Communication Technology and Modernization's Impact on Social Dysfunction in Bangladesh: Addressing Remedial Measures

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(This thesis paper submitted as partial requirement for the fulfilment of M.Phil degree in the Institute of Disaster Management and Vulnerability Studies, University of Dhaka, Bangladesh.)

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HONOR PLEDGE

I pledge on my honor that I have not given or received any unauthorized assistance on this thesis paper.

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APPROVAL OF SUPERVISOR

I recommend that this paper be accepted as a thesis paper required for the fulfilment of M.Phil degree in the Institute of Disaster Management and Vulnerability Studies, University of Dhaka, Bangladesh.

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DEDICATION

To

My beloved wife

ABSTRACT

Modernization is the replacement of traditional structural elements by modern ones and networks have become the basic units of modern society. A new society emerges when and if a structural transformation can be observed in the relationships of production, in the relationship of power and in the relationship of experience. These transformations lead to an equally substantial modification of social forms of space and time, and to the emergence of a new culture. We are living in the information age where a communication technological device like cell phone, internet, TV/radio etc. are not just modern technology but also used for making calls, video calls, sending text messages, chatting as well as in these devices users can use many features like operating system, facebook, you tube, third-party apps and user interface, reminder of important tasks, calendar, online libraries, dictionaries and so many more. Overall, it is arguably true that people tend to "take the easiest route," thereby becoming more dependent on technology. These are wonderful technological tools that can do almost anything and makes our life easier. But, these modern communication technologies are being abused by the users and have many bad impacts on our personal and social life. The relationship among modernization, communication technology, crime and deviance is highly complex in the network society. Many from the younger generation and students are highly dependent on smart phones and internet. They spend most of their time in using these communication technologies. People are too involved with their technological devices and hardly have time with their friends and family in real life. Addiction and dependence of using the most sophisticated communication decreases the academic performance, face to face communication skill, social relation and also created many psychological problems like depression, anxiety, insomnia and mental break down etc. Teenaged and youths are just getting addicted to these and cannot leave their communication technologies even for a few minutes. Criminals are also abusing these technologies for various purposes like cyber crime, cyber stalking, demanding extortion, eve-teasing, threatening, illegal use in examination, organizing criminal activity etc. Dysfunctional uses of these technologies have many bad impacts on our social norms and values, cultural, economic, politics and environment as well. So, dysfunctional use of modern communication technologies can bring many miseries on us and now a day it's a matter of deep concern to everybody. The study objectives were to investigate different aspects

of communication technology, modernization and social dysfunction; communication technology based crime & deviance; its causes & consequences relating social dysfunction in Bangladesh. To conduct the study, purposive sampling method is used and total sample size (n) was 150. To supplement the survey findings case study, Key Informant Interview and non participatory observation were also took part in the study. The present study also gave some suggestive measures those can play a significant role for controlling dysfunctional use of communication technologies.

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Muhammad Kamruzzaman
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ABBREVIATIONS

ATM	: Automated Teller Machine
AVN	: Adult Video News
BBC	: British Broadcasting Corporation
BCC	: Bangladesh Computer
BPC	: Bangladesh Penal Code
BTRC	: Bangladesh Telecommunication Regulatory Commission
CDs	: Compact Disks
DB	: Detective Branch
DGFI	: Directorate General of Forces Intelligence
DVD	: Digital Video Disk
E-Mail	: Electronic Mail
FB	: Facebook
FCC	: Federal Communications Commission
FM	: Frequency Module
GD	: General Diary
GPS	: Global Positioning System
GSM	: Global System for Mobile Communication
GSMR	: Group Special Mobile Association
HD TV	: High Definition Television
HTC	: High Technology Corporation
ICT	: Information Communication Technology
IGP	: Inspector General of Police
ISL	: Sheba Phone Ltd.
IT	: Information Technology
ITU	: International Telecommunication Union
IQ	: Intelligent Quotient
JMB	: Jamaitul Mujahedin Bangladesh
KIIs	: Key Informant Interviews
LI	: Lawful Interception
MEMS	: Micro-electromechanical Systems
MMS	: Multimedia SMS
MS	: Microsoft

NCST   : National Council for Science and Technology

NMT   : Nordic Mobile Telephone

OR   : Odd Ratio

PSTN   : Public Switched Telephone Network

RAB   : Rapid Action Battalion

RF   : Radio Frequency

RFID   : Radio Frequency Identification

RISJ   : Reuters Institute for the Study of Journalism

RUIM   : Removable User Identity Module

SAR   : Specific Absorption Rate

SIM   : Subscriber's Identity Module

SMS   : Short Message Service

SPSS   : Statistical Package for Social Sciences

UNESCO   : United Nation Educational, Scientific and Cultural Organization

VOA   : Voice of America

VOIP   : Voice Over Internet Protocol

WAP   : Wireless Application Protocol

WiFi   : Wireless Fidelity

WiMax   : Wireless Micro Wave Access

WWW   : World Wide Web

1G   : First Generation

2G   : Second Generation

3G   : Third Generation

ABSTRACT

Modernization is the replacement of traditional structural elements by modern ones and networks have become the basic units of modern society. A new society emerges when and if a structural transformation can be observed in the relationships of production, in the relationship of power and in the relationship of experience. These transformations lead to an equally substantial modification of social forms of space and time, and to the emergence of a new culture. We are living in the information age where a communication technological device like cell phone, internet, TV/radio etc. are not just modern technology but also used for making calls, video calls, sending text messages, chatting as well as in these devices users can use many features like operating system, facebook, you tube, third-party apps and user interface, reminder of important tasks, calendar, online libraries, dictionaries and so many more. Overall, it is arguably true that people tend to "take the easiest route," thereby becoming more dependent on technology. These are wonderful technological tools that can do almost anything and makes our life easier. But, these modern communication technologies are being abused by the users and have many bad impacts on our personal and social life. The relationship among modernization, communication technology, crime and deviance is highly complex in the network society. Many from the younger generation and students are highly dependent on smart phones and internet. They spend most of their time in using these communication technologies. People are too involved with their technological devices and hardly have time with their friends and family in real life. Addiction and dependence of using the most sophisticated communication decreases the academic performance, face to face communication skill, social relation and also created many psychological problems like depression, anxiety, insomnia and mental break down etc. Teenaged and youths are just getting addicted to these and cannot leave their communication technologies even for a few minutes. Criminals are also abusing these technologies for various purposes like cyber crime, cyber stalking, demanding extortion, eve-teasing, threatening, illegal use in examination, organizing criminal activity etc. Dysfunctional uses of these technologies have many bad impacts on our social norms and values, cultural, economic, politics and environment as well. So, dysfunctional use of modern communication technologies can bring many miseries on us and now a day it's a matter of deep concern to everybody. The study objectives were to investigate different aspects of communication technology, modernization and social dysfunction; communication

technology based crime & deviance; its causes & consequences relating social dysfunction in Bangladesh. To conduct the study, purposive sampling method is used and total sample size (n) was 150. To supplement the survey findings case study, Key Informant Interview and non participatory observation were also took part in the study. The present study also gave some suggestive measures those can play a significant role for controlling dysfunctional use of communication technologies.

Table of Contents

CHAPTER 3: REVIEW OF RELATED LITERATURE

CHAPTER 4: FINDINGS FROM SURVEY

CHAPTER 5: CASE STUDIES AND KIIs

CHAPTER 6: FINDINGS OF DISCUSSION

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

List of Figure

List of Tables

List of Graphs

1   INTRODUCTION

1.1. Background of the Study

Common beliefs are often associated with crime in post-modern societies such as big cities, mass society, liberal democratic states, capitalistic and socialist countries, and in communities with advanced communication and media. In reality, the relationship between modernization and prevalence of crime is highly complex and vary country to country and society to society. Sometime, modernization process are accompanied by declining, stable, or rapidly increasing crime rates, depending on the place, particular conditions, and time frame under consideration (Savelsberg, 2011). Modernization is subject to replacement of traditional structural elements in a particular state or society

In the context of development theory, modernization is understood as a trend toward urbanization, mass communication, general political participation, and general education (Lerner, 1958). The diffusion of a networking logic substantially modifies the operation and outcomes in processes of production, experience, power, and culture. For Castells (2000), networks have become the basic units of modern society. The network society goes further than the information society that is often proclaimed. He argues that it is not purely the technology that defines modern societies, but also cultural, economic and political factors that make up the network society. A new society emerges when and if a structural transformation can be observed in the context of production-relations, in the relationship of power and experiences. These transformations lead to an equally substantial modification of social forms of space and time, and to the emergence of a new culture (Castells, 2008).

The modernization theory attempts to identify the social variables which contribute to social progress and development of societies, and seeks to explain the process of social evolution, progress and development The process of modernization is closely related to technological advancement. For example, new technology is a major source of social change. A new technology does not merely add something; it changes everything. People in society are always coming up with new ideas and better ways of making life easier and more enjoyable. Technology makes it possible for a more innovated society and

broad social change. All aspects of our life are touched by the progress in science and technology in some way or the other. Technology is the use of scientific knowledge to make and produce modern machines. Communications have also been modernized by advanced technology. Communication technologies such as phones, cellular phones, internet, fax machines, television, radio etc. have impacts on our modern life and all these communication technologies sometimes are catalyst for influencing and determining our modern life, life style, life plan, life calendar, life sector etc. Overall lifestyle patterns are less diverse than the plurality choices available in day to day and even in longer term strategic decisions. A lifestyle involves a cluster of habits and orientations and hence has a certain unity important to continuing sense of ontological security- that connects options in a more or less ordered pattern. The plurality of choices which confronts individuals in a situation of high modernity derives from several influences: living in a post traditional order; pluralization of life worlds; existential impact of the contextual nature of warranted beliefs; prevalence of mediated experience and transformation of intimacy (Giddens, 2008). Passing a single day without these types of technologies is unthinkable for many of us in the present networking society. Today the use of communication technology is not just limited to distant communication; it is rather being used in multiple purposes. Beside the advantages of modern communication technologies, abuses of these making loss of money; breaking security system; increasing fraud, threats, eve teasing, family disputes, social & cultural problems, new forms of crime & deviance.

1.2. Statement of the Problem

The super fast growth of computer and others communication technologies and equipments has paved the way for the genesis of new forms of crimes and deviances. For example, the high-tech crime involves an attempt to pursue illegal activities through the use of advanced electronic media. High technology as a form of sophisticated electronic devices, i.e., the computer PC, cellular telephone, internet and other means of digital communication in quite common use of today's society. Even passing a single day without these types of technologies is unthinkable for many of us. Therefore the use of advanced communication technology is not just limited to distant communication; it is rather being used in multiple purposes.

Beside the advantages of modern communication technologies, abuses of these for making money; breaking security system; increasing fraud, threats, eve teasing, creating family disputes including social and cultural problems, emerging new forms of crime and deviance are numerous examples of modern society. But Bangladesh is in the plan for positive and productive digitalization and the right use of information and communication technology might play a significant role to make the plan more effective. Therefore, the impact of communication technology and modernization on social dysfunction in Bangladesh is a subject matter of worth studying

1.3. Objectives of the Study

The broad objective of the study is to understand the impacts of communication technology and modernization on social dysfunction in Bangladesh. The following specific objectives are also formulated to achieve the study goals.

