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## Mobile Phone to Youngsters: Necessity or Addiction

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**Abstract:** This study focuses on exploring the pattern of mobile phone usage among youngsters in Pakistan to delineate the extent of addictive behavior towards its usage. For this purpose questionnaires were used to elicit the responses. University students were selected as population and simple random sampling technique was used. Sample was consisting of 500 students out of which 400 students responded back comprising 80% response rate for this research. Findings of this study revealed that majority respondents are able to have definite priorities between their responsibilities & commitments and their cell phone usage. Very few are those who always exhibit the extreme addictive behaviors and rest is the majority who are not frequently involved in addictive usage patterns. Thus, youngsters use their cell phones under reasonable limits and do not tend towards extreme behaviors leading towards addictive cell phone usage.

# Key words: Mobile Phone, Addiction, Youngsters, Youth, Pakistan.

# 1. Introduction

Technological revolution has provided the world with luxurious inventions. Communication channels has been so fabulously upgraded that corresponding to a persons with thousands of miles apart is just a game of seconds now. Invention of fixed telephone in 19<sup>th</sup> century was no more a wonder in 21<sup>st</sup> century when human brain invented portable "Mobile Phone". Mobile phone technology has experienced a tremendous growth. In 1946, Swedish mobile used the first official mobile phone. In 1983, Motorola presented 1<sup>st</sup> truly portable cell phone (History of cell phone, n.d.). According to a researcher, it took 20 years to strap up one billion mobile phone users, 40 months to harness 2 billion and just 2 years to reach the mark of 3.5 billion (Worldwide mobile phone users, 2010). This industry has been among the fastest growing categories of consumption goods. Remarkable growth can be seen in its users especially among young people. They are the most vivid users of this technology.

Each and every invention has brought comforts as well as some threatening effects with it. Same is the case with mobile phone technology. This is a medium that allows youngsters to communicate and interact with others without parental and teachers' monitoring. Psychiatrists proclaim that in the 21st century mobile phone addiction has become one of the major non-drug addictions. Addict victims suffer social isolation and economic losses. They suggest a person to be addict if he feels an overwhelming need of cell phone usage for more than half an hour daily (Madrid, 2003). According to Yang, many mobile phone users suffer from a new type of mental disease called 'mobile phone dependence' syndrome and it is common especially amongst the youth. When such users observe a drop in phone calls or text messages then symptoms of addiction appear. These symptoms are often observed in eccentric, non-confident and unsociable people (Mobile phone addiction, 2003).

On the list of top 10 countries with largest number of mobile phone subscribers Pakistan ranked 10<sup>th</sup> (Top 10 Countries of mobile subscribers, n.d.). Mobile phone users have increased from 300,000 in 2001 to 90 million in 2008 in Pakistan (Pakistan cell phone users, 2008). According to an announcement by PTA (Pakistan Telecommunication Authority), Pakistan has a total of 98 million mobile phone users in May 2010. Growth rate has increased from 0.55 percent in April 2010 to 0.72 percent in May, 2010 (Attaa, 2010). Hence, it is very important to identify the usage patterns of mobile users in Pakistan with a special focus on young users. This area is yet an unexplored area and required researchers attention. This study in result will help to explore demographics, extent & effects of mobile usage and usage pattern and behaviors of mobile usage to

delineate the addictive behavior of youngsters and how they look at the mobile usage. So this study will meet these unanswered questions and cover up the gap explored in the up given sentences.

# 2. Literature Review

Studies suggest the upsides of mobile phone usage. Power and Horstmanshof (2004) proposed that mobile phone usage provides young people with an opportunity to create new relationships with others and to sustain them. Many researchers, Chapman and Schofield (1998), Taylor and Harper (2001), Carroll et al. (2002), emphasized on its use to increase the sense of security in case of emergency. Tiong et al. (2003) proclaimed that this technology provides means for social fulfillment of young people such as access, convenience and mobility. Frissen (2000); Matthews (2004) suggested that mobility also put busy working parents at ease because through this technology they can better be in touch with their children. Markett et al. (2006) suggested that learning in classroom can be promoted through increased interactivity among the students during the lecture and using the short messaging service (SMS) can promote this interactivity. Chen et al. (2007) proposed that having mobile phone is necessary for college students to keep in touch with their family. Also they use mobile phones to fulfill their family roles by sharing their experiences with and getting an emotional and psychic support from their family. Ling and Yttri (2002) proclaimed that mobile phone technology has revolutionized the patterns of correspondence and coordination among peer groups, colleagues and family member. Cova (1994) proposed that youngsters seek peer group acceptance by using their mobile phones. But researchers, Bianchi and Phillips (2005), Paragas (2003), Monk et al. (2004), Palen et al. (2001), also recognized the problematic dimension of excessive usage of mobile phone in young people. James and Drennan (2005) conducted a study on Australian students and identified a higher usage rate of 1.5 hours-5 hours a day. They also highlighted the financial costs, emotional stress, damaged relationships, and falling literacy as adverse consequences of excessive usage. While Matthews (2004) concluded that Australian adolescents do not make more than 5 calls a day on average. And 85% of them used short messaging service less than 5 times a day.

