u> that you like <u>least</u> about having a cell phone?

      _____
      _____
      _____

सर्वे प्रश्नावली – भारत के वयस्क युवा सेल फोन उपभोक्ता के लिएः–

I. पृष्ठभूमि सूचना :

    1. उम्र   (वर्षों में)

    2. लिंग – पुरूष / महिला

    3. संबध स्तर – अविवाहित –विवाहित – एक रिश्ते में

    4. क्या आप छात्र है – हाँ – नहीं।

    5. क्या आप सेवारत हैं – हाँ – नहीं

    6. रहन – सहन स्तर – सपरिवार – एकल – मित्रों के साथ

7. आम तौर पर आप किस तरह के कपड़े पहनना पसंद करते/करतीं हैं ? (उत्तर के लिए एक विकल्प को चुने)

    a.   परम्परागत (जैसे– कुर्ता, पजामा, सलवार, कमीज, आदि)

    b.   पाश्चात्य (जैसे – जींस, शर्ट (कमीज़), पतलून, आदि)

    c.   परम्परागत और पाश्चात्य दोनों ।

8. जब आप मित्रों के साथ बाहर जाते / जाती हैं तो आमतौर पर किस तरह का भोजन लेना पसंद करते/करती हैं ? (उत्तर के लिए एक विकल्प को चुने)

    a.   भारतीय

    b.   पाश्चात्य (जैसे – पिज्जा, बर्गर)

    c.   दोनो भारतीय और पाश्चात्य

9. मित्रों के साथ बातचीत में मुख्यतः आप किस भाषा का प्रयोग करते/करती हैं ? (उत्तर के लिए एक विकल्प को चुने)

     a.   अंग्रेजी

     b.   हिंदी

     c.   अन्य, क्षेत्रिय भाषाऐं

10. कॉलेज के बाद मुख्यतः आप मित्रों के साथ बाहर कहाँ जाते / जाती हैं ? <u>ऊपर से तीन विकल्पों को चिन्हित करें।</u>

     a.   नाइट क्लब

     b.   बार

     c.   जलपान गृह

     d.   गलियों में

     e.   सिनेमा हॉल

     f.   शॉपिंग मॉल

     g.   अन्य, कृपया वर्णन करें ....

11. क्या आप आयोजित विवाह व्यवस्था (अरेंज मैरेज) में विश्वास करते/करती हैं ?

     a.   हाँ

     b.   नहीं

12. क्या आप ऐसा सोचते / सोचती हैं कि लड़के और लड़कियों के बीच विवाह पूर्व प्रेम संबंध उचित हैं ?

     a.   हाँ

     b.   नहीं

13. विभिन्न माध्यमों तक पहुँच और स्वामित्व/ प्रत्येक प्रश्न के लिए एक उत्तर को चिन्हित करें।

   a.   टेलिविजन – व्यक्तिगत – परिवार के साथ साझे में – ये माध्यम मेरें पास नहीं हैं।

   b.   रेडियो– व्यक्तिगत – परिवार के साथ साझे में – ये माध्यम मेरें पास नहीं हैं।

   c.   कम्पूटर एव इंटरनेट – व्यक्तिगत – परिवार के साथ साझे में – ये माध्यम मेरें पास नहीं हैं।

   d.   सेल फोन – व्यक्तिगत – परिवार के साथ साझे में – ये माध्यम मेरें पास नहीं हैं।

   .

II.   शुरू करें–

1. जब आप सेलफोन के बारे में सोचते / सोचती है तो आपके प्रथम 3 शब्द क्या होते हैं ?

      1..

      2..

      3..

III.   अधिग्रहण एवं स्वामित्व :

   1   कितने सेल फोन आपके अपने हैं ?

        .... सेल फोन

   2   आपके पास इस समय कितने सिम कार्ड हैं ?

        .... सिम कार्ड

3. सेल फोन को खरीदने (लेने में) में निम्नलिखित कारण कितने महत्वपूर्ण हैं ? <u>ऊपर से तीन विकल्पों को चिन्हित करें।</u>

     d   जरूरत / आवश्यकता

     b   क्योकिं सभी के पास है

     c   सुरक्षा / सलामती

     d   अपातकाल

     e   परिवार से जुड़ाव

     f   मित्रों से संवाद

     g   सुविधाजनक

     h   अभिभावक से उपहार

4. आपके प्रथम सेलफोन के लिए किसने भुगतान किया था ? <u>एक चिन्हित करें।</u>

     a   अभिभावक– पिता / माता

     b   स्वंय

     c   मित्र

     d   सहोदर – भाई / बहन

5. आपके वर्तमान सेलफोन के बिल का भुगतान कौन करता है ? <u>एक चिन्हित करें।</u>

     a   अभिभावक– पिता / माता

     b   स्वंय

     c   मित्र

     d   सहोदर – भाई / बहन

6. आपने अपना प्रथम सेलफोन को किस उम्र में खरीदा (प्राप्त) किया था ?