1. To understand the complex dynamics of communication technology, modernization and social dysfunction in Bangladesh.
2. To identify different patterns of communication technology based crime and deviance in Bangladesh.
3. To determine the social, cultural, economic, health, political and environmental impacts of communication technology and modernization on societal functions in Bangladesh.
4. To investigate the underlying issues and factors involving social dysfunction concerned with communication technology and modernization in Bangladesh.
5. To come up with remedial measures to control social dysfunction out of communication technology and modernization.

1.4. Significance of the Study

In modern day, using of modern communication technology like cell phone is a symbol effective communication means. Some of the modern technologies made long distance into short for easy communication with each other. Unfortunately now a day, some tools of modern communication technology are using for committing crime and violence. Moreover many children are becoming deviants due to the means of some modern communication technology. This study will show the impacts of communication technology and modernization on smooth social functions in Bangladesh from various

aspects. In Bangladesh, there is no significant study on impacts of communication technology and modernization on social dysfunction and criminality. Some of the specialized law enforcement agencies are able to understand the socio-demographic context of deviant activities by addressing the prevailing crime and deviant by using of modern communication technology. But in general, most of the crimes and deviant acts are being happened in our society especially in urban society with the help of advanced communication technology. This study will therefore try to understand that how the guardians, educational institutions, organizations, policy makers, law enforcing agencies and government can play a vital role in reducing communication technology based crime and criminal activities. Moreover, this study can be treated as the ready reference to future research.

1.5. Research Design

1.5.1. Sources of Data

Both primary and secondary data were used in the study. Different types of quantitative and qualitative data were gathered using multiple sources of data. Primary data were mainly collected from 150 communication technology users in the Dhaka City through employing sample survey method. A pre-test was conducted by administering a draft survey questionnaire. The draft questionnaire the survey focused and aimed to investigate different aspects of communication technology, modernization and social dysfunction; communication technology based crime & deviance; its causes & consequences relating social dysfunction in Bangladesh.

Five case studies and five key informant interviews (KIIs) were undertaken to unearth the in-depth understanding of the problem and substantiate the survey findings. Some non-participant observations were made to look at different patterns of social dysfunction related to communication technology in Bangladesh. Some secondary data on communication technology and modernization's impacts on social dysfunctions were collected from the documents of newspaper articles, texts, reports, journals, books, research papers and publications of various relevant issues and internet. Moreover literature survey was one of the key tools for getting secondary data collection and analysis.

1.5.2. Sampling Design

The sample respondents were selected from Dhaka city, the capital of Bangladesh. According to the Bangladesh Telecommunication Regulatory Commission (BTRC), now Bangladesh has six cell phone operators and total cell phone subscribers in the country reached to 12 crore 87 lac 69 thousand on July, 2015 (The Daily Prothom Alo: September 08, 2015). As there is no accurate statistics on communication technology users in Dhaka city due to huge number of people come in and pass out the city each day, the present study could not fixed any specific sampling frame. But the sample size is determined on the basis of researcher's Judgment. Keeping time and resource constraints in mind and considering the heterogeneous characteristics of users of communication technology in Dhaka city, the total sample size was determined as 150. The present study used purposive sampling technique for selection of respondents and was determined on the basis of pre-specified characteristics.

The study also included few (five) case studies and five key informant interviews. The respondents for case studies and key informant interviews were also selected purposively determining study objectives.

1.5.3. Study Area

Dhaka City was selected as the study area for this research work. The study area is located in the center and capital city of Bangladesh (Appendix 2). Dhaka city was chosen considering its size, heterogeneity, various levels of people who commute from different parts of Bangladesh. Dhaka city is the core city and has been supported with advanced means of transport, communications and public services. Every day, a huge number of commuters come in and pass out the city. Multifarious activities happen in the mega city and that's why I have chosen Dhaka city which would represent whole country's reality about communication technology and modernization's impact on social dysfunction.

Dhaka is a megacity and one of the major cities of South Asia. Located on the banks of the Buriganga River, Dhaka, along with its metropolitan area, has a population of over 14 million (population census 2011), making it the largest city in Bangladesh. It is the 8th largest city in the world and also among the most densely populated cities in the world. Modern Dhaka is the center of political, cultural and economic center of

Bangladesh. Although its urban infrastructure is relatively developed in the country, Dhaka suffers from various problems such as pollution, congestion, and lack of adequate services due to its huge population. In recent decades, Dhaka has seen to be part of modernization of transport, communications and public services. The city is being attracted by large foreign investments and greater volumes of external commerce and trade. It is also experiencing an increasing influx of people from across the country. This has made the mega city Dhaka as one of the fastest growing city in the world.

The Awami League government on 29 November 2011 dissolved the Dhaka City Corporation by the Local Government (City Corporation) Amendment Bill 2011 passed by the Parliament of Bangladesh after being placed in the Parliament. The city corporation split into two corporations, named Dhaka City Corporation North and Dhaka City Corporation South, with the southern wing holding more territory than the north. Today it serves as one of the prime centre for culture, education and business in the region (http://en.wikipedia.org/wiki/Dhaka).

1.5.4. Data Collection

The study followed multiple methods of data collection. Both primary and secondary data were collected and used for the study. To address the objectives of the study, both quantitative and qualitative data were analyzed. The primary data were collected by conducting sample survey, case study, non-participant observation and Key Informant Interviews (KIIs). On the other hand, the secondary data were collected from various documents, including newspaper articles, texts, reports, journals, books, research papers and publications of various relevant issues and internet. For conducting the study, at least two experienced researchers were employed as field investigators.

Survey

Sample Survey was the main method of data collection for the study. But considering the nature of the study, non-participant observation, case study and key informant interviews were also used to supplement and complement the survey data. The survey selected the respondents of Dhaka City who are the users of communication technologies. A total 150 samples were selected for the study. The total respondents were categorized into three tiers of age groups such as: Teen age (13-19 years), Youth (20-30 years) and Adults (31-

above years). Total respondents were selected from three groups of people disproportionately and for each age group, respondents were selected purposively.

In the survey, the respondents were asked about various issues and problems related to different aspects of communication technology, modernization and social dysfunction; crime & deviance related to communication technology and its causes and consequences relating to social dysfunction in Bangladesh. In the survey a structured questionnaire (appendix 01) and two expert data collectors were recruited.

Observation

The researcher and the enumerators followed the non-participant observation method for assessing different aspects of communication technology, modernization and social dysfunction in Bangladesh.

Case Study

The Case study and key informant interviews were two qualitative methods used for in-depth collection of information for the study. The tendency of abusing of communication technology is a very sophisticated, hidden but sensitive issue. To assess such situation, five (5) case studies were conducted under the study. The case study respondents were selected disproportionately (1 for the age group 13-19 years, 3 for 20-30 years and 1 for above 30 years) and purposively. Two more respondents were selected from the age group 20-30 years for availability of respondents in the study area. Through the case studies, the respondents provided in-depth information about the subject matters. The names of the case respondents mentioned in this study are not real rather pseudo and symbolic alphabetical name has been used for keeping their name and identity confidential. For conducting the case study, structured check list/schedule were also used.

Key Informant Interview (KII)

Five key informants were selected purposively keeping in mind the experience and knowledge on communication technologies and modernization. KIIs were conducted with different expertise including sociologist, criminologist, psychologist, law enforcement, law & IT expert and communication technology user's guardian. Sociologist and criminologist were selected to investigate the use, abuse and misuse of

cell phone, different social and economical problems, and its link with crime and deviance. Psychologists was selected to know the psychological impact and behavioral changes emerged for using and abusing cell phone and it's after effect. The RAB and Police preferred for understanding the nature of criminal activities related to abuse of communication technologies. All key informants were asked to provide policy measures to control dysfunctional use of communication technologies. For key informant interviews structured questionnaire, field notes and tape recorder were used.

1.5.5. Data Analysis

Descriptive statistical technique was used for analysis of the survey findings. The study dealt mostly with nominal and ordinal variables for which percentage, cross tabulation and measures of central tendency were more appropriate to analyze. Survey data were analyzed with the support of SPSS software and MS Excel. Tables, graphs etc., were used for presentation of the findings. For systemic procedure and careful data entry, code book has been used for the study.

1.6. Scope and Limitations of the Study

This study is conducted in the capital city which is the busiest city of the country. Every day, a huge number of commuters come in and pass out from the city. So, it was very hard to determine the total cell phone users in Dhaka city. The study is also based on the available and accessible primary data gathered through survey method, case study and Key Informant Interview (KII) and secondary information was analyzed through review of literature. The nature of the study faced some kind of problem in the context of privacy issues. Difficulties to accessibility and availability of secondary information on cell phone are the major limitations of the study. Considering the nature of the study problem, the survey used a small sample. The analysis of the findings is based on some statistical tools which is also a limitation of the study. Besides, due to type of variables, the findings were analyzed with the aid of descriptive statistics mostly.

2 CONCEPTS, THEORIES AND LAWS

2.1. Communication Technology

We are living in the information age, and there has never been a suitable technology like modern and advanced technology in the past or even for a particular period of human history. Digital technologies have contributed to revolutionize communication in the modern world and it has helped rapid integration into our lives in the context of making a phone call or exchange messages. Communication exchanging or transferring of a message from a sender to a receiver. The method by which the communication is carried is referred to as the medium. A device is one medium that is commonly used throughout the modern world to send and receive communication. Communication devices are used in personal life, business, government and society as a whole.

Communication technology encompasses a broad range of mediums, from the internet to radio to television to wireless signal providers. It is used in the business sphere, in personal relationships and also in public spaces that are neither primarily commercial nor personal, such as a subway stop that uses televisions to broadcast schedule changes. Traditionally, communication technology is limited to hardware such as radio receptors or television sets. However, the popularity of wireless technologies has correspondingly made the concept of communication technology slightly more ethereal. Although "hot spots" are required to transmit wireless signal, the seemingly unlimited variety of wireless devices makes this form of communication technology particularly invigorating in terms of its potential growth. Regardless of their specific form, the last few decades have seen an unparalleled rise in the availability of these technologies among the public. In 1985, for example, there were a total of 340,000 cell phone subscribers in the United States. In 2012, there are now 5.9 billion cell phone subscribers worldwide. This shift in the span of only 27 years has had a dramatic effect on how people relate to one another (Smith, 2012).

2.1.1. Types of digital communication technologies

Sarokin, a former researcher with Google Answers, stated in an online article that the Internet and cell phones are two of the most prominent examples of the influence of the Information Age, but there are many other types of digital communication technologies.

The Internet and Email: In 1962, a researcher at the Massachusetts Institute of Technology described a "Galactic Network" of interconnected computers that could talk to one another. Since then, the idea of the Internet was evolved. Relying on packet switching the digital transfer of short bursts of data globally connected computer networks quickly developed into sophisticated digital communication technologies. Email over the network was introduced in the 1970s and has since grown into one of the most widespread forms of digital communication, both on the Internet and through private networks. Packet switching protocols matured and speeds increased. In 1980, the first widespread computer virus crashed the global computer network.

In the 1990s, digital communication over networked computers emerged from limited use in the academic, government and business world to come into use by the public. The World Wide Web, the Internet on steroids, was described in 1991, the White House website appeared in 1993, and the first Internet advertising came online in 1994. As transmission speeds increased, the Internet evolved from principally one-way communication to a social two-way system Web 2.0 at sites like Face book and Twitter.