Situation becomes more pathetic when serious social, educational and health hazards come up as a consequence of excessive cell phone usage. Ling (2005) identified a linkage between its usage and criminal activities like alcohol, fighting, theft and narcotics use. Srivastava (2005) claimed that students even use their mobile phones while attending their lectures. McEvoy *et al.* (2005) proposed that young people are often prone to serious safety hazards as they use their mobile phone simultaneously while driving. Bianchi and Phillips (2005), Palen *et al.* (2008) stated that youngsters also use their cell phones at prohibited places like petrol stations, planes and hospitals. Griffiths and Renwick (2003) stated that higher usage of mobile phone leads towards being indebt and other financial worries of adolescents. Aoki & Downes (2003) conducted a research on students in United States. They proposed that majority of the students tend to make calls at night. This can lead to sleep loss and other adverse outcomes. Warner (2003) proposed that young people use SMS to be in touch with their belongings and to feel a sense of their presence all the time. Similarly, Ito (2006) claimed that young people seem to be desperate to be in touch with their friends. Niaz (2008) proposed that addictive mobile use has now become a public health problem and awareness about the dangers associated with excessive usage and addictive behaviors must be extended among common people.

There must be consideration on securing the children and young cell phone users from the abuses and addiction of this technology. Thompson & Ray (2007) emphasized security of children using mobile phone. They pinpointed the potential risks of uncontrolled expenditures, exposure and access to prohibited, damaging or adult material and bullying via mobile phone. Age matters when we talk about the extent of mobile phone usage. Kurniawan (2008) claimed a passive usage of mobile phone among older people because they got a fear of getting familiar with new technology. While Walsh et al. conducted a qualitative research to explore the behavioral patterns of young mobile users in Australia. He proposed that young people are too much attached to their mobile phones that they demonstrate the symptoms of behavioral addiction.

Studies also show gender related differences among young users of mobile phone. Devís *et al.* (2009) studied the pattern of usage of new technology among school students. They concluded that boys spend more time on using mobile phone than girls do. Also, adolescents consume more time on using mobile phones on weekend

than on casual week days. It reflects that various factors contribute towards the extent of mobile phone usage. Turner (2008) proposed that phone-related behaviors are differentially associated with user's personality and individual attributes (age, gender etc.). Rice & Katz (2003) revealed that mobile phone usage is associated with income, work status, and marital status of the potential users. But few studies proved a non-significant relationship among gender of the mobile phone users and its usage. Prezza *et al.* (2004) claimed that mobile phone usage among adolescents was almost independent of type of class (computer science or not), gender and socio-economic status. Many studies prove excessive usage of mobile phone just as an abuse or a necessity of the time. Carbonell *et al.* (2008) proclaimed that excessive usage of mobile phones does not lead to the rapid emotional changes so it can be considered abuse but not addiction. Hence, it is the need of the time to explore whether youth is moving towards addictive using patterns and to see the consequences. This study is being conducted with an aim to identify the above said propositions.

#### 3. Research Methodology

This study was conducted with an aim to delineate the aspects of mobile phone usage among Pakistani young users including usage patterns and behavioral elements and addictive patterns of mobile phone usage. For this purpose questionnaires were used to elicit the responses. University students were selected as population and simple random sampling technique was used. Sample consisted of 500 students out of which 400 students responded back comprising 80% response rate for this research. Major chunk of questionnaire was taken from the research report of study conducted by MACRO (Market Analysis & Consumer Research Organization) in May, 2004. It contains three main dimensions i.e. demographics, extent & effects of mobile usage and usage pattern & behaviors of mobile usage. Demographics included age, gender and educational qualification of the respondents. To delineate the extent and effects of mobile phone usage, respondents were asked 10 questions with reliability factor of 0.81. In the last portion of questionnaire 21 queries were made to delineate the mobile phone usage patterns and associated behaviors of the respondents and reliability factor of this dimension was 0.79. SPSS 17.0 was used to analyze the collected data.