.... वर्ष

7. सेलफोन खरीदने में निम्नलिखित कारक कितने महत्वपूर्ण हैं ? <u>ऊपर से तीन विकल्पों को चिन्हित करें।</u>

     a   ट्रेड–मार्क / ब्रांड

     b   मॉडल

     c   डिजाइन / बाहय रूप रेखा

     d   विशेषताऐं

     e   मूल्य

8. सेलफोन की निम्नलिखित विशेषताऐं आपके लिए कितनी महत्वपूर्ण हैं ? <u>ऊपर से तीन विकल्पों को चिन्हित करें।</u>

     a   संगीत यंत्र

     b   लिखने में आसानी / सरल पाठ्य

     c   कैमरा

     d   रेडियो

     e   वीडियो रिकार्डिंग / पार्श्व गायन

     f   एमएमएस – मल्टी मीडिया सेवा संदेश

     g   टेलीविज़न

9. कितने सेलफोन आपके पास हैं ?

............1..........2..........3..........4..........5..........5 से ज्यादा

IV.   सेलफोन एक वस्तु / तकनीक के रूप में

1   निम्नलिखित कथनों में किससे आप सहमत या असहमत है ? एक उत्तर को चिन्हित करें।

a   मैं सोचता / सोचती हूँ कि सेलफोन पाश्चात्य तकनीक है, क्योंकि इसका अविष्कार पश्चिम में हुआ।

   1.   सहमत
   2.   असहमत

b   मैं सेलफोन का इस्तेमाल ये दिखाने के लिए करता / करती हूँ कि मैं पश्चिमी हूँ।

   1.   सहमत
   2.   असहमत

c   मैं सेलफोन का इस्तेमाल इस दिखावे के लिए करता / करती हूँ कि मैं फैशनेबल हूँ।

   1.   सहमत
   2.   असहमत

d   अन्य लोग सेलफोन का इस्तेमाल इस दिखावे के लिए करते हैं कि वे फैशनेबल हैं।

   1.   सहमत
   2.   असहमत

e   मैं सेलफोन का इस्तेमाल ये दिखाने के लिए करता / करती हूँ कि मैं कितना धनी हूँ।
   1.   सहमत
   2.   असहमत

f   अन्य लोग सेलफोन का इस्तेमाल ये दिखाने के लिए के लिए करते हैं कि वे कितने धनी हैं।

   1.   सहमत

   2.   असहमत

V. *साधारण सेलफोन प्रयोग :–*

1 आप सेलफोन का इस्तेमाल इनमें से के लिये कितनी बार करते / करती हैं ?

a बात करने के लिए ।

1 अक्सर

2 कभी – कभी

3 शायद ही कभी

4 कभी नहीं

b संदेश पाठ भेजने के लिए।

1 अक्सर

2 कभी – कभी

3 शायद ही कभी

4 कभी नहीं

c एमएमएस भेजने के लिए।

1 अक्सर

2 कभी – कभी

3 शायद ही कभी

4 कभी नहीं

d   संगीत सुनने के लिए।

    1   अक्सर

    2   कभी – कभी

    3   शायद ही कभी

    4   कभी नहीं

e   कैमरे के माध्यम से तस्वीर लेने के लिए।

    1   अक्सर

    2   कभी – कभी

    3   शायद ही कभी

    4   कभी नहीं

f   मोबाइल खेल खेलने के लिए।

    1   अक्सर

    2   कभी – कभी

    3   शायद ही कभी

    4   कभी नहीं

g   इंटरनेट का उपयोग करने के लिए।

    1   अक्सर

    2   कभी – कभी

    3   शायद ही कभी

    4   कभी नहीं

h टेलिवीजन देखने के लिए।

    1 अक्सर

    2 कभी – कभी

    3 शायद ही कभी

    4 कभी नहीं

i रेडियो सुनने के लिए।

    1 अक्सर

    2 कभी – कभी

    3 शायद ही कभी

    4 कभी नहीं

j माइक्रो ब्लॉगिंग करने के लिए जैसे (ट्वीटर पर)।

    1 अक्सर

    2 कभी – कभी

    3 शायद ही कभी

    4 कभी नहीं

2   क्या आप सोचते / सोचती हैं, कि इनको करते समय सेलफोन पर ये बात स्वीकार्य है, जब :–

a   घर में अपने परिवार के साथ रात का खाना खाते समय।

1   हमेशा

2   अक्सर

3   कभी – कभी

4   कभी नहीं

b   अपने जानने वालों के साथ अनौपचारिक रूप में किसी कैफे में बैठने पर (जैसे – कॉलेज कैंटीन)