Cell Phones: Martin Cooper (pioneer of mobile telephony) is an American former Motorola vice president and division manager who in the 1970s led the team that developed the handheld mobile phone (www.economist.com/node/13725793). Mobile phones and their networks were first deployed in Sweden in 1981 via the Nordic Mobile Telephone (NMT) System (analogue; 450 MHz bandwidth; 1st Generation or 1G); mass deployment was present in Sweden by 1985. The analogue 900 MHz system started there in 1986, but was closed in Sweden by 2000. The digital system (Global System for Mobile Communication; GSM) started in 1991, representing the second generation of mobile phone systems, or "2G" (Khurana, 2008).

The earliest generation of handheld mobile telephones relied on the analog communication technology of the conventional phone network. The first phones using digital communication, known as 2G phones, appeared in the early 1990s. Digital phone technology developed rapidly after that. The first text message was sent in 1993, and the transmission of other digital content, such as ringtones and advertising, followed shortly after. In 2001, 3G digital phone communication arrived, providing faster transmission and making broadband communication practical for multiple media such as voice, Internet and GPS. The 4G phones appeared later that decade, offering digital communication 10 times faster than earlier technologies.

Television and Radio: Broadcasting is a crucial instrument of modern social and political organization. At its peak of influence in the mid-20th century, national leaders often used radio and television broadcasting to address entire countries. Because of its capacity to reach large numbers of people, broadcasting has been regulated since it was recognized as a significant means of communication. Beginning in the early 1980s, new technologies–such as cable television and videocassette players–began eroding the dominance of broadcasting in mass communications, splitting its audiences into smaller, culturally distinct segments. Previously a synonym for radio and television, broadcasting has become one of several delivery systems that feed content to newer media.

Television, system of sending and receiving pictures and sound by means of electronic signals transmitted through wires and optical fibers or by electromagnetic radiation. These signals are usually broadcast from a central source, a television station, to reception devices such as television sets in homes or relay stations such as those used by cable television service providers. Television is the most widespread form of communication in the world. Television has a variety of applications in society, business, and science. The most common use of television is as a source of information and entertainment for viewers in their homes. Security personnel also use televisions to monitor buildings, manufacturing plants, and numerous public facilities. Public utility employees use television to monitor the condition of an underground sewer line, using a camera attached to a robot arm or remote-control vehicle. Doctors can probe the interior of a human body with a microscopic television camera without having to conduct major surgery on the patient. Educators use television to reach students throughout the world.

As online computer systems become more popular, televisions and computers are increasingly integrated. Such technologies combine the capabilities of personal computers, television, and in some cases telephones, and greatly expand the services these equipment provide. Consumers may eventually need only one system, which they could use for entertainment, communication, shopping, and banking in the convenience of their home. Since 2009, the Federal Communications Commission has required TV stations in the U.S. to broadcast exclusively in digital format. The transition from conventional to digital television technologies made high-definition television possible and established the television as more than a simple receiver of transmitted signals. Many digital TVs are multimedia devices that display television programming, games, photographs and on-demand movies, stream Internet content, play music and handle recorded media like CDs and DVDs. As televisions become more interactive, they are evolving into true two-way digital communication devices (Marc, 2000).

Other Electronic Communication: Digital communications have become ubiquitous in modern society and encompass a wide variety of technologies. Remote controls, keyless entry devices, walkie-talkies, Bluetooth earpieces, GPS satellites, cash registers and credit cards are among the many technologies that communicate digitally with people and with other devices. Futurists have coined the term "The Internet of Things" to refer to the trend of enabling thousands of types of devices, from light bulbs to washing machines, with digital communication capabilities.

Physical Digital Media: Given the sophistication of the instantaneous transmission of digital data, it can be easy to overlook the more mundane communication activities. We store digital data on many types of physical media, including CDs, DVDs, flash drives, tape and compact memory chips. Every time you hand a friend or colleague a file, whether you transfer it electronically or pass along a DVD, you are engaged in a form of digital communication.

Jung, another prominent technology researcher mentioned that since the development of the Internet, electronic means of communication over the years have grown and improved. There are six types of Electronic Communication where email has become one of the more basic forms of communication, overshadowed by social media, instant messaging and video chatting.

Web Pages: World Wide Web users post content on websites for others to view. The content may be simple text, but it might also contain multimedia files including images, sounds, videos or streaming content. Unlike many other forms of electronic communication, most Web content is pulled from the Web by users who are seeking information, rather than pushed to subscribers. While not as permanent as traditional media like paper, Web pages can archive information for extended periods.

E-mail: Email is a method originally intended to imitate physical mail. Messages are delivered from one specific address to one or more specific addresses. Users are alerted to the presence of new messages in their inboxes by email clients that display the content and offer an opportunity to reply. Messages are primarily text but may include file attachments of various types including images and short movies. Unlike instant messages, emails are generally not expected to be read immediately upon receipt. Most email readers keep track of conversations that include multiple people through the use of threads. Thus email is ideally suited for long, involved conversations between two people or among small groups of people.

Forums: Conversations that go on indefinitely, involve large numbers of people or need to be archived are not well suited to email. Forums, often hosted on the Web, provide an alternative that combines many of the aspects of email and Web pages. They involve discussions around a single, limited topic but can take place over months or years and involve dozens or even hundreds of participants. Most use a treelike structure that allows participants to jump in at whatever level their comments are most appropriate.

Text and Instant Messaging: Text messaging uses cellular airwaves and protocols to deliver textual messages from one cellular phone to another or from one phone to a group of other phones. Text messaging is usually intended as near-instant communication and can be quicker than a phone call because the sender doesn't have to wait for the recipient to answer before delivering a message. Because text messaging is informal and easy, it's sometimes called chatting. Text messaging can also facilitate private discussions when there is a chance that a phone call could be overheard. Instant messaging is similar to text messaging but is carried over the Internet rather than over cell phone airwaves.

Social Networking: Social networking sites facilitate communication among people with common interests or affiliations. Sites such as Facebook and LinkedIn provide places for people to interact, sometimes in real time. Microblogging services like Twitter, allow short textual messages of no more than 140 characters to be broadcast to a large audience. Unlike text messages, which are delivered to only small groups, micro blog posts are intended to be seen by all of a user's followers. Micro blog users can repost messages that they want to share with their own followers, so a micro blog post can spread quickly. A widely reposted message is called a viral post.

Video Chat: Like instant messaging, most video chatting is conducted over Internet protocols that stream images from one device to another. At times, nothing beats a face-to-face conversation. Video chats provide immediacy to a conversation. Because a person's tone is often easier to read when you can see his face, businesses often use videoconferencing to aid in virtual meetings.

2.1.2. Scenario of Communication Technology in Bangladesh

Bangladesh is a country with tremendous potential for development through science and technology. Our limited land and high population density implies application of modern scientific methods and technology for cultivation and give thrust to development of industries. In order to improve the living standard of the common mass through expansion of development activities in science and technology and its application, the Government of Bangladesh has formed National Council for Science and Technology (NCST). Recently formulated National Information and Communication Technology Policy (2002) has also given enormous importance to the development of ICT for capturing our share in the multi-billion dollar software export market, for ensuring good governance, for enacting ICT related policies, special allocation of funds for software projects, development of world class ICT professionals and creation of a world class ICT institution for promoting excellence in the field. National ICT Policy includes issues of human resource development, creation of ICT infrastructure, facilitating research and development on ICT, development of ICT industries on a priority basis. It has also highlighted importance of hardware industries, e-Commerce, e-Governance, legal issues related to ICT, application of ICT in health care, application of ICT in agriculture to exploit the potential for development of rural economy and agro-business. Application of

ICT in other areas like social welfare, transportation and the judiciary system is also highlighted. Realizing the importance of ICT and the enormous impact it can create in our everyday life, the name of the Ministry has been changed from Ministry of Science and Technology to the Ministry of Science and Information & Communication Technology. The Ministry of Science and ICT have been entrusted with the responsibility of harmonious growth of this sector in Bangladesh. Bangladesh Computer Council (BCC), the apex body having the responsibility for promotion of all sorts of ICT activities in the country, is also governed by the Ministry of Science and ICT. Development of Science and ICT depends on the expansion of telecommunication sector. This sector is still under developed due to lack of deregulation and open competition. In 2002, independent telecom regulatory authority, Bangladesh Telecommunication Regulatory Commission (BTRC) has been created (Salim, 2006).

2.1.2.1. Cell phone

Mobile phone sector was opened up for private sector investment in Bangladesh in 1989. The leading mobile phone service provider, GP, launched the country's first wireless application protocol (WAP) Internet services in August 2006 (Hamid & Akter, 2009). According to The Bangladesh Telecommunication Regulatory Commission (BTRC), now Bangladesh has six cell phone operators and total cell phone subscribers in the country reached to 12 crore 87 lac 69 thousand on July, 2015. But, from the statistics of Group Special Mobile Association (GSMR) at present Bangladesh has 6 crore 70 lac unique cell phone users (The Daily Prothom Alo: September 08, 2015). According to the study of Mobiforbes, a cell phone research and development organization published that Bangladesh is the most top country in south Asia in terms of cell phone users and it is 75% of total population followed by Pakistan (65 percent) and India (62%) (The Daily Prothom Alo: November 24, 2014).

2.1.2.2. PSTN Phone

According to BTRC, the total number of PSTN Phone Subscribers in Bangladesh has reached 1028.19 thousand at the end of May 2010 in where BTCL 872.41 thousands, Telebarta 56.42 thousands, Jalalabad Telecom Ltd. 39.57 thousands, Westec Ltd. 17 thousands, Sheba Phone Ltd. (ISL) 11.62 thousands, S. A. Telecom System Ltd. 18.03 thousands, and Banglaphone Ltd. 2.24 thousands.

2.1.2.3. Internet

According to the recent report of ITU and UNESCO on the state of Broadband 2015, Bangladesh is clearly ahead of India and Pakistan for using internet in the cell phone securing position 149th out of 189 followed by 155th and 156th in the world. On the other hand, 6.4 people use mobile broadband internet out per 100 in Bangladesh followed by India (5.5) and Pakistan (5.1). Among the developing countries those have internet connection home to home, Bangladesh position is 101th (6.5 %) out of 133. The report also mentioned, Bangladesh position is 162th in the world in terms of number of person use internet (ITU & UNESCO, 2015).

According to BTRC, the total number of Internet Subscribers in Bangladesh has reached 36249.018 thousands at the end of August 2013 in where mobile internet users 34711.101 thousands, ISP & PSTN 1222.62 thousands, WiMAX 315.297 thousands. Bangladesh, one of the fastest growing economies in the world, has had an impressive internet penetration growth as its users have reached more than 5.50 million until last year (2011) from only 100,000 users in 2000. According to the International Telecommunication Union (ITU), a total of 4.88 million internet users are added in the last calendar year to only 617,300 users in 2010 in Bangladesh. The country's mobile phone penetration has also jumped to 93.78 million in June 2012 which has facilitated the internet as well as Facebook users in the country (thefinancialexpress-bd.com: August 14, 2012).

2.1.2.4. Facebook

At present facebook is the most popular social networking media in the Bangladesh. According to information technology ministry of Bangladesh, there are twelve new facebook ID is being opened in each second in Bangladesh and now its growth position is second in the world. Within very short time Bangladesh has 2.5 crore facebook users and most of them about 90 percent are under 25 years old (The Daily Jugantor: September 08, 2015).