## 4. Results and Discussion

Table 1 shows the demographical details of this study. Out of 400 respondents 38.2% are male while majority of respondents are female students (61.8%). Age brackets of the respondents to this study remained 18 years (minimum) to 26 years (maximum). As this study was conducted with an aim to explore the addictive using patterns of mobile phone among youngsters of Pakistan, this age bracket (18-26 years) fulfilled the study requirements perfectly. With regard to their level of education, 48.5% of the respondents are students of bachelors, 45.5% are at masters' level, 0.2% were doing M.phil and 0.6% are taking some other education.

		Frequency	Percentage
Age	17-21	172	43.00
	22-24	154	38.50
	25-36	74	18.5
Gender	Male	153	38.2
	Female	247	61.8
	Bachelors	194	48.5
Degree	Masters	182	45.5
	M. Phil	21	5.2
	Other	3	0.6

# Table 1: Demographical details of respondents

Table 2 shows the extent of mobile phone usage and related effects. The finding revealed that 15.8% of 410 respondent say that do not use mobile phone longer than they intended, 23.5% say that they rarely use mobile phone longer than they intended, 23.5% say that they frequently

do, 13.5% say that they often do and 8.5% say that they always use mobile phone longer than they intended.12.2% of 410 respondent say that they do not ignore there face to face friends to chat on phone. 21.2% say that they rarely ignore there face to face friends to chat on phone, 24.2% says they occasionally do, 14.5% say that they frequently do.16.8% say that they often do and 11.0% say that they always ignore there face to face friends to chat on phone.10.0% of 410 respondent say that they do not use mobile phone to communicate with the family, 18.8% say that they rarely use mobile phone to communicate with the family, 13.8% say that they occasionally do, 17.5% say that they frequently do, 21.5% say that they often do and 18.5% say that use mobile phone to communicate with the family. 18.8% of 410 respondent say that others do not complain about the amount of time they spend on using there cell phone, 28.2% say that rarely others do complain about the amount of time they spend on using there cell phone, 16.2% say that others occasionally do, 15.0% say that others frequently do, 12.8% say that others often do and 9.0% say that others do not complain about the amount of time they spend on using there cell phone. 26.2% of 410 respondents say that there job performance or productivity never suffered due to the use of mobile phone, 27.8% say that rarely their job performance or productivity suffered due to the use of mobile phone, 16.2% say that occasionally their job performance or productivity suffered, 15.0% say that frequently their job performance or productivity suffered, 12.8% says often their job performance or productivity suffered and 9.0 says that always their job performance or productivity suffered due to the use of mobile phone. 18.5% of 410 respondents say that they never get annoyed if someone bother them while they are using there cell phone, 28.8% say that they rarely do get annoyed if someone bother them while they are using there cell phone, 16.2% say that they occasionally do, 10.2% say they frequently do, 18.2% say that they often do and 8.0% say that they always get annoyed if someone bother them while they are using there cell phone. 24.0% of 410 respondents say that they never lose there sleep due to late night usage of cell phone, 24.5% say that they rarely do lose there sleep due to late night usage of cell phone, 17.0% say that they occasionally do, 15.8% say that they frequently do, 14.0% say that they often do and 4.8% say that they always lose there sleep due to late night usage of cell phone. 25.2% of 410 respondents say that they do not try to reduce the amount of time they spend on using the cell phone and fail, 20.0% say that they rarely try to reduce the amount of time they spend on using the cell phone and fail, 17.5% say that they occasionally do, 18.0% say that they frequently do, 11.2% say that they often do and 7.8% say that they always try to reduce the amount of time they spend on using the cell phone and fail. 23.2% of 410 respondents say that they do not try to hide the facts when anyone asks them that what they do on their cell phone, 28.2% say that they rarely do try to hide the facts when anyone asks them that what they do on their cell phone, 14.2% say that they occasionally do, 12.0% say that they frequently do, 13.2% say that they often do and 9.0% say that they always do try to hide the facts when anyone asks them that what they do on their cell phone. 15.5% of 410 respondents say that they feel depressed, moody, or nervous when they are away from their cell phone, 23.5% say that they rarely do feel depressed, moody, or nervous when they are away from their cell phone, 20.8% say that they occasionally do, 10.5% say that they frequently do, 14.5% say that they often do and 15.2% say that they always feel depressed, moody, or nervous when they are away from their cell phone.