1   हमेशा

2   अक्सर

3   कभी – कभी

4   कभी नहीं

c   अपने जानने वाले के साथ रेस्तरां में बैठे हो।

1   हमेशा

2   अक्सर

3   कभी – कभी

4   कभी नहीं

d जब आप किसी दुकान पर नगद भुगतान कर रहे हो।

    1   हमेशा

    2   अक्सर

    3   कभी – कभी

    4   कभी नहीं

e सार्वजनिक रूप से चलते हुए (जैसे – गली में, ट्रेन में, स्टेशन पर)

    1   हमेशा

    2   अक्सर

    3   कभी – कभी

    4   कभी नहीं

f लोकल बस या लोकल ट्रेन में सफर करते समय।

    1   हमेशा

    2   अक्सर

    3   कभी – कभी

    4   कभी नहीं

g ट्रेन में सफर करते समय (जैसे – मुंबई से पूणे)

    1   हमेशा

    2   अक्सर

    3   कभी – कभी

    4   कभी नहीं

3. क्या आप सोचते / सोचती हैं कि अपने सेलफोन से पाठ्य संदेश भेजना स्वीकार्य है जब :–

    a   घर में अपने परिवार के साथ रात का खाना खाते समय।

         1   हमेशा

         2   अक्सर

         3   कभी – कभी

         4   कभी नहीं

    b   अपने जानने वालों के साथ अनौपचारिक रूप में किसी कैफे में बैठने पर (जैसे – कॉलेज कैंटीन)

         1   हमेशा

         2   अक्सर

         3   कभी – कभी

         4   कभी नहीं

    c   अपने जानने वाले के साथ रेस्तरां में बैठे हो।

         1   हमेशा

         2   अक्सर

         3   कभी – कभी

         4   कभी नहीं

d जब आप किसी दुकान पर नगद भुगतान कर रहे हो।

    1 हमेशा

    2 अक्सर

    3 कभी – कभी

    4 कभी नहीं

e सार्वजनिक रूप से चलते हुए (जैसे – गली में, ट्रेन में, स्टेशन पर)

    1 हमेशा

    2 अक्सर

    3 कभी – कभी

    4 कभी नहीं

f लोकल बस या लोकल ट्रेन में सफर करते समय।

    1 हमेशा

    2 अक्सर

    3 कभी – कभी

    4 कभी नहीं

g ट्रेन में सफर करते समय (जैसे – मुंबई से पूणें)

    1 हमेशा

    2 अवसर

    3 कभी – कभी

    4 कभी नहीं

VI. सेलफोन एक निजी मीडिया उपकरण के रूप में : –

1 क्या आप सोचते / सोचती है कि सेलफोन आपकी व्यक्तिगत संपति है ?

    1 हाँ

    2 नहीं

2 निम्नलिखित कथनों में से किससे सहमत या असहमत है ? एक उत्तर को चिन्हित करें।

    1 मैं खास रिंगटोन का प्रयोग करता / करती हूँ ताकि लोग जाने की यह मेरा सेलफोन है।

        1 सहमत

        2 असहमत

    2 मैं खास वॉलपेपर को चुनता / चुनती हूँ ताकि अन्य लोग जाने कि यह मेरा सेलफोन है।

        1 सहमत

        2 असहमत

3   मैं अपने सेलफोन के बारे में बहुत निजता रखता / रखती हूँ।

       1   सहमत

       2   असहमत

4   मैं अपने सेलफोन से भावुकता से जुडा / जुडी हूँ।

       1   सहमत

       2   असहमत

5   मैं पसंद नहीं करता / करती कि कोई अन्य व्यक्ति मेरे सेलफोन के विषय सूची में जाये।

       1   सहमत

       2   असहमत

6   मैं अपने सेलफोन को सुरक्षात्मक कूट (कोड) से बंद रखता / रखती हूँ ताकि कोई मेरे संदेश को पढ़ नहीं सके।

       1   सहमत

       2   असहमत

VII.   *सेलफोन सामाजिक तकनीक के रूप में :–*

1   आप सेलफोन से मित्रों के साथ मुख्यत : कैसे संवाद करते हैं ? (एक उत्तर को चिन्हित करें।)

       a   पाठ्य संदेश।

       b   वॉयस कॉल्स।

2   निम्नलिखत कथनों में से आप किससे सहमत या असहमत हैं ?(एक उत्तर को चिन्हित करें।)

     (a)   मेरे सारे मित्रों के पास सेलफोन है।

       1   सहमत

       2   असहमत

(b) मैं अपने सेलफोन का उपयोग मित्रों के साथ योजनाओं का समन्वयन के लिए करता / करती हूँ।