A survey report of Social bakers, a global social media and digital analytics company stated, some 2.80 million people of Bangladesh use the world's strongest social media, Facebook (FB), as it secured 51st position among the nations using the network globally. Report also mentioned people of 18-24 years of age are the major FB users in

Bangladesh as 1.37 million or around 50 per cent of the total users subscribe it, followed by the users of 25-34 years of age, who are 29 per cent of the total FB users. Out of the total 2.80 million FB users in Bangladesh, 1.37 million are young (18-24 years of age). Among the FB members, 78 per cent are male and 22 per cent female. It also said, United States of America (USA) is on the top of the list with 159.03 million users, while Brazil has secured the second position with its 54.95 million subscribers and India is in the third position with its 51.96 million FB members. The Socialbakers said that Facebook penetration in Bangladesh is 1.77 per cent compared with the country's 158 million population (thefinancialexpress-bd.com: August 14, 2012).

2.1.2.5. Skype/Imo/Viver/Tengu/Whatsapp

Skype is a premium voice-over-IP service and instant messaging client that is developed by the Microsoft Skype Division. The service allows users to communicate with peers by voice using a microphone, video by using a webcam, and instant messaging over the Internet. Phone calls may be placed to recipients on the traditional telephone networks. Calls to other users within the Skype service are free of charge, while calls to landline telephones and mobile phones are charged via a debit-based user account system. Skype has also become popular for its additional features, including file transfer, and videoconferencing. In the world, Skype had 663 million registered users as of the end of 2010. (http://en.wikipedia.org/wiki/Skype). Now a days, imo, viver, tengu and whatsapp are the other most commonly used internet based communication technologies.

2.1.2.6. Radio and Television

Radio is an important form of media in Bangladesh as it is easily accessible - especially to those in smaller communities. Radio is also a powerful tool in reaching individuals who are illiterate. Such radio transmissions are used to provide information to such communities. Community Radio also promotes culture and diversity. Radio broadcasts such as these will be directed to the needs and interests of the local people. The following is a list of radio stations that can heard in Bangladesh via shortwave transmission and on the Internet: BBC – Bengali Service, VOA – Bengali Service, Radio Metrowave, DW Radio – Bengali, Bangla Radio, Broadcastings, Uradhura Radio, Eurobangla Audiocast, Radio Probash and Bangla Music Radio (http://www.bangladesh.com/radio/). Recent years have seen an massive upsurge in Bangladeshi television channels and FM Radio Stations. The total number of TV

Channels in Bangladesh is 27 including 3 state-owned TV Channels and the total number of Radio stations is 16 including 1 state-owned station named Bangladesh Betar and 1 online Radio station (http://en.wikipedia.org).

2.1.3. Communication Technology and Modernization

Modernization is the replacement of traditional structural elements by modern ones. In the context of development theory, modernization is understood as a trend toward urbanization, mass communication, general political participation, and general education (Lerner, 1958). Modernization may be accompanied by declining, stable, or rapidly increasing crime rates, depending on the place, particular conditions, and time frame under consideration (Savelsberg, 2011). Classical sociologists have understood modernization as a movement from small social units toward mass society, toward functional differentiation (Durkheim, 1984), toward high levels of rationality or toward modern action orientations such as universalism, achievement, and affective-neutrality (Weber, 1952). Whereas, modernization theory attempts to identify the social variables which contribute to social progress and development of societies, and seeks to explain the process of social evolution. It has strong relation with technology. New technology is a major source of social change. A new technology does not merely add something; it changes everything". People in society are always coming up with new ideas and better ways of making life easier and more enjoyable. Technology makes it possible for a more innovated society and broad social change. All aspects of our life are touched by the progress in science and technology in some way or the other. Technology is the use of scientific knowledge to make modern machines. Communications have also been modernized by technology. The effects of this modernization are there for us to see. Beside the advantages, communication technologies such as phones, cellular phones, Internet, fax machines, television, radio are etc. have adverse impacts on us including 1) children are becoming addicted to television programmes and computer games. Their education and outdoor activities have taken a back seat. 2) An overexposure to foreign culture is causing the younger generation to imitate the youth of the Western Nations and forget their own culture. 3) Criminals make use of the modern technology to promote fraud, crime and terrorism. 5) Unemployment in some sectors will increase as machines take over work done by men earlier (Sam, 2011).

2.1.4. Social Dysfunction

A perspective is simply a way of looking at the world. A theory is a set of interrelated propositions or principles designed to answer a question or explain a particular phenomenon; it provides us with a perspective. Sociological theories help us to explain and predict the social world in which we live. Sociology includes three major theoretical perspectives: the functionalist perspective, the conflict perspective, and the symbolic interactionist perspective. Each perspective offers a variety of explanations about the social world and human behavior. The functionalist perspective is based largely on the works of Herbert Spencer, Emile Durkheim, Talcott Parsons, and Robert Merton. According to functionalism, society is a system of interconnected parts that work together in harmony to maintain a state of balance and social equilibrium for the whole. For example, each of the social institutions contributes important functions for society: Family provides a context for reproducing, nurturing, and socializing children; education offers a way to transmit a society's skills, knowledge, and culture to its youth; politics provides a means of governing members of society; economics provides for the production, distribution, and consumption of goods and services; and religion provides moral guidance and an outlet for worship of a higher power. The functionalist perspective emphasizes the interconnectedness of society by focusing on how each part influences and is influenced by other parts (Mooney, Knox, and Schacht, 2007).

To offset the focus on stability of traditional functionalism, Merton introduced the concept of "dysfunction." Whereas functions contribute to the adjustment of the system, dysfunctions are those consequences that lead to instability and ultimately change. The analyst must recognize, Merton asserted, that institutional structures and cultural elements are interrelated and mutually supporting, and that the dominant orientation of socio-cultural systems is to stability (Merton 1948/1968, 95).

Merton insisted that social structures can only be analyzed in terms of both statics (stability) and dynamics (change). The concept of dysfunction allows functional theory to focus on change. The concept of dysfunction is based on tension, strain, or contradictions within component elements of socio-cultural systems. Dysfunctional elements create pressures for change within the system (Merton 1948/1968, 176). Social mechanisms within the system, including the interrelation and predominantly mutually

supporting elements of the system, operate to keep these strains in check, attempting to limit or minimize change of the social structure. However, such mechanisms are not always effective, and the accumulation of stress and resulting conflict often cause systemic change. One of the primary goals of functional analysis is to identify these dysfunctions and examine how they are contained or reduced in the socio-cultural system as well as how they sometimes cause systemic or fundamental change (Merton, 1948/1968, p. 107).

2.1.5. Crime

The concept of crime is always been changing from the ancient age with the changes of society, civilization, culture, economic, politics, science etc. Which act is considered, as a crime today, may be it will not considered as a crime tomorrow. Which act is crime that declared by the law of the state perspective to the society? Therefore, there is no universal definition of crime. The concept of crime is a running process. Simply we can define crime as any kind of activities social, moral or political, which violates the regular law, is called crime. Or, any kind of antisocial, immoral or simple behavior is crime. According to Mr. Tappan, "an intention al act or omission in violation of criminal law, committed without any defense or in justification and penalized by the law as felony or misdemeanor". There are certain characteristics of crime, which make an unlawful act or omission punishable under the law of the land. To be a crime, all condition and characteristics that are given below should be fulfill. 1) External consequence: Crime always have a harmful impact on society ma it be social, personal, emotional or mental. 2) Act (Actus): There should be an act or omission to constitute a crime. Intention or mens-rea alone shall not constitute a crime unless it is followed by some external act. 3) Mens-rea or guilty mind: Mens-rea is one of the essential ingredients of a crime. It may, however, be director implied. An act alone does not constitute a crime unless it is accompanied by guilty intention. 4) Prohibited act: The act should be prohibited or forbidden under the existing law. 5) Punishment: The act in order to constitute a crime should not only be prohibited by the law but should also punishable' by the State (Paranjape, 2002).

2.1.6. Deviance

The word deviance connotes odd or unacceptable behavior, but in the sociological sense of the word, deviance is simply any violation of society's norms. Deviance can range from something minor, such as a traffic violation, to something major, such as murder. Each society defines what is deviant and what is not, and definitions of deviance differ widely between societies. For example, some societies have much more stringent rules regarding drinking wine(http://www.sparknotes.com/sociology/deviance/section1.rhtml).

The study of Social Deviance is the study of the violation of cultural norms in either formal (criminal) or informal (deviant) contexts. Social deviance is a phenomenon that has existed in all societies where there have been norms. There are two possibilities for how an individual will act in the face of social norms; conform or violate. There are implicit social norms and explicit social norms. Explicit social norms are not necessarily laws (such as a sign at a computer lab that says food and drink are prohibited) (Hagan, 1994). Deviance is a relative issue, and standards for deviance change based on a number of factors, including the following:

Location: A person speaking loudly during a church service would probably be considered deviant, whereas a person speaking loudly at a party would not. Society generally regards taking the life of another person to be a deviant act, but during wartime, killing another person is not considered deviant.

Age: A five-year-old can cry in a supermarket without being considered deviant, but an older child or an adult cannot.

Social status: A famous actor can skip to the front of a long line of people waiting to get into a popular club, but a nonfamous person would be considered deviant for trying to do the same.

Individual societies: In the United States, customers in department stores do not try to negotiate prices or barter for goods. In some other countries, people understand that one should haggle over the price of an item; not to do so is considered deviant.

Deviant Traits: Sometimes people are considered deviant because of a trait or a characteristic they possess. Sociologist Erving Goffman used the term stigma to identify deviant characteristics. These include violations of the norms of physical ability or appearance. For example, people who are confined to wheelchairs or who have IQs over

140 are deviant because they do not represent the usual behaviors or characteristics of most people.

Social Control: Punishing people for deviant behavior reminds people what is expected of them and what will happen if they do not conform to society's norms. Every society has methods of social control, or means of encouraging conformity to norms. These methods of social control include positive sanctions and negative sanctions. A positive sanction is a socially constructed expression of approval. A negative sanction is a socially constructed expression of disapproval.

2.1.7. Delinquency

Delinquency is a kind of abnormality. When an individual deviates from the course of normal social life, his behavior is called delinquency. This has almost become a universal problem in most of the countries including Bangladesh. Thus the term has a very extensive meaning and includes rebellious and hostile behavior of children and their attitude of indifference towards society. Certain other acts such as begging, truancy, vagrancy, obscenity, loitering, pilfering, drinking, gambling, etc. which vicious persons very often commit are also included within the meaning of the term juvenile delinquency. There is a growing awareness among the people of the world about the problem of juvenile delinquency. Any society, undergoing changes in its structural and functional aspects is faced with the problem of dislocation and disequilibrium in the social, cultural, political and economic life of the community. When a juvenile, bellow an age specified under a statue exhibits behavior which may prove to be dangerous to society and or to himself he may be called a Juvenile Delinquent (Paranjape, 2002). Each state has its own precise definition of the age range covered by the word "juvenile". According to Bangladesh Penal Code (BPC) (Section- 82), "Noting is an offence which is done by a child under seven years of age". According to Section- 83, "Nothing is an offence, which is done by a child above 7 years of age, and under 14, who has not attained sufficient maturity of understand to judge of the nature and consequences of his conduct on that occasion".