# Interpretation

Keeping in view the above statistics, it is explicit that majority (62.8%) of young mobile phone users do not make longer than intended calls frequently. Similarly a lesser percentage (27.8%) of respondents is those who often or always ignore their face-to-friends to be with their cell phone. Chen et al. (2007) proposed that having mobile phone is necessary for college students to keep in touch with their family and this study proposed the similar findings that only 28.8% of respondents were those who do not use their cell phone to communicate with their family or use it rarely. While asked about excessive usage, only 36.8% respondents claimed that others frequently, often or always complaint about their excessive usage. Similarly those who frequently or always suffer a decline in their productivity due to mobile phone usage were only 31.1% of total respondents. Majority of respondents were those who do not frequently get annoyed by any botheration while using cell phone (63.5%). Similarly, 65.5% of total respondents claimed that they do not suffer sleep loss due to mobile phone usage on frequent basis. When asked about the failure in efforts to reduce usage, majority of respondents (62.7%) were those who do not put such efforts frequently. 65.6% of total respondents were those who do not frequently frequently efforts frequently. From the findings

above it can be concluded that very few (4.8%-18.5%) students are those who always exhibit the extreme addictive behaviors and rest are the majority who are not frequently involved in addictive usage patterns.

	Not	Rarely	Occasionally	Frequently	Often	Always
Variables	applicable					
Making calls longer than intended	15.8	23.5	23.5	15.2	13.5	8.5
Ignoring face-to-face friends for using cell phone	12.2	21.2	24.2	14.5	16.8	11.0
Using cell phone to communicate with family	10.0	18.8	13.8	17.5	21.5	18.5
Others complaint about excessive cell phone usage	18.8	28.2	16.2	15.0	12.8	9.0
Decline in productivity due to cell phone usage	26.2	27.8	15.0	10.8	14.8	5.5
Getting annoyed on Someone bothering you during cell phone	18.5	28.8	16.2	10.2	18.2	8.0
usage Suffering sleep loss due to late night usage	24.0	24.5	17.0	15.8	14.0	4.8
Trying to reduce the extent of cell phone usage	25.2	20.0	17.5	18.0	11.2	7.8
Concealing facts about cell phone usage from others	23.2	28.2	14.2	12.0	13.2	9.0
Feeling nervous, moody and depressed while away from cell phone	15.5	23.5	20.8	10.5	14.5	15.2

Table 3 shows the mobile phone usage patterns and associated behaviors. The findings revealed that 33.0% of 410 respondents say that they strongly disagree, 27.5% say that they disagree, 18.8% say that they neither agree nor disagree, 14.2% say that they agree and 6.5% say that they strongly agree are in totally different world, when they are using cell phone, which leads them away from the daily round. The findings revealed that 25.5% of 410 respondents say that they strongly disagree, 26.0% say that they disagree, 21.2% say that they neither agree nor disagree, 17.5% say that they agree and 9.8% say that they strongly agree they use cell phone irrespective of the place. The findings revealed that 38.0% of 410 respondents say that they strongly disagree, 25.8% say that they disagree, 18.5% say that they neither agree nor disagree, 13.5% say that they agree and 4.2% say that they strongly agree that they avoid keeping their cell phone on silent/vibration mode. The findings revealed that 39.8% of 410 respondents say that they strongly disagree, 20.5% say that they disagree, 19.0% say that they neither agree nor disagree, 15.8% say that they agree and 5.0% say that they strongly agree that they have met interesting people and have made new friends by using mobile phone. The findings revealed that 16.8% of 410 respondents say that they strongly disagree, 28.5% say that they disagree, 20.8% say that they neither agree nor disagree, 28.5% say that they agree and 5.5% say that presence of others bother them while they are talking over my mobile phone. The findings revealed that 28.0% of 410 respondents say that they strongly disagree, 30.5% say that they disagree, 20.0% say that they neither agree nor disagree, 19.0% say that they agree and 2.5% say that lengthy conversations on mobile phone are ok. The findings revealed that 31.0% of 410 respondents say that they strongly disagree, 22.2% say that they disagree, 18.2% say that they neither agree nor disagree, 18.5% say that they agree and 10.0% say that they respond to unknown calls/ messages. The findings revealed that 23.0% of 410 respondents say that they strongly disagree, 19.0% say that they disagree, 22.0% say that they neither agree nor disagree, 25.5% say that they agree and 10.5% say that information stored in mobile phones are private. The findings revealed that 38.2% of 410 respondents say that they strongly disagree, 26.5% say that they disagree, 17.2% say that they neither agree nor disagree, 8.5% say that they agree and 9.5% say that they using mobile phone while driving is ok. The findings revealed that 13.2% of 410 respondents say that they strongly disagree,