    1   सहमत

    2   असहमत

(c) मैं अपने सेलफोन का उपयोग मित्रों के साथ सामाजिकता के लिए करता / करती हूँ।

    1   सहमत

    2   असहमत

(d) सेलफोन की उपलब्धता मेरे नए मित्र आकर्षित करने में सहयोग करते हैं।

    1   सहमत

    2   असहमत

(e) सेलफोन विपरीत लिंग पर सकारात्मक प्रभाव डालने में मेरी मदद करता है।

    1   सहमत

    2   असहमत

(f) सेलफोन उन व्यक्तियों से मित्रता करने में मेरी मदद करते हैं, जो विपरीत लिंग के है।

    1   सहमत

    2   असहमत

(g) विपरीत लिंग से इश्कबाजी या डेट करने में सेलफोन मेरी मदद करता है।

    1   सहमत

    2   असहमत

(h) मैं सेल फोन का उपयोग अपने पुरूष मित्र/ महिला मित्र के साथ संबंध बनाए रखने में करता / करती हूँ।

    1   सहमत

    2   असहमत

3. (a) निम्नलिखित कौन से कारक आपके पाद्य संदेश और आवाज कॉल्स को करने के आपके निर्णयों को प्रभावित करते है ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

    (a) कीमत

    (b) मित्रता की प्रकृति – (जैसे – सेल फोनमित्र, वास्तविक जीवन मित्र)

    (c) सुविधा

    (d) बातचीत का विषय

    (e) इनमें से कोई नहीं

(b) आप निम्नलिखित में से किन तरीकों को ऐसे लोगों से मित्रता बनाने में उपयोग करते है, जिनसे आप मिले ना हो ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

    (a) इंटरनेट पर सोशल नेटवर्किंग की वेबसाइट।(जैसे फैशनबुक,ऑरकुट)

    (b) सेलफोन के माध्यम से अनियमित डायलिंग करके

    (c) सेलफोन के जरिए संपर्क स्थापित करने के लिए संदर्भ को प्रयोग करते हुए

    (d) मोबाइल नेटवर्किंग अनुप्रयोगों (जैसे –ट्वीटर – एसएमएस – गपशप)

(c) निम्नलिखित में से कौन से तरीके मित्रता तोड़ने के लिए सबसे अधिक उपयुक्त है ? एक उत्तर को चिन्हित करें।

    (a) सेलफोन द्वारा पाठ्य संदेश।

    (b) सेलफोन द्वारा आवाज कॉल्स।

    (c) आमने – सामने।

(d) निम्नलिखित में से किससे आप सहमत या असहमत हैं ? एक उत्तर को चिन्हित करें।

    (a) मैं अपने गुस्से का इजहार करने के लिए मित्रों को पाठ्य संदेश भेजता / भेजती हूँ

        1 सहमत

        2 असहमत

    (b) अगर गुस्से में हूँ तो सेलफोन पर अपने मित्रों को डाँटता / डाँटती हूँ।

        1 सहमत

        2 असहमत

VIII. *मीडिया प्रकार्य / कार्य : समाचार प्राप्ति ।*

1 आप निम्नलिखित में से किस रूप में सेल फोन पर समाचार प्राप्त करते हैं ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

    (a) एसएमएस – अपडेट

    (b) वीडियो

    (c) टेलीविज़न

    (d) रेडियो

(e)   अन्य / कृपया वर्णित करें ....

(f)   मैं सेलफोन पर समाचार प्राप्त नहीं करता / करती हुँ।

अगर आप सेलफोन पर समाचार नहीं प्राप्त करते / करती हैं तो प्रश्न 2 और 3 छोड़ दे और प्रश्न 4 पर जायें।

2   अगर आप सेलफोन से समाचार प्राप्त करते / करती है, तो किस प्रकार के समाचार सेलफोन से प्राप्त करते / करती हैं ? (इनमें से जो लागू हों उन समी को चिन्हित करें)

(a)   समसामायिक घटनायें

(b)   राजनीति

(c)   व्यवसाय (बिजनेस)

(d)   खेलकूद

(e)   फैशन

(f)   मनोरजंन

(g)   अन्य / कृपया वर्णित करें ....

3 कितनी बार आप अपने सेलफोन पर समाचार प्राप्त करते / करती हैं ? एक उत्तर को चिन्हित करें।

(a) घंटे में एक बार

(b) दिन में एक बार

(c) सप्ताह में एक बार

(d) महीने में एक बार

(e) यह परिवर्तित होता रहता है

4. मुंबई में आतंकी हमले की सूचना आपको किस माध्यम से पहली बार प्राप्त हुई ? एक चिन्हित करें।

(a) टेलीविज़न से

(b) रेडियो से

(c) कम्प्यूटर पर इंटरनेट के माध्यम से

(d) सेलफोन पर इंटरनेट के माध्यम से (जैसे: ट्वीटर,वेबसाइट पर समाचार अद्यतन से)

(e) सेलफोन पर मित्रों से

(f) मौखिक रूप से सुनकर

(g) अन्य (कृपया वर्णित करें..)