2.1.8. Conceptual Framework of the Study

Communication technology encompasses a broad range of mediums, from the internet to radio to television to wireless signal providers. Communications technology is the activity of designing and constructing and maintaining communication systems and Communication is the exchanging or transferring of a message from a sender to a receiver. In Bangladesh, cell phone/land phone, internet and television/radio based communication technology or devices are mostly using and these are interconnected with each other. Internet can be used in cell phone or modern television as well as these technologies can use communication purposes separately. When these technologies use as dysfunctional way or abused then crime and deviant activities occurred and these two also are interlinked. The dysfunctional uses of these technologies can bring great miseries as well as have many adverse impacts on our life like: Social, Cultural, Economic, Health, Political, Environmental and Psychological.

Figure 1: Conceptual Framework of the Study
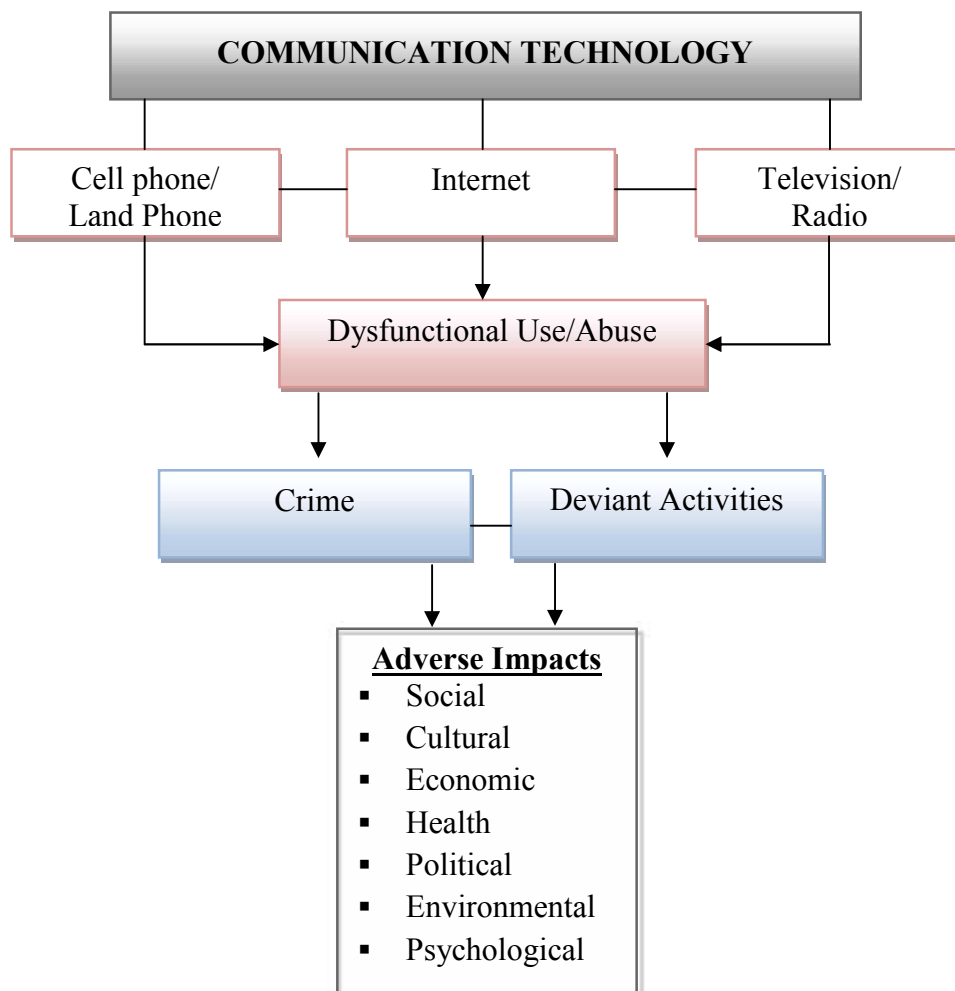
2.2. Related Theories

Van Dijk has defined the idea "network society" as a form of society increasingly organizing its relationships in media networks gradually replacing or complementing the social networks of face-to-face communication. The internet interpersonal, organizational, and mass communication come together. People become linked to one another and have access to information and communication with one another constantly. Using the internet brings the "whole world" into homes and work places. Also, when media like the internet becomes even more advanced it will gradually appear as "normal media" in the first decade of the 21st century as it becomes used by larger sections of the population and by vested interests in the economy, politics and culture. It asserts that paper means of communication will become out of date, with newspapers and letters becoming ancient forms for spreading information (Van Djik, 1991).

According to Castells, networks constitute the new social morphology of our societies and networks have become the basic units of modern society. The network society goes further than the information society that is often proclaimed. It is not purely the technology that defines modern societies, but also cultural, economic and political factors that make up the network society. Influences such as religion, cultural upbringing, political organizations, and social status all shape the network society. Societies are shaped by these factors in many ways. These influences can either raise or hinder these societies (Castells, 2000). A new society emerges when and if a structural transformation can be observed in the relationships of production, in the relationship of power and in the relationship of experience. These transformations lead to an equally substantial modification of social forms of space and time, and to the emergence of a new culture (Castells, 2008).

According to Marcus Felson and Ronald V. Clarke, opportunities cause crime. Opportunities are highly specific, concentrated in time and space and depend on everyday movements. One crime may produce opportunities for another; some products offer more tempting crime opportunities. Social and technological changes produce new crime opportunities. Opportunities for crime can be reduced and reducing opportunities does not usually displace crime, but can produce wider decline in crime. By reducing the opportunities for the commission of crimes and "target hardening", and encouraging

more authority figures to assume responsibility, potential offenders will be deterred. (Felson and Clarke: 1998).

According to Routine Activities Theory of Cohen and Felson, crime occurs whenever three conditions come together: (1) suitable targets, (2) motivated offenders and (3) absence of guardians. The phenomena that criminals and victims often have the same socio-demographic characteristics (e.g., are in relatively the same age group) and that criminals and victims often live in physical proximity of one another. Time, place, and interpersonal actions are at the heart of direct-contact predatory crimes because those crimes require the convergence of a suitable target, lack of capable guardians to commit a crime, and a motivated offender in time and space (Siegel, 1998).

Through Rational Choice Theory, Cornish and Clarke (1986) describe crime as an event that occurs when an offender decides to risk breaking the law after considering his or her own need for money, personal values or learning experiences and how well a target is protected, how affluent the neighborhood is or how efficient the local police are. Before committing a crime, the reasoning criminal weighs the chances of getting caught, the severity of the expected penalty, the value to be gained by committing the act, and his or her immediate need for that value.

Sigmund Freud's Psychoanalytic Theory has been one of the most influential theories of our time. It breaks the human personality down into three critical parts: Id, Ego and Superego. The Id is the most basic part and is present at birth. The Id functions with the pleasure principle. This means it tends to be a little animalistic. It can be irrational and illogical. The Ego works to maintain or control the Id. It operates on the reality principal and tries to keep the Id straight. The Ego makes a person have rational and realistic thoughts while interacting with others. The Superego is the conscience. It contains the principles and ideals of society. The Superego operates on idealism. It's goal is to inhibit the desires of the Id and convince the Ego to work towards more moral goals rather than realistic ones. He proposed that criminal behavior is either the result of mental illness or a weak conscience. These three major parts develop sequentially. The Id is at birth and the Ego come later once a child understands reality and begins to act realistically with his\her environment and others. The Super ego is developed last when the child learns moral values (Bartollas, 1990).

In the Social learning theory Cornell Montgomery (1843-1904) found that crime is a product of learning the norms. Values and behaviors associated with criminal activity. Social learning can involve the actual technique of crime as well as the psychological aspects of criminality. The view that human behavior is modeled through observation of human social interactions, either directly from observing those who are close and from intimate contact, or indirectly through the media. He proposed that social learning occurred through four main stages of imitation: Close contact, Imitation of superiors, Understanding of concepts, and Role model behavior.

In criminology, Differential Association is a theory developed by Edwin Sutherland proposing that through interaction with others, individuals learn the values, attitudes, techniques, and motives for criminal behavior. It states that criminal behavior is learned behavior and learned via social interaction with others. They learn how to commit criminal acts; they learn motives, drives, rationalizations, and attitudes. It grows socially easier for the individuals to commit a crime. Their inspiration is the processes of cultural transmission and construction. Sutherland had developed the idea of the "self" as a social construct, like when a person's self-image is continuously being reconstructed especially when interacting with other people (Paranjape, 2002).

Neutralization Theory is identified with the writings of David Matza (1957) and his associate Gresham Sykes (1961). Sykes and Matza view the process of becoming a criminal as a learning experience. Matza argues that the most committed criminals and delinquents are not involved in criminality all the time; they also attend schools, family functions, and religious services. Their behavior can be conceived as falling along a continuum between total freedom and total restraint. This process, which he called "Drift" refers to the movement from one extreme of behavior to another, resulting in behavior that is sometime unconventional, free, or deviant and at other time unnatural and serious. Learning techniques of neutralization allows a person to temporarily "drift away" from conventional behavior and get involved in more subterranean values and behaviors (Hagan, 1984).

Travis Hirschi (1969) told in his social control theory that delinquent acts result when an individual's bond to the society is week or broken". There are four principals that make up this bond (1) Attachment: The first bond, attachment, takes three forms: attachment to

parent, to school (teachers), and to peers. The bond of affection between a parent and a child thus becomes a primary deterrent to criminal activity. It's strengths depends on the depth and quality of parent- Childs interaction. (2) Commitment: Commitment describes efforts one must go through, and the time and energy that it takes to fulfill future needs and desires. A lack of commitment to conventional society creates a situation in which criminality and criminal behavior may take place. (3) Involvement: Involvement refers to one's engrossment in conventional activities, such as studying, spending time with the family & participation with the extra-curricular activities. (4) Belief: It is defined as the endorsement of the general conventional values & norms, especially the belief that law & society's rules in general are morally correct & should be obeyed (Adler, Mueller, and Laufer, 2004).

Van Dijk and Castells's theory of network society defined, people become linked to one another and have access to information and communication with one another constantly. Using the internet brings the whole world into homes and work places. Networks constitute the new social morphology of our societies and networks have become the basic units of modern society. This theory of Network Society is very much related to my study as it intend to find out the impact of modern communication technologies on social dysfunctions. In the dysfunctional society, communication technology users are often involved with crime and deviance with their modern communication technologies and leaned behavioral traits. Some of them did these for personal gain, absence of capable guardians & laws and weak conscience. Proper cultural practice does not work in the dysfunctional society and that's why their learned bad behaviors instigate to commit crime and deviance. Through interaction with others, individuals learn the values, attitudes, techniques, and motives for criminal behavior. It states that criminal behavior is learned behavior and learned via social interaction with others. From these point of view Sigmund Freud's Psychoanalytic Theory, Cornell Montgomery's Social learning theory and Edwin Sutherland's Differential Association theories are also very much related to the study.

2.3. Review of Related Laws in Bangladesh.

The following laws are currently active in Bangladesh for controlling communication technology based crime and deviance:

1. The Information and Communication Technology Act 2006
2. The Pornography Control Act 2012
3. The Indecent Advertisement Prohibition Act 1963
4. The Bangladesh Telecommunication Regulation Act 2001

2.3.1. Information and Communication Technology Act, 2006.

The Information & Communication Technology Act, 2006 undertaken by the Parliament received approval from the President on 23 *Ashwin*, 1413 corresponding to 8 October 2006. The act prepared to provide legal recognition and security of Information and Communication Technology and rules of relevant subjects.