15.2% say that they disagree, 22.0% say that they neither agree nor disagree, 32.2% say that they agree and 17.2% say that excessive usage of mobile phone causes health hazards. The findings revealed that 22.8% of 410 respondents say that they strongly disagree, 18.8% say that they disagree, 18.2% say that they neither agree nor disagree, 21.5% say that they agree and 18.8% say that they can live a day without my mobile phone. The findings revealed that 18.8% of 410 respondents say that they strongly disagree, 20.8% say that they disagree, 24.5% say that they neither agree nor disagree, 26.5% say that they agree and 9.5% say that they use to text/call to someone living under the same roof. The findings revealed that 11.2% of 410 respondents say that they strongly disagree, 23.0% say that they disagree, 30.2% say that they neither agree nor disagree, 23.0% say that they agree and 12.5% say that they can't stop thinking about the chat they had on my mobile phone. The findings revealed that 8.2% of 410 respondents say that they strongly disagree, 20.0% say that they disagree, 24.0% say that they neither agree nor disagree, 30.2% say that they agree and 17.5% say that they look forward to get to a peaceful place to attend the call/text from their friends. The findings revealed that 8.0% of 410 respondents say that they strongly disagree, 26.5% say that they disagree, 23.5% say that they neither agree nor disagree, 27.0% say that they agree and 15.0% say that their inbox remain full of saved text that they use to read in leisure. The findings revealed that 16.8% of 410 respondents say that they strongly disagree, 22.0% say that they disagree, 24.8% say that they neither agree nor disagree, 22.0% say that they agree and 14.5% say that they can't go for a day without using cell phone. The findings revealed that 27.2% of 410 respondents say that they strongly disagree, 25.5% say that they disagree, 19.2% say that they neither agree nor disagree, 18.0% say that they agree and 10.0% say that they give priority to their cell phone over their professional and personal commitments. The findings revealed that 14.5% of 410 respondents say that they strongly disagree, 23.0% say that they disagree, 25.8% say that they neither agree nor disagree, 24.8% say that they agree and 12.0% say that they can't relax if their cell-phone signal does not have good signal strength. The findings revealed that 9.2% of 410 respondents say that they strongly disagree, 30.0% say that they disagree, 28.2% say that they neither agree nor disagree, 25.0% say that they agree and 7.5% say that they respond to someone's call/text even when it is not convenient for them. The findings revealed that 9.7% of 410 respondents say that they strongly disagree, 21.0% say that they disagree, 27.0% say that they neither agree nor disagree, 34.0% say that they agree and 8.2% say that they can complete their assignments with in stipulated time. The findings revealed that 16.8% of 410 respondents say that they strongly disagree, 29.5% say that they disagree, 29.0% say that they neither agree nor disagree, 16.2% say that they agree and 8.5% say that mobile phone usage is just wastage of time and resources.

# Interpretation

The above statistical findings reveal that a lesser percentage of respondents agreed to the statements depicting the addictive usage patterns and behaviors. Only 20.7% of total respondents agreed that they lost out of the real world while being with their cell phone. Likewise, only 27% respondents agreed to the fact that they use cell phone everywhere without considering the decorum of that place and rest 73% showed disagreement or indifferent opinion about. Similarly, just 17.7% of total respondents were those who agreed to avoid keeping their cell on silent or vibration mode due to fear of missing the incoming alerts of calls/text. Again 20.8% respondents were those who used cell phone as a medium to make new friends. Percentage of respondents agreed to be bothered by other's presence while talking over their cell phone was only 34%. When inquired about, only 21.5% of respondents agreed that lengthy conversations even on mobile phone are ok. Out of total 410 respondents only 28.5% respondents were those who agreed to the claim that they respond to all calls/text irrespective of the identity of next person. Only 18% agreed to the statement that using mobile phone while driving is not an issue. About 50% agreed to the fact that excessive usage of mobile phone causes health hazards which means users are well aware of the potential health threats of excessive usage. Majority respondents (63.5%) disagreed or showed an indifferent opinion about the claim that they can't live even a day without using their cell phone. About 32% respondents were those who use their cell phone even being uncomfortable with other tasks to be performed and rest was the majority of respondents who do not use their cell phone when it's inconvenient for them. And finally asked about their personal and professional responsibilities with regard to their cell phone usage, only 28% respondents were those who prefer using their cell phone over these responsibilities. This proves that majority respondents use their cell phones under reasonable limits and do not tend towards extreme behaviors regarding addictive cell phone

usage. Also they are able to have definite priorities between their responsibilities & commitments and their cell phone usage.