5 निम्नलिखित में किस माध्यम से आप मुंबई आतंकी हमले का समाचार लगातार प्राप्त करते रहे ?(इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) टेलीविज़न से

(b) रेडियो से

(c) कम्प्यूटर पर इंटरनेट के माध्यम से

(d) सेलफोन पर इंटरनेट के माध्यम से (जैसेः ट्रवीटर,वेबसाइट पर समाचार अद्यतन से)

(e) सेलफोन पर मित्रों से

(f) मौखिक रूप से सुनकर

(g) अन्य (कृपया वर्णित करें...)

VIII. अधिभारण (डाउनलोडिंग), अग्रेषण (फारवर्डिंग) ,मतदान

1 आप एसएमएस / एमएमएस के माध्यम से अपने मित्रों को निम्नलिखित में से किसी को क्या हमेशा अग्रसारित करते / करती हैं। (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) चुटकले

(b) कविता / शायरी

(c) प्यारा संदेश

(d) महत्वपूर्ण समाचार

(e) अश्लील छवियाँ

(f) प्रदर्शन और रैलियों के विषयों में समाचार (जैसे – मुंबई आतंकी हमले के बाद शांति प्रदर्शन)

(g) मैं अग्रसारित नहीं करता / करती – एसएमएस / एमएसएस

2   आप एसएमएस / एमएसएस के माध्यम से अपने मित्रों द्वारा निम्नलिखित में से क्या हमेशा प्राप्त करते हैं ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) चुटकले

(b) कविता / शायरी

(c) प्यारा संदेश

(d) महत्वपूर्ण समाचार

(e) अश्लील छवियाँ

(f) प्रदर्शन और रैलियों के विषयों में समाचार (जैसे – मुंबई आतंकी हमले के बाद शांति पदयात्रा)

(g) मैं अग्रसारित नहीं करता / करती – एसएमएस / एमएसएस

3   आप सेलफोन पर क्या अधिभारित (डाउनलोड) करते / करती हैं ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) रिंगटोन

(b) वॉलपेपर

(c) खेल

(d) संगीत / गाने

(e) तस्वीर

(f) वीडियो

(g) अगर अन्य ,कृपया वर्णित करें...

(h) मैं अधिभारण नहीं करता / करती ।

4   निम्नलिखित में से क्या आप सेलफोन से इंटरनेट पर क्या अपलोड़ करते / करती है ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) समाचार

(b) तस्वीरें

(c) वीडियो

(d) अगर अन्य है , कृपया वर्णित करें ....

(e) मैं अपलोड़ नहीं करता / करती ।

5   निम्नलिखित में से मोबाइल के किस प्रविधि का उपयोग सेलफोन द्वारा समूह संदेश भेजने के लिए करते / करती हैं ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) ट्वीटर

(b) एमएसएस गपशप

(c) गूगल एमएसएस

(d) वाकोवें

(e) कोई नहीं

6   निम्नलिखित में से अक्सर किस प्रकार के टेलीविजन कार्यक्रम को देखते हुए आप सबसे अधिक आनंदित होते / होती है ?(एक चिन्हित करें)

(a) ऐसा कार्यक्रम जिसके बाद श्रोताओं से पाठ संदेश भेजने को कहा जाता है। (जैसे – रियलटी शो ,इंडियन–आइडियल जैसा)

(b) कार्यक्रम , जो श्रोताओं से पाठ संदेश भेजने की अपेक्षा नहीं करते।

(c) मैं टेलिविजन कभी भी नहीं देखता / देखती हुँ।

7   क्या आप अपने सेलफोन का उपयोग निम्नलिखित कार्यक्रमों में भागीदारी करने या मतदान करने में करते / करती हैं ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) रियलटी शो (जैसे इंडियन आइडॉल)

(b) समाचार कार्यक्रम

(c) अन्य ,कृपया वर्णित करें ....