Present Information and communication technology law's has a provision to punish anybody if he/she do false publicity, defamation, spread self made wrong information etc. about national leaders and renowned persons as well as any publicity against the state in the social networking websites or blogs (The Daily Prothom Alo: November, 04, 2013).

According to article 4(1) of this Act, if any person commits any crime that would have been punishable under this law if committed in Bangladesh, this act should be applied as if that crime has been committed in Bangladesh

Section 54 to 67 of the ICT Act 2006 describe the cyber crimes both civil and criminal matters. The followings shall be treated as crime and punishable offence;

• Unauthorized copying, extracting and downloading of any data, database
• Introduction of virus
• Damage and disruption to computer system and computer network
• Denial of access to authorized person to computer
• Providing assistance to make possible to commit to crime
• Hacking with computer system
• Tampering computer source documents

• Electronic forger for the purpose of cheating and harming reputation

• Using a forged Electronic record

• Publication of digital signature certificate for the fraudulent purpose

• Confiscation of computer, network etc.

• Publication of information which is obscene in electronic form

• Misrepresentation and suppressing material facts for obtaining digital signature certificate

• Breach of confidentiality and privacy

• Publishing false digital signature certificate

Section-54: Penalty for damage to computer, computer system, etc. If any person, without permission of the owner or any person who is in charge of a computer, computer system or computer network,

(a) accesses or secure access to such computer, computer system or computer networks for the purpose of destroying information or retrieving or collecting information or assists other to do so;

(b) downloads, copies or extracts any data, computer database or information from such computer, computer system or computer network including information or data held or stored in any removable storage medium;

(c) introduces or causes to be introduced any computer contaminant or computer virus into any computer, computer system or computer network;

(d) damages or causes to be damaged willingly in any computer, computer system or computer network, data, computer database or any other programmes residing in such computer, computer system or computer network;

(e) disrupts or causes disruption of any computer, computer system or computer network;

(f) denies of causes the denial of access to any person authorized to access any computer, computer system or computer network by any means;

(g) provides any assistance to any person to facilitate access to a computer, computer system or computer network, in contravention of the provisions of this Act, rules or regulations made there under;

(h) for the purpose of advertisement of goods and services, generates or causes generation of spams or sends unwanted electronic mails without any permission of the originator or subscriber;

(i) charges the services availed of by a person to the account of another person by tampering with or manipulating any computer, computer system or computer network; then the above said activities shall be treated as offences of the said person.

(2) If any person commits offence under sub-section (1) of this section, he shall be punishable with imprisonment for a term which may extend to ten years, or with fine which may extend to Taka ten lakhs, or with both

Section-57: Punishment for publishing fake, obscene or defaming information in electronic form.

(1) If any person deliberately publishes or transmits or causes to be published or transmitted in the website or in electronic form any material which is fake and obscene or its effect is such as to tend to deprave and corrupt persons who are likely, having regard to all relevant circumstances, to read, see or hear the matter contained or embodied in it, or causes to deteriorate or creates possibility to deteriorate law and order, prejudice the image of the State or person or causes to hurt or may hurt religious belief or instigate against any person or organization, then this activity of his will be regarded as an offence.

(2) Whoever commits offence under sub-section (1) of this section he shall be punishable with imprisonment for a term which may extend to ten years and with fine which may extend to Taka one crore.

The Ministry of Information and Communication Technology, Government of the People's Republic of Bangladesh is charged with the administration of this Act. There have been two amendments to the Information and Communication Technology Act, 2006 namely ICT ACT 2008 (amendment) and ICT ACT 2009 (amendment).

Therefore present situation is that the Government (Ministry of Home Affairs) is entitled to tap any telephone line of any person if it so desires without any prior warrant or order of any court and collect information, which can be used as evidence. Telephone tapping and collecting information from the conversation of two individuals is an infringement of fundamental rights. This is a violation of the right to privacy and Article 43 of the Constitution which states that "Every citizen shall have the right, subject to reasonable restrictions imposed by law in the interests of the security of the State, public order,

public morality or public health- (a) to be secured in his home against entry, search and seizure and (b) to the privacy of his correspondence and other means of communication.

Privacy primarily relates to government actions not private actions. Human rights guarantees do not impose broad obligations on governments to protect individuals against possible invasions of their privacy by other individuals. However Constitutional and international guarantees require that restrictions on freedom of expression, even in the interests of privacy, must meet a very high standard of legality and necessity. Governments in many countries are given powers to breach privacy. This is often done during criminal investigations, where police are permitted to seize private property from a suspect's house. Telephone tapping, where all information being transmitted over a phone line is secretly monitored, is often permissible for Law Enforcement Agencies although it requires permission from a court or proper authority subject to some restrictions (Amin, 2006).

2.3.2. Pornography Control Act, 2012

The Parliament has enacted the Pornography Control Act, 2012. The law was approved by the President of Bangladesh on 08 March 2012 having been accepted by the Parliament.

The preamble of the Act very correctly identifies the reason behind enacting this piece of legislation. The preamble says this Act has been enacted to prevent detoriation of moral and ethical values of the society. Information technology with its immense benefits has got some disadvantages as well if it is used by mischief people with criminal intention. It has been seen in our country that video clips, MMS etc of sexual intercourse or behavior relating to sexual activities have been recorded on camera by a section of people and then used to blackmail, cheat, defame girls and women.

Social media sites such as Facebook are immensely popular and it is very easy to spread a video clip around the globe. This Act makes any such recording of video, still picture and publication of them in print, electronic or whatsoever form a Criminal offence. Some section of the society cultures a thought that if the video was recorded or the still picture was taken with the consent of the persons being filmed it will not be a crime; but actually and very justly it is a crime under section 8 of the Pornography Control Act 2012 and

any person convicted under the above mentioned section can be sentenced up to 7 (seven) years of imprisonment.

The Act has a separate section for child pornography and for this act any person below the age of 18 is a child and any pornography recording, pictures with a child being filmed will carry a sentence of 10 years imprisonment and five lac taka fine. Few other feature of the Act is that it empowers the Court to take expert opinion/help from IT experts and empowers the Investigation Officer to siege or search any device, book, CD etc as evidence.

Section 11 of the Act states that Government may constitute Tribunal which is yet to be established for trial of offences under the Act and No Rules have been made by the Government as of now. Any false and frivolous allegation under this Act carries a sentence of 2 years imprisonment and up to 1 lac taka fine.

Overall this Act is definitely a timely initiative by the Government to curb increasing number of videos of sexual activities being recorded and released in the internet and now we await few convictions of the accused criminals to establish example in the society so that the criminal minds which are hatching conspiracy to get new pornography videos recorded are scared and terrified

2.3.3. The Indecent Advertisement Prohibition Act 1963

The Indecent Advertisement Prohibition Act 1963 is enacted for prohibiting indecent advertisements (http://bdlaws.minlaw.gov.bd/print_sections_all.php?id=333).

According the section 2(a) "advertisement" includes any notice, circular or other document, displayed on any house, building or wall, or published in any newspaper or periodical, and any announcement made orally or by any means of producing or transmitting light or sound, but does not include trade circulars issued by manufacturers of drugs to medical practitioners;

2(b) "indecent" includes whatsoever may amount to any incentive to sensuality and excitement of impure thoughts in the mind of an ordinary man of normal temperament, and has the tendency to deprave and corrupt those whose minds are open to such immoral influence, and which is deemed to be detrimental to public morals and

calculated to produce pernicious effect, in depraving and debauching the minds of persons;

In case of Prohibition against persons advertising, displaying, etc, indecent advertisements, this act stated in the section 3(i) no person shall take any part in the publication of any advertisement which is indecent; and 3(ii) no person having the ownership, possession or control of any property or public place shall knowingly allow any advertisement which is indecent to be displayed on such property or place, or to be announced there from.

In case of penalty provision this act stated in the section 4: whoever contravenes any of the provisions of this Act shall, on conviction, be punishable- (a) in the case of a first conviction, with imprisonment which may extend to six months, or with fine, or with both; and (b) in the case of any subsequent conviction, with imprisonment which may extend to one year, or with fine, or with both.

REVIEW OF RELATED LITERATUE

3.1. Network Society

The term network society describes several different phenomena related to the social, political, economic and cultural changes caused by the spread of networked, digital information and communications technologies. A number of academics are credited with coining the term since the 1980s and several competing definitions exist.

Van Dijk has defined the idea "network society" as a form of society increasingly organizing its relationships in media networks gradually replacing or complementing the social networks of face-to-face communication. Personal communication is replaced by digital technology. This means that social and media networks are shaping the prime mode of organization and most important structures of modern society. He compares this type of society to a mass society that is shaped by groups, organizations and communities ('masses') organized in physical co-presence (Van Djik, 1991). Van Dijk's The Network Society describes what the network society is and what it might be like in the future. The first conclusion of this book is that modern society is in a process of becoming a network society. This means that on the internet interpersonal, organizational, and mass communication come together. People become linked to one another and have access to information and communication with one another constantly. Using the internet brings the "whole world" into homes and work places. Also, when media like the internet becomes even more advanced it will gradually appear as "normal media" in the first decade of the 21st century as it becomes used by larger sections of the population and by vested interests in the economy, politics and culture. It asserts that paper means of communication will become out of date, with newspapers and letters becoming ancient forms for spreading information (Van Djik, 1991).

According to Castells, networks constitute the new social morphology of our societies. It's not just about networks or social networks, because social networks have been very old forms of social organization. It's about social networks which process and manages information and is using micro-electronic based technologies." The diffusion of a networking logic substantially modifies the operation and outcomes in processes of

production, experience, power, and culture. For Castells, networks have become the basic units of modern society. The network society goes further than the information society that is often proclaimed. He argues that it is not purely the technology that defines modern societies, but also cultural, economic and political factors that make up the network society. Influences such as religion, cultural upbringing, political organizations, and social status all shape the network society. Societies are shaped by these factors in many ways. These influences can either raise or hinder these societies (Castells, 2000).

The space of flows plays a central role in Castells' vision of the network society. A new society emerges when and if a structural transformation can be observed in the relationships of production, in the relationship of power and in the relationship of experience. These transformations lead to an equally substantial modification of social forms of space and time, and to the emergence of a new culture (Castells, 2008). The society we live in is not a society in social division. It is a society based on an informational development model, in which some cognitive skills are more valued than others, namely: the highest education level, formal literacy and technological literacy's (Cardoso, 2005).

The power of the networks that constitute the network society over human communities or individuals who are not integrated in these networks. In this case, power operates by exclusion/inclusion. Power is the structural capacity to impose one´s will over another´s will. There can be bargaining, but in the last resort, there is power when regardless of the will of someone (a person, a social group, a category of people, an organization, a country, and the like) it must submit to the will of the power holders – or else, be exposed to violence, under different forms.

The network society is a global society. However, this does not mean that people everywhere are included in these networks. In fact, for the time being, most are not. But everybody is affected by the processes that take place in the global networks of this dominant social structure. This is because, the core activities that shape and control human life in every corner of the planet, are organized in these global networks: financial markets; transnational production, management, and distribution of goods and services; highly skilled labor; science and technology; communication media, culture, art, sports;

international institutions managing the global economy and inter-governmental relations; religion; the criminal economy; and the transnational NGOs that assert the rights and values of a new, global civil society (Held et alter, 1999; Castells, 1998/2000b; Volkmer, 1999; Stiglitz, 2002).