Variables	Strongly Disagree	Disagree	Indifferent	Agree	Strongly Agree
I am in different world while using cell phone	33.0	27.5	18.8	14.2	6.5
I use cell phone irrespective of the place where I am	25.5	26.0	21.2	17.5	9.8
I avoid activating silent/vibration mode of cell phone	38.0	25.8	18.5	13.5	4.2
I've made new friends whom I came to know using cell phone	39.8	20.5	19.0	15.8	5.0
Presence of others bother me while I am talking over my mobile phone	16.8	28.5	20.8	28.5	5.5
Lengthy conversations on mobile phone are ok	28.0	30.5	20.0	19.0	2.5
I respond to unknown calls/ messages	31.0	22.2	18.2	18.5	10.0
Information stored in mobile phones are private	23.0	19.0	22.0	25.5	10.5
Using mobile phone while driving is ok	38.2	26.5	17.2	8.5	9.5
Excessive usage of mobile phone causes health hazards	13.2	15.2	22.0	32.2	17.2
I can live a day without my mobile phone	22.8	18.8	18.2	21.5	18.8
I use to text/call to someone living under the same roof	18.8	20.8	24.5	26.5	9.5
I can't stop thinking about the chat I had on my mobile phone	11.2	23.0	30.2	23.0	12.5
I look forward to get to a peaceful place to attend the call/text from my friends	8.2	20.0	24.0	30.2	17.5
My inbox remain full of saved text that I use to read in leisure	8.0	26.5	23.5	27.0	15.0
I can't go for a day without using cell phone	16.8	22.0	24.8	22.0	14.5
I give priority to my cell phone over my professional and personal commitments	27.2	25.5	19.2	18.0	10.0
I can't relax if my cell-phone signal does not have good signal strength	14.5	23.0	25.8	24.8	12.0
I respond to someone's call/text even when it is not convenient for me	9.2	30.0	28.2	25.0	7.5
I can complete my assignments with in stipulated time	9.7	21.0	27.0	34.0	8.2
Mobile phone usage is just wastage of time and resources	16.8	29.5	29.0	16.2	8.5

Table 3: Usage patterns and behaviors of mobile phone

#### **5. Conclusion and Recommendations**

Findings suggest that majority of young mobile phone users are those who do not make longer than intended calls; do not ignore their face-to-friends to be with their cell phone; do not have complaints about their excessive usage; do not suffer a decline in their productivity due to mobile phone usage; do not suffer sleep loss due to mobile phone usage and do not feel nervous or depressed being away from their cell frequently. Very few are those who always exhibit the extreme addictive behaviors and rest is the majority who are not frequently involved in addictive usage patterns. Similarly, very few respondents agreed to have addictive behaviors such as being lost out of the real world while being with their cell phone; using cell phone everywhere without considering the decorum of that place, avoiding keep their cell on silent or vibration mode due to fear of missing the incoming alerts of calls/text; considering lengthy conversations and using cell

phone while driving ok; responding to all calls/text irrespective of the identity of next person and majority of respondents who do not use their cell phone when it's inconvenient for them. Hence, findings of this study revealed that majority respondents are able to have definite priorities between their responsibilities & commitments and their cell phone usage. Very few are those who always exhibit the extreme addictive behaviors and rest is the majority who are not frequently involved in addictive usage patterns. Thus, youngsters use their cell phone usage

Mobile phone seems to be a necessity today whether a millionaire or a sweeper carries a cell phone with him irrespective of the income earned and social status. During previous decade, number of its users has significantly increased in Pakistan. This study focused on exploring the pattern of mobile phone usage among youngsters in Pakistan as young people are exhibiting addictive behavior towards its usage and about 70% of Pakistan's population comprises of young people (Why the Need of YES Network Pakistan? n.d.). On the list of top 10 countries with largest number of mobile phone subscribers Pakistan ranked 10<sup>th</sup> (Top 10 Countries of mobile phone subscribers, n.d.). Mobile phone users have increased from 300,000 in 2001 to 90 million in 2008 in Pakistan (Pakistan cell phone users, 2008). According to an announcement by PTA (Pakistan Telecommunication Authority), Pakistan has a total of 98 million mobile phone users in May 2010. Growth rate has increased from 0.55 percent in April 2010 to 0.72 percent in May, 2010 (Attaa, 2010). Findings of this study revealed that majority respondents are able to have definite priorities between their responsibilities & commitments and their cell phone usage. Very few are those who always exhibit the extreme addictive behaviors and rest is the majority who are not frequently involved in addictive usage patterns. Thus, youngsters use their cell phones under reasonable limits and do not tend towards extreme behaviors leading towards addictive cell phone usage. This study is a value addition to the sphere of this social phenomenon, its extent and consequences.