(d) इनमें से कोई नहीं

IX. अधिकार क्षेत्र

IX.A. पैतृक अधिकार क्षेत्र

1 क्या आपके अभिभावक आपके सेलफोन प्रयोग पर निम्नलिखित में से किसी प्रकार के नियम लागू करते हैं ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) सेल फोन पर देर रात तक बात नहीं करना।

(b) सेल फोन पर बातें करने में बहुत अधिक समय खर्च नहीं करना।

(c) आपका सेल फोन का बिल नियत सीमा से अधिक नहीं होना चाहिए।

(d) सेल फोन पर उस समय बातें न करना जब आप अभिभावक या रिश्तेदार के साथ हो।

(e) सेल फोन का उस समय इस्तेमाल नहीं करना। जब आप परीक्षा के लिए घर पर पढ़ाई कर रहे हों।

(f) कोई नियम नहीं

2. क्या आपके अपने अभिभावक से निम्नलिखित मुद्दों पर कभी बहस/ मतभेद हुआ है ? ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) सेलफोन पर देर तक बातें करना ——— हॉ ——— नहीं

(b) नया सेलफोन खरीदने के बारें में ——— हॉ ——— नहीं

(c) क्योंकि आपके अभिभावक सेलफोन को आपके पढ़ाई में खराब प्रदर्शन करने के लिये दोषी मानते है –हॉ – नहीं।

(d) अधिक सेलफोन बिल पर – हॉ – नहीं ।

3. निम्नलिखित कथनों जिससे आप सहमत या असहमत है ? (केवल एक उत्तर को चिन्हित करें)

(a) अभिभावक को सेलफोन के उपयोग पर नज़र रखनी चाहिए क्योंकि इससे युवा गलत दिशा में जाते हैं।

———सहमत ——— असहमत

(b) अभिभावक को सेलफोन के उपयोग पर नज़र रखनी चाहिए क्योंकि इस प्रयोग से युवा प्रेम संबंध को जारी रखते हैं।

———सहमत ——— असहमत

(c) अभिभावक को सेलफोन के उपयोग पर नज़र रखनी चाहिए क्योंकि उन्हें पता है कि हमारे लिए क्या सही है और क्या गलत।
———सहमत ——— असहमत

(d) अभिभावक को सेलफोन के उपयोग पर नज़र रखनी नही चाहिए क्योंकि इससे हमारी गोपनीयता भंग होती है।

———सहमत ——— असहमत

(e) अभिभावक द्वारा सेलफोन के वालपेपर को बदलने के लिए मुझसे कहना उचित है।

———सहमत ——— असहमत

IX B. _कॉलेज अधिकरण अधिकार क्षेत्र : –_

1. क्या आप अपना सेलफोन रोज़ाना कॉलेज ले जाते / जाती है ? — हाँ —नहीं

2. कक्षा के दौरान आप निम्नलिखित में से किस प्रारूप में अपना सेलफोन रखते / रखती हैं ?

(a) स्विच ऑन करके

(b) स्विच ऑन करके लेकिन शांत

(c) स्विच ऑफ करके

3. जब आप कक्षा में होते / होती है तो निम्नलिखित में से किस तरीके से अपना सेलफोन का उपयोग करते / करती है ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) कक्षा में संदेश (एसएमएस) भेजना

(b) कक्षा में संदेश (एसएमएस) पढ़ना।

(c) कक्षा में वॉइस कॉल्स का जबाव देना।

(d) कक्षा में वॉइस कॉल्स करना।

4. सेल फोन के उपयोग पर निम्नलिखित में से कौन– सा नियम आपके कॉलेज में है ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) कॉलेज सीमा के अंदर सेल फोन का इस्तेमाल न करना

(b) कक्षा में सेल फोन का उपयोग न करना

(c) कोई नियम नही है

(d) अगर अन्य है, कृपया वर्णन करें

5. आपके विचार से, कॉलेज में सेल फोन के उपयोग से सम्बन्धित कोई नियम होने चाहिए ?

हॉ – नहीं

IX c सरकार के अधिकार क्षेत्र :–

1 क्या आप सोचते / सोचती है कि निम्नलिखित में से कोई नियम सरकार द्वारा सार्वजनिक स्थानों पर सेल फोन के उपयोग पर होना चाहिए ? (इनमें से जो लागू हों उन सभी को चिन्हित करें)

(a) अस्पताल में सेल फोन का उपयोग वर्जित करना।

(b) पेट्रोल पंप पर सेल फोन का उपयोग नही करना।

(c) सड़क पर चलते समय या गाड़ी चलाते समय सेल फोन का उपयोग वर्जित करना

(d) अगर अन्य है, कृपया वर्णन करें ....

(e) कोई नियम नही

2. क्या आप सोचते / सोचती है कि सरकार को युवाओं द्वारा सेल फोन के उपयोग से सम्बनिधत कोई नियम बनाना चाहिए ?

(a) हॉ युवाओं को 18 वर्ष के उम्र के पहले सेल फोन नही देना चाहिए।

(b) युवाओं द्वारा सेलफोन पर ऐसे एमएमएस जो वयस्क सामग्री युक्त हो के प्रसारण से सम्बन्धित नियम होनें चाहिए

(c) व्यवित्तयों की ऐसी तस्वीरें जो अन्य लोग अपने सेलफोन से खिंचते हो उनको लेकर नियम होना चाहिए

(d) अगर अन्य है, कृपया वर्णन करें ....