3.2. Communication Technology, Media and Network Society

The technological context of the network society is established not just by microprocessors and the Internet, but by an emerging wave of diverse new technologies that find their uses relative to one another. The 2005 Lemelson-MIT list of the top twenty-five technological innovations those proved to be important not just because they provided new capabilities, but because these capabilities met real human needs in a technological context established by earlier innovations and in an evolving social context. The list runs: Internet, cell phone, personal computers, fiber optics, Email, commercialized GPS, portable computers, memory storage discs, consumer level digital cameras, RFID (radio frequency identification) tags, MEMS, DNA fingerprinting, Air bags, ATM, advanced batteries, hybrid car, OLEDs, display panels, HD TV, space shuttle, nanotechnology, flash memory, voice mail, modern hearing aids and short range, high frequency radio (Mitchell, 2005).

A central feature of the network society is the transformation of the realm of communication, including the media. Communication constitutes the public space, i.e. the cognitive space where people's minds receive information and form their views by processing signals from society at large. In this regard, the new communication system is defined by three major trends: (1) Communication is largely organized around media business conglomerates that are global and local at the same time, and that include television, radio, the print press, audiovisual production, book publishing, music recording and distribution, and on line commercial firms. These conglomerates are linked to media organizations around the world, under different forms of partnership, while engaging at the same time in fierce competition amongst themselves. (2) Communication is both global and local, generic and customized, depending on markets and products. (3) The communication system is increasingly digitized, and gradually interactive. So, concentration of business does not mean a unified, unidirectional process of communication.

Societies have moved from a mass media system to a customized and fragmented multimedia system, where audiences are increasingly segmented. Because the system is diversified and flexible, it is increasingly inclusive of every message sent in society. As the network society diffuses, and new communication technologies expand their networks, there is an explosion of horizontal networks of communication, quite independent from media business and governments, that allows the emergence of mass communication. It is mass communication because it is diffused throughout the Internet, so it potentially reaches the whole planet. It is self-directed because it is often initiated by individuals or groups by themselves, bypassing the media system. The explosion of blogs, blogs, podding, streaming, and other forms of interactive, computer to computer communication sets up a new system of global, horizontal communication networks that, for the first time in history, allow people to communicate with each other without going through the channels set up by the institutions of society for socialized communication.

Mainstream media, and particularly television, still dominate the media space, although this is changing fast. Because the language of television is based on images, and the simplest political image is a person, political competition is built around political leaders. Few people know the actual programs of political parties. And programs are built by pollsters focusing on what people would like, so they tend to be very similar at least in their wording. People think in metaphors, and built these metaphors with images. Trust and character are constructed around the image of a person. Because of this, character assassination becomes the political weapon of choice. Negative messages are much more effective than positive messages. And the most negative message is to undermine the trust of people in their potential leader by diffusing, fabricating, or manipulating damaging information. Media politics and image politics lead to scandal politics, the kind of politics at the forefront of the political processes almost everywhere in the world.

New media is the concept that new methods of communicating in the digital world allow smaller groups of people to congregate online and share, sell and swap goods and information. It also allows more people to have a voice in their community and in the world in general. The most important structural characteristic of new media is the integration of telecommunications technologies. The second structural new media characteristic of the current communications revolution is the rise of interactive media.

Interactivity is a sequence of action and reaction. The downloaded link or the supply side of web sites, interactive television and computer programs is much wider that the uplink or retrieval made by their users. The third, technical, characteristic of new media is digital code. The new media are defined by all three characteristics simultaneously: they are media which are both integrated and interactive and also use digital code at the turn of the 20th and 21st centuries (Castells & Cardoso, 2005).

The network society is manifested in the transformation of sociability. From studies in different societies, that are most instances Internet users are more social have more friends and contacts and re more socially politically active than non users. Moreover, the more they use the Internet, the more they also engage in face to-face interaction in all domains of their lives. Similarly, new forms of wireless communication, from mobile phone voice communication to SMSs, WiFi and WiMax, substantially increase sociability, particularly for the younger groups of the population. The network society is a hyper social society, not a society of isolation. People, by and large, do not face their identity in the Internet, except for some teenagers experimenting with their lives. People fold the technology into their lives, link up virtual reality and real virtuality; they live in various technological forms of communication, articulating them as they need it. Society shapes technology according to the needs, values an interests of people who use the technology. Furthermore, information and communication technologies are particularly sensitive to the effects of social uses on technology itself. The history of the internet provides ample evidence that the users, particularly the first thousands of users, were, to a large extent, the producers of the technology. However, technology is a necessary, albeit not sufficient condition for the emergence of a new form of social organization based on networking, which is on the diffusion of networking in all realms of activity on the basis of digital communication networks (Castells, 2006).

Media in the network society present a large variety of channels of communication, with increasing interactivity. And they do not constitute a global village of a unified, Hollywood-centered culture. They are inclusive of a wide range of cultures and social groups, and send targeted messages to selected audiences or to specific moods of an audience. The media system is characterized by global business concentration, by diversification of the audience (including cultural diversification), by its technological versatility and channel multiplicity, and by the growing autonomy of an audience that is

equipped with the Internet, and has learned the rules of the game – namely, everything that is a collective mental experience is virtual, but this virtuality is a fundamental dimension of everybody´s reality. The enclosure of communication in the space of flexible, interactive, electronic hypertext has a decisive effect on politics. Media have become the public space (Volkmer, 2003).

The concepts about network society described by Jan van Dijk, Barry Wellman, Hiltz and Turoff, and Manuel Castells are embodied in much digital technology. Social networking sites such as Facebook and Twitter, instant messaging and email are prime examples of the Network Society at work. These web services allow people all over the world to communicate through digital means without face-to-face contact. This demonstrates how the ideas of society changing will affect the persons we communicate over time (http://en.wikipedia.org/wiki/Network_society).

The Internet provides an opportunity to the public and healthcare professionals to access medical and health information, improve the efficiency and effective, timely healthcare. The rise of mobile systems and the widespread adoption of the cell phone mean that mobile applications are an exciting and rapidly expanding domain for such applications. Many new offerings are being developed through digital appliances, computer terminals and mobile devices (Katz, James & Acord, 2005).

It is likely that "blogs," or web logs (which are essentially on-line diaries with an interactive component that encourages others to leave comments), will be playing a growing and complementary role in these processes (Katz, James & Acord, 2005). It is worth including in our analysis a brief mention of the way mobile technology is being used to control malaria and AIDS. In the case of AIDS, free text messaging services are available in Kenya, where users can send text questions and receive free answers. As well, the free service sends out daily tips on how to prevent infection and deal with the disease's consequences. This service is provided by NGO One World (BBC, 2004).

3.3. Informationalism and Network Society

A network society is a society whose social structure is made of networks powered by microelectronics-based information and communication technologies. A network is a set of interconnected nodes. A node is the point where the curve intersects itself. Communication networks are the patterns of contact that are created by flows of messages among communicators through time and space (Monge and Contractor, 2003). So, networks process flows. Flows are streams of information between nodes circulating through the channels of connection between nodes. A network is defined by the program that assigns the network its goals and its rules of performance.

Networks became the most efficient organizational forms as a result of three major features of networks that benefitted from the new technological environment: flexibility, scalability, and survivability. Flexibility: they can reconfigurate according to changing environments, keeping their goals while changing their components. They go around blocking points of communication channels to find new connections. Scalability: they can expand or shrink in size with little disruption. Survivability: because they have no center, and can operate in a wide range of configurations, they can resist attacks to their nodes and codes, because the codes of the network are contained in multiple nodes, that can reproduce the instructions and find new ways to perform (Castells, 2004).

The network society works on the basis of a binary logic of inclusion/exclusion, whose boundaries change over time, both with the changes in the networks´ programs and with the conditions of performance of these programs. It also depends on the ability of social actors, in various contexts, to act on these programs, modifying them in the sense of their interests. The global network society is a dynamic structure, it is highly malleable to social forces, to culture, to politics, to economic strategies (Castells, 2004).

In the communication realm, the network society is characterized by a pattern of networking, flexibility, recombination of codes, and ephemeral symbolic communication. This is a culture primarily organized around and integrated by a diversified system of electronic media, including the Internet. Cultural expressions of all kinds are enclosed and shaped by this inter-linked, electronic hypertext, formed by

television(s), radio, print press, films, video, art, Internet communication, in the so-called multimedia system (Croteau & Haynes, 2000).

Technology, understood as material culture, is a fundamental dimension of social structure and social change (Fischer, 1992). A technological paradigm organizes a series of technological discoveries around a nucleus, and a system of relationships that enhance the performance of each specific technology. It is frequently said that society is now living in an information age, which has provided various information technologies (i.e. the Internet and cellular phones). However the "information age" has not been clearly defined. Although many define the current economy as an information economy, there is still no universally accepted definition to refer to the current society. Currently, over thirty different labels for referring to contemporary society are used in academic fields and casual conversation (Alvarez & Kilbourn, 2002). Some of these labels include: information society, global village, digital society, wired society, post-industrial society, and network society. Some of the terms describe the same phenomena, while others do not.

Informationalism is a technological paradigm based on the augmentation of the human capacity of information processing and communication made possible by the revolutions in microelectronics, software, and genetic engineering. Computers and digital communications are the most direct expressions of this revolution. Under the informational paradigm, the capacity of any communicating subject to act on the communication network enables people and organizations with the possibility to reconfigure the network, according to their needs, desires, and projects.

An analysis of the different information society models can have as its starting point the individualization of four dimensions (technology, economy, social well-being and values), through which one can better understand what each society's position is in relation to the global information society panorama. On this basis one can consider that a society is an informational society if it possesses a solid information technology: infrastructure, production and knowledge (Castells & Himanen, 2001).

3.4. Communication Technology and Identity

The world of communications has changed radically due to the development of digital technologies. The multiplicity of Television channels and Internet and the access to information in all its formats from around the world has had a strong impact on traditional media and, at the same time, as Thompson (1995) points out, digital technologies have transformed the spatial and temporal organization of social life, creating new forms of action and interaction, new kinds of social relationship and new ways of relating to others and to oneself. The new forms of social interaction allowed by Internet oblige us to reconsider the meaning of concepts as community or identity. The big impact of Internet on the expression and perception of social identities is relatively clear: it spans cultural spheres and geographical boundaries and allows communication from many to many. One of the most important factors for the development of collective identity is and has been communication. There are two types of identity building which are relevant here (Tubella, 2005): 1) Individual identity understood as the sense of oneself as an individual endowed with certain characteristics and potentialities, and 2) Collective identity, understood as a sense of oneself as a member of a social group. It is a sense of belonging, a sense of being part of a collectivity.

Giddens (1991) tries to understand the persistence of national identities and propose to be considered by analyzing how citizenship is created and recreated in local situations in the context of the everyday uses and production of culture. During many years, Television has taken the place of vernacular literatures in the construction of a common imaginary and complicity.

Its very much concern is that while traditional media, in special television, play an enormous role in the construction of collective identity, Internet influences the construction of individual identity, as individuals increasingly rely on their own resources to construct a coherent identity for themselves in an open process of self formation as a symbolic project through the utilization of symbolic materials available to them. The difference resides in the fact that the use of television in the construction identity is vertical, from one to many and opposite, the use of Internet in this process of self formation depends of the will of each individual. It is a horizontal use, from many to many (Tubella, 2005).