## Limitations and future directions

This study gives good explanation of addictive behavior in itself. Sample size might be increased in order to elicit more appropriate results. Yet there are lots of improvements that can be made. This study can be repeated with different respondents like parents, friends and colleagues. These might be suitable respondents as they are directly affected by one's behavior and habits; and findings of the study would enlighten the findings of existing studies as well as current research.

#### References

- Aoki, K., and Downes, E. J. (2003). An analysis of young people's use of and attitudes toward cell phones. *Telematics and Informatics*, 20 (4), 349-364.
- Attaa, A. (June 24, 2010). *Pakistan registers 98 million mobile phone users*. Retrieved January 03, 2011, from http://propakistani.pk/2010/06/24/Pakistan-registers-98-million-mobile-phone-users/.
- Bianchi, A., and Phillips, J. (2005). Psychological predictors of problem mobile phone use. *Cyber Psychology & Behavior*, 8(1): 39-51.
- Carbonell, X., Guardiola, E., Beranuy, M., Bellés, E. (2008). A bibliometric analysis of the scientific literature on Internet, video games, and cell phone addiction. *J Med Libr Assoc*, 97(2): 102-107.
- Carroll, J., Howard, S., Peck, J., and Murphy, J. (2002). A Field study of perceptions and use of mobile telephones by 16-22 years olds. *Journal of Information Technology Theory and Practice*, 4(2): 49-61.
- Chapman, S., Schofield, W. N., (1998). Lifesavers and Samaritans: emergency use of cellular (mobile) phones in Australia. *Accid. Anal. Prevent.* 30(6): 815–819.
- Chen, Y., & Katz, J. E. (2009). Extending family to school life: College students' use of the mobile phone. *International Journal of Human-Computer Studies*, 67: 179-191.
- Cova, B. (1994). Community and consumption: towards a definition of the 'linking value' of product or services. *European Journal of Marketing*, 31(3/4): 297–316.

- Devís, J. D. Carmen P., Vicente, J. Beltrán, C. and Tomás, J. M. (2009). Screen media time usage of 12–16 yearold Spanish school adolescents: Effects of personal and socioeconomic factors, season and type of day. *Journal of Adolescence*, 32 (2): 213-231.
- Frissen, V. (2000). ICT in the rush hour of life. *The Information Society*, 16 (1): 65-75.
- Griffiths, M., & Renwick, B. (2003). *Misfortune or mismanagement: A study of consumer debt issues.* Ourimbah, NSW: Central Coast School of Business, University of Newcastle.
- *History of cell phone.* (n.d.). Retrieved January 03, 2011, from http://www.tech-faq.com/history-of-cell-phones.html.
- Ito, M., (2005). Mobile Phones, Japanese Youth, and the Re-placement of Social Contact, in: Ling, R., Pedersen, P. E. (Eds.), Mobile Communications: Re-negotiation of the Social Sphere. Springer, London, 131-148.
- James, D., & Drennan, J. (2005). Exploring addictive consumption of mobile phone technology. Paper presented at the Australian and New Zealand marketing academy conference, Perth, Australia.
- Kurniawan, S. (2008). Older people and mobile phones: A multi-method investigation. *International Journal of Human-Computer Studies*, 66(12): 889-901.
- Ling, R. (2005). Mobile communications vis-à-vis teen emancipation, peer group integration and deviance. In The Inside Text: Social perspectives on SMS in the mobile age, edited by Harper, R. Taylor, A. and Palen, L. London: Klewer, 175–189.
- Ling, R., & Yttri, B. (2002). *Hyper-coordination via mobile phones in Norway*. In J. Katz & M. Aakhus (Eds.), Perpetual contact: *Mobile communication, private talk, public performance* (139-169). Cambridge, UK: Cambridge University Press.
- MACRO. (2004). *Study of mobile phone usage among the teenagers and youth of Mumbai*. Retrieved January 01, 2011, from International Telecommunication Union website: www.itu.int/osg/spu/ni/futuremobile/.../IndiaMacroMobileYouthStudy04.pdf.
- Markett, C., Sánchez, I. A., Weber, S., Tangney, B. (2006). Using short message service to encourage interactivity in the classroom. *Computers & Education*, 4(3): 280-293.
- Matthews, R. (2004). The Psychosocial aspects of mobile phone use among adolescents. *In Psych*, 26(6): 16-19.
- McEvoy, S. P., Stevenson, M. R., McCartt, A. T., Woodward, M., Haworth, C., Palamura, P. & Cercarelli, C. (2005). Role of mobile phones in motor vehicle crashes resulting in hospital attendance: A case-crossover study. *British Medical Journal*, 338: 428-430.
- *Mobile phone addiction plagues Chinese youth.* (June 04, 2003). Retrieved on January 07, 2011, from http://articles.timesofindia.indiatimes.com/2003-06-04/science/27198193\_1\_mobile-phone-ental disease-professional-image.
- Madrid. (December 10, 2003). *Mobile phones becoming a major addiction*. Retrieved January 14, 2011, from Sydney Morning Herald website: http://www.smh.com.au/articles/2003/12/10/1070732250532.html?from=storyrhs.
- Monk, A., Carroll, J., Parker, S., & Blythe, M. (2004). Why are mobile phones annoying? *Behavior and information technology*, 23(1): 33-41.
- Niaz, U. (2008). Addiction with Internet and Mobile: An overview. *Journal of Pakistan Psychiatric Society*, 5(2): 72.
- *Pakistan goes from 300,000 to 90 million cell phone users in under 8 years.* (July 23, 2008). Retrieved January 11, 2011, from http://www.techlahore.com/tag/mobile-penetration/.
- Palen, L., Salzman, M. & Youngs, E. (2000). Going wireless: Behavior & practice of new mobile phone users. Proceedings of the 2000 ACM Conference on Computer Supported Cooperative Work, Philadelphia, Pennsylvania, United States. 201-210.
- Palen, L., Salzman, M., & Youngs, E. (2001). Discovery and integration of mobile communications in everyday life. *Personal and Ubiquitous Computing*, 5(2): 109-122.
- Paragas, F. (2003). Being mobile with the mobile: Cellular telephony and renegotiations of public transport as public sphere. Paper presented at the Front Stage/Back Stage: *Mobile Communication and the Renegotiation of the Social Sphere Conference*, Grimstad, Norway.
- Power, M. R., and Horstmanshof, L. (2004). YYSSW (Yeah, yeah, sure, sure, whatever): keeping and supporting relationships through SMS text messaging. *Human Communication and Technology Communication, National Communication Association Annual Convention, Chicago, Illinois.*