(e) इसके लिए कोई नियम नही होना चाहिए ।

X. स्वीकार्य / अस्वीकार्य व्यवहार

1 निम्नलिखित में से किसे आप स्वीकार्य व्यवहार / अस्वीकार्य व्यवहार मानेंगे।

(ए) सार्वजनिक स्थानों पर सेलफोन द्वारा तेज अवाज में बातें करना।

—————————स्वीकार्य————————अस्वीकार्य

(बी) सार्वजनिक स्थानों पर अपमानजनक भाषा का प्रयोग करना।

—————————स्वीकार्य————————अस्वीकार्य

(सी) सार्वजनिक स्थानों पर सेलफोन द्वारा अन्तरंग, वार्तालाप करना।

—————————स्वीकार्य————————अस्वीकार्य

(डी) सेलफोन द्वारा प्रेम पूर्ण संबंध को लेकर बातें करना।

—————————स्वीकार्य————————अस्वीकार्य

(इ) सेलफोन द्वारा व्यस्क सामग्री युक्त एमएमएस भेजना।

—————————स्वीकार्य————————अस्वीकार्य

(एफ) सेलफोन पर अश्लील तस्वीरों को किसी निजी स्थान पर देखना।

—————————स्वीकार्य————————अस्वीकार्य

(जी) सेलफोन पर अश्लील तस्वीरों को किसी सार्वजनिक स्थान पर देखना। जैसे – (ट्रेन, स्टेशन पर)

—————————स्वीकार्य————————अस्वीकार्य

(एच) सेलफोन का उपयोग अश्लील तस्वीरों को रखने के लिए।

—————————स्वीकार्य————————अस्वीकार्य

(आइ) लोगों से सेलफोन पर स्वैच्छिक तौर से नम्बर मिला कर बात करना।

—————————स्वीकार्य————————अस्वीकार्य

(जे) सेलफोन से लड़कियों को कॉल कर उनको यौनिक तौर पर परेशान करना।

—————————स्वीकार्य————————अस्वीकार्य

11 पसन्द / नापसंद

1 सेलफोन में कौन–सी एक चीज है जो आपको बहुत पसंद है ? (वर्णन करें)

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2 सेलफोन में कौन – सी एक चीज है जो आपको सबसे कम पसंद है ? (वर्णन करें)

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APPENDIX D: CONSENT FORM FOR INTERVIEWS

Cell Phone Odyssey: Investigating cell phone usage among Indian youth

This is a research project being conducted by Priyanka Matanhelia at the University of Maryland, College Park. I am inviting you to participate in this research project because you are a young adult in the age-group of 18 – 25 years in India. The purpose of this research project is to examine the use of cell phones among young people in India. I am collecting this information to understand why cell phone use is becoming so popular among Indian youth, how it is changing their media habits, and if it is bringing about any change in society. The procedure involves conducting in-depth, open-ended interviews with young adults in India in the age-group of 18 – 25 years. A detailed list of questions that will be asked during the interview is attached. The questions will be same for all the participants, however, additional questions may be asked during the interview process with the consent of the participant to gain a deeper insight into the use of cell phones. The expected duration of each of these interviews would be approximately couple of hours. The information gathered from these interviews will be used for my dissertation project.

I will do my best to keep your personal information confidential. To help protect your confidentiality I will not include your real names on the collected data. I will be the only person who will know your real identity. If I write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College

Park or governmental authorities if you or someone else is in danger or if I am required to do so by law. There are no known risks associated with participating in this research project.

The use of cell phones among young people is increasingly rapidly. There have been several concerns from parents and governmental authorities regarding cell phone usage among Indian youth. The information from this research will help me to understand whether cell phones are an integral part of young people's life and if there are any potential dangers to young people or society from its usage.

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

This research is being conducted by Priyanka Matanhelia under the direction of principal investigator, Prof. Maurine H. Beasley at the College of Journalism, University of Maryland, College Park, USA. If you have any questions about the research study itself, please contact Maurine Beasley at 3115, Journalism Building, University of Maryland, College Park, phone no. 301-405-2413, email: mbeasley@jmail.umd.edu.

If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: **Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu;**

(telephone) 301-405-0678. This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

Your signature indicates that: you are at least 18 years of age; the research has been explained to you; your questions have been fully answered; and you freely and voluntarily choose to participate in this research project.

Signature and Date

NAME OF SUBJECT _____

SIGNATURE OF SUBJECT _____

DATE _____

APPENDIX E: CONSENT FORM FOR SURVEY – ENGLISH

Participant's consent form for survey on cell phone usage among young adults in India

Project Title: Study on cell phone usage among young adults within the age-group of 18 – 24 years in the cities of Mumbai and Kanpur.

Participant Consent: I state that I am over 18 years of age and wish to participate in a program of research being conducted by Professor Maurine Beasley and Doctoral Candidate Priyanka Matanhelia, Philip Merrill College of Journalism, University of Maryland, College Park.

Purpose: The purpose of this survey is to investigate the different ways in which young people in India are using cell phones.

Procedures: The procedure involves a one-time session of filling out a survey questionnaire, lasting approximately 20 minutes. The questionnaire will be presented to me in a paper-based format.

Confidentiality: All information collected in the study is confidential. My name will not be identified after the survey. Non-identifiable ID numbers will be assigned and all questionnaires will be destroyed at the end of the study.

Risks: There are no known risks associated with participation in the research.

Benefits, Freedom to Withdraw & Ask Questions: The survey is not designed to help me personally, but to help the investigator learn more about the cell phone usage among young adults in India. I am free to ask any questions or withdraw from participation at any time without penalty.

Contact Information of Investigators: Prof. Maurine Beasley
                                       Philip Merrill College of Journalism
                                       1117 Journalism Building
                                       College Park, MD 20742
                                       Telephone: 1-301-405-0678

If you have questions about your rights as a researched subject or wish to report a research-related injury, please contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-4212.

_____
Name of Participant

_____
Signature of Participant

_____
Date

APPENDIX F: CONSENT FORM FOR SURVEY – HINDI

भारत में युवाओं के बीच मोबाइल फ़ोन के प्रयोग पर सर्वेक्षण के लिये भागीदारी का सहमति फार्म:

परियोजना शीर्षक :– मुंबई और कानपुर शहर में रहने वाले 18 से 24 वर्ष के वयस्कों द्वारा प्रयोग किये जाने वाले मोबाइल फोन पर अध्ययन।

सहभागी सहमति :– मैं घोषणा करता हूँ कि मैं 18 वर्ष की आयु से अधिक आयु का हूँ और मैं प्रोफेसर मैरिन बीस्ले और डाक्टर उपाधि की उम्मीद प्रियंका मातान्हीलिय फिलिप मैरिल कॉलेज ऑफ जर्नलिज्म, युर्निवसिटी ऑफ मैरीलेन्ड, कॉलेज पार्क द्वारा आयोजित शोध के एक कार्यक्रम में अपनी इच्छा से भागीदारी चाहता हूँ / चाहती हुँ।

उद्देश्य:– इस सर्वे का उद्देश्य भारत में जो युवा वर्ग मोबाइल फ़ोन का उपयोग करते है उसके विभिन्न तरीकों की जाँच करना है।

प्रकिया:– इस प्रकिया में एक सर्वेक्षण प्रश्नावली को एक समय सत्र के भीतर भर कर पूरा करना है। ये प्रश्नावली लगभग 20 मिनट की है। यह प्रश्नावली मुझे पन्नों पर छपे फॉर्मेट के रूप में उपलब्ध होगी।

गोपनीयता:– इस अध्ययन की सभी एकत्रित जानकारी गोपनीय है। सर्वेक्षण के पश्चात् मेरा नाम किसी को नहीं बतलाया जाएगा। अध्ययन के आखिर में सभी उत्तरदाताओं को अनभिज्ञ आई.डी. नम्बर दी जाएगी और सभी प्रश्नावलियों को नष्ट कर दिया जाएगा।

जोखिम:– शोध में भाग लेने वालों के साथ किसी प्रकार का कोई जोखिम नहीं है।

लाभ, प्रत्याहन एवं प्रश्न पूछने की स्वतन्त्रता:– यह सर्वेक्षण मुझे किसी भी प्रकार से व्यक्तिगत लाभ पहुचाने के लिये नहीं किया जा रहा है बल्कि इसका उद्देश्य जाँचकर्त्ता को भारतीय युवाओं के मोबाइल फ़ोन के प्रयोग के बारे में जानकारी देने में सहायता करना है। मैं कोई भी प्रश्न पूछने के लिये स्वतन्त्र हूँ और किसी भी समय बिना जुर्माने के प्रत्याहन करने के लिये स्वतन्त्र हूँ।

जाँचकर्त्ता से सम्पर्क करने सम्बन्धी जानकारी

प्रोफेसर मायूरिन बेस्ली

फिलिप मैरिल कॉलेज ऑफ जर्नलिज़म
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1–301–405–0678

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यदि आप शोध विषयो से सम्बन्धित कोई प्रश्न करना चाहते है या शोध सम्बन्धी अपहत रिर्पोट प्रस्तुत करना चाहते है तो कृपया सम्पर्क करें

Institutional Review Board Office] University of Maryland, College Park, Maryland, 20742, (e-mail) irb@deans.umd.edu; (telephone) 301-405-4212

प्रतिभागी का नाम

प्रतिभागी का हस्ताक्षर

दिनॉक

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