- Prezza, M., Pacilli, M. G., Dinelli, S. (2004). Loneliness and new technologies in a group of Roman adolescents. *Computers in Human Behavior*, 20(5): 691-709
- Rice, R. E., Katz. J. E. (2003). Comparing internet and mobile phone usage: digital divides of usage, adoption, and dropouts. *Telecommunications Policy*, 27(8-9): 597-623.
- Srivastava, L. (2005). Mobile Phones and Evolution of Social Behaviour, *Behaviour and Information Technology*, 24(2): 111-129
- Taylor, A.S. & Harper, R. (2001). Talking activity: *young people and mobile phones. Paper presented at CHI 2001 Workshop*: Mobile Communications: Understanding Users, Adoption and Design.
- Thompson, R., Ray, G. (2007). More safety for children with mobiles. *Card Technology Today*, 19(9): 10.
- Tjong, S., Weber, I., and Sternberg, J. (2003). Mobile, youth culture, shaping telephone use in Australia and Singapore. *ANZCA03 Australian and New Zealand Communication Association*: Designing communication for diversity, Brisbane, Queensland.
- *Top 10 Countries With the Largest Number of Mobile Subscribers.* (n.d.). Retrieved January 18, 2011, from http://blog.myxnote.com/top-10-countries-with-the-largest-number-of-mobile-subscribers793.php.
- Turner, M., Love, S., Howell, M. (2008). Understanding emotions experienced when using a mobile phone in public: The social usability of mobile (cellular) telephones. *Telematics and Informatics*, 25(3): 201-215.
- Warner, J. (2003). Beyond the Net, Cell phones shape social behavior among teens in Japan, First publication, *The Miami Herald*, Monday, April. 7, 2003. [Online] Available: http://jcwarner.com/writing/4-07-03-cell-phones.htm (November 23, 2009).
- Worldwide mobile phone users to exceed adult population by 2014. (June 23, 2010). Retrieved January 09, 2011, from http://www.mobilephonereviews.org/mobile-phone-news/worldwide-mobile-phone-users-exceed-adult-population-2014/.
- *Why the Need of YES Network Pakistan?* (n.d.). Retrieved January 08, 2011, from, http://www.yesnetworkpakistan.org/NeedofYESPakistan.html.