Network society is not just the result of the impact of information technologies on social structures, but a new social form using communication as one of the central factors defining it, and becoming the emblematic figure of our current society. The communication practice most affected by Internet use in 2002 and certainly now is television. A 16.6% of people watched less television since they were connected to the Internet. Of this 16.6%, 61.7% were under 30 years old (Tubella, 2005). Therefore, television is still the reference communication medium, yet in contrast, people trust radio more. From the point of view of consumer confidence, radio occupies the first place as 29.6% trust it more, compared to 25.8% who have more confidence in the printed press and 20.8% who trust television. If we analyze consumer confidence levels in the Internet, we see that those who trust it a lot are mainly users (89.3%), although 67% of those who say they trust it very little are also users (Tubella, 2005).

3.5. Communication Technology, Crime and Deviance

3.5.1. The nature of interrelationship between Cell phone/land phone, Crime and Deviance

The cell phone, as we more commonly call 'the mobile' is not only a friendly, handy gadget for the gangs but now a part and parcel and almost a prosthetic for any urban dweller. Dhaka, the densely populated capital of Bangladesh, whether a prince or a pauper, the majority of the Dhaka citizens own a cell phone. It became a everywhere gadget offering more flexibility, mobility to living in the stagnant, ever-jammed city. The user groups include not only the juvenile group of teens and early twenties but also professionals, businessmen, and housewives. Not only family and personal affairs, but also businesses like banking, small trades are run and dealt over mobiles. Conversely, expansive, uncontrolled distribution and easy access of mobiles have also augmented crime rates (Samayeen, 2009).

A study on usages and abuses of mobile internet in Bangladesh found, the income level of the mobile users is more than 10 thousand taka ($ 142) per months. Educated and advanced people cannot imagine a day without the connection of internet. Young people (18-25 years old) are highly involved in using MI facilities. Similarly non-using Internet in any means is higher in this category. Over 40 years old people are less interested

toward these facilities. Teenage or youngsters are taking connections through this convenient medium. The people who are using MI facilities they (54.55 percent) have given strong arguments in favor of these services but most of the Internet users are concern about its cost and about half portion of the users (48.15 percent) has mentioned it as very high. Major portion of the MI users is young. So, there is a chance of being misused of this advanced technology. They have less business dealings or official purposes but they are using Internet heavily. Surfing facebook or such social networking sites, meaningless chitchat with their friends, sending odd website links to the known subscribers, enjoying 'porn' websites etc. are the main tasks of them. Many of them also use credit cards so it is found that they are spending much money and time whole night. This is treated as a threat for young generation. More than 50 percent respondents have agreed that it is being misused. Among the total MI users about 44 percent think that the main motivation behind mobile internet abuse is having this service is necessity. For the professional purpose using this service is inevitable and in some cases, it is found that they are being smart through using this technology. Friends and others give value of their advancement (Hamid & Akter, 2009).

A research study in the USA found various bad habits resulted from cell phone use like- talking over cell phone in the toilet (3 persons out of 4), immediate searching cell phone after morning rise, using and playing cell phone before go to sleep, spend extra money for using cell phone application, purchasing fashionable dresses from online shopping through using smart phone, capturing pictures meaninglessly, playing games and passing more time to see online videos, all time using headphone, searching mobile charger here and there, using cell phone and showing busyness during eating, playing games or running mobile apps in the period of waiting time, don't interested talking side men rather than wasting time in the cell phone (The Daily Prothom Alo: October 22, 2013).

According to research by C&R Research, 22 percent of young children own a cell phone (ages 6-9), 60 percent of tweens (ages 10-14), and 84 percent of teens (ages 15-18. And cell phone companies are now marketing to younger children with colorful kid-friendly phones and easy-to-use features (http://www.cmch.tv/mentors/hottopic.asp?id=70).

Bangladesh is still a third world country after all. But, despite all this, many users are able to check their mail, see what's going on, and post to this blog. Bangladesh is one of

the few countries in the world that can guarantee each one of its residents can get a cell phone signal no matter where they are in the country. The television commercials play a vital role in this cultural morphology bringing changes is behavioral patterns. Unlike earlier times, when an amateur lover would throw an articulately written poem in a minutely folded paper to his next door sweetheart over moss-ridden roof tops or through grilled balconies, it is suddenly much easier for the young boys and girls to communicate via cell phones. Crank calls increase as unknown male voices introduce themselves as "brother" pestering random girls, addressing them as "sister" and offer their friendship. It is not only the upper-class, fashion crazy *Dhakaites* (citizens of Dhaka) carrying the latest model of mobiles has created this new society. The impact of cell phones on slum dwellers, a parallel world to the Dhaka was seen. Korail, the biggest shantytown over 100 acres land, juxtaposed with the affluent neighborhood of Banani in Dhaka, has more than 120 thousand families, none of them have definite address and nearly all dispute over their occupied land. Yet, most of these families own at least one or more mobiles. Even the slum kids own cell phones. Deprived of any formal education these kids become vendors, household workers or delivery boys in neighboring areas. An emerging new business, cell phone booths to reload the prepaid phone cards and renting phones are also mostly served by slum dwellers. The transient shanty-towns or slums within Dhaka are filled with crimes like, drug abuse, smuggling, drug trafficking, prostitution and myriad of other anti-social activities (Samayeen, 2009).

In 2005, a police officer in charge of Ramna thana, admitted an open secret that local small grocery stores are paid terrorist agents and the slums are taken to be the centre of these criminal acts. The crimes are maneuvered not only by calls and codified language but also by SMSs and missed calls. 1, 2 or 3 the number of missed- calls also acts as the cryptogram and perhaps give direction of action. As he disclosed a recent incident of Pichi Hannan, a pseudonym of the godfather in Ramna area, the heart of Dhaka was caught with evidence and related clues from a cell phone left in the crime scene. A sub-inspector was shot dead at the scene of the crime and the salavaged cell phone appeared to be a valuable source to trace back the action for the team. There were several missed calls, which gave clues to unravel and track many of the associated people of the gang. They caught not only the group leader but also the accomplice correspondent from the police force. As one of the insidious sides, the mammoth billboards and all-pervading banners, for example, are changing the streetscape, turning Dhaka into a collage of cell

phone ads. Other many complains that cell companies didn't even leave the tranquil beach of Cox's Bazaar, which is now filled with huge billboards of cell phones, hiding the scenic backdrop and sky within our visual limits. Instinctively, the symbolic content of post-modernism and globalization adorns most of its major roads like Airport road, VIP roads and more of Dhaka. The small and big structures get hidden behind the conspicuous mobile ads and create a new architectural elegance (Samayeen, 2009).

Day by day the rate of forgery increasing rapidly over cell phone and its variation is being changed with the time in Bangladesh. At a result, many cell phone users are being victimized financially, mentally and some cased physically. A well trained gang working for this and noted forgery techniques of them are forgery in the name of mobile recharge/flexi load, winning a lottery from the mobile operator, transfer money/talk time from the cell phone users account through computer generated missed call (coded: +243 or +8802400 or +0904) (The Daily Prothom Alo: November 12, 2013).

A government research of Japan recently found that students who talked more time over cell phone got low score in the exam than who talked less. Students of junior high school passed more than one hour of half day for using cell phone, web browsing, e-mail sending, computer games etc. There is a tendency to use smart phone at the age of 11 years old. Almost 54 percent last year students of elementary school have mobile phone and growing a non-studying tendency among them. The research team request parents to monitor their children's cell phone use (The Daily Kaler Kantho: August 26, 2014).

In this digital age, it is no wonder that some misguided persons would adopt digital techniques to cheat or steal. During a recent admission test at the Dinajpur's Hajee Mohammad Danesh Science and Technology University, a student was using what looked like a calculator. It was later found to contain a camera and a SIM card so that it could be used as a smartphone. The student was taking pictures of the question paper and sending images to his accomplices outside. The answers were appearing on the screen soon afterwards (Matin, 2014).

On October 29, 2010, RAB arrested a gang of eight students who sent answers to multiple-choice questions via SMS to freshmen aspirants inside Dhaka University admission test halls. A team of RAB-3 and officials of DU administration tracked the

gang for a week after an admission seeker. RAB caught kingpin Aminul Islam inside a Kha unit admission test hall when he was sending out answers to admission seekers via text messages. Aminul prepared well for the exam and entered the hall with a fake identity and a hidden mobile phone. He got set number three of the question paper. He then texted "3" to five of his gang members, who forwarded the text to their client students. The client freshmen aspirants had also smuggled in mobile phones inside the test halls. And all the correct answers were sent to them via SMS from the five gang members. RAB-3 source mentioned, the gang had been helping examinees cheat in various competitive exams for the last couple of years. And Aminul got Tk 40,000 to Tk 50,000 for sitting for an exam while the other members of the gang received handsome amounts from admission seekers (The Daily Star: October 30, 2010).

The Rapid Action Battalion recently arrested one person along with 635 illegal Subscriber's Identity Module (SIM) cards at Gulisthan Mobile Plaza in Dhaka city. RAB officials alleged that some employees of cell phone operators were selling SIM cards to the subscribers without registration to evade taxes. The SIM cards having no registration are generally used for extortion and other criminal activities, they claimed (The New Age: March 8, 2010).

The picture of cell phone abuse in the hill tracks area is very much unsatisfactory. In this area many young girl's secret picture and video captured with or without their consent and later the abusers use those secret contents in the illegal purposes. Bad people firstly made love with them and then make physical relation to some heinous purposes. Later, those contents are transferred to one cell phone to another cell phone through Bluetooth or infrared. Many of them uploaded those contents in the internet with the help some godfather. By this time, many victims migrated to another place and still their parents are facing much unexpected situation. Rangamati Police Super mentioned, a secret business of cell phone and hidden cam is running in the whole country and hill tracts area is not separate one (The Daily Ittefaq: April 29, 2010).

Extortion and threat to high profile people using cell phones is going unabated as law enforcers could hardly trace the criminals who manage their SIM cards without following proper registration procedure. The callers and the sellers of the RUIM (removable user identity module) card are still remaining out of the dragnet due to fake

registration. Various gangs are also demanding hefty amounts from government high-ups, businessmen and wealthy people using such SIM or RUIM cards. If anyone does not want to meet their demands, the criminals threaten to kill them or abduct their children. Moreover, SIMs which are sold without any registration or by providing fake information are also being used for issuing threats for personal vengeance or teasing girls. In many cases criminals use photographs of other people to get the registration. RAB alone receives 70 such complaints on an average every day and police also receive a good number of such complaints. RAB and Police said that they were failed to trace offenders in ninety percent cases due to user's fake registration (Islam, 2010).

Recently, RAB-03 arrested Marzia Zannati, an employee of Islamic Insurance called Governor of Bangladesh Bank on 30 November, 2014 in the name Skeikh Rehana, sister of Bangladesh Prime Minister for helping two insurance employee and she tried to earn at least 2 crore taka in this way (The Daily Prothom Alo: December 06, 2014).

Two Dhaka University professors were threatened over phone for extortion using the name of Subrata Bain, one of the most feared criminals in Dhaka city in recent years, heading the most-wanted list of Bangladesh Police and who has reportedly been absconding since late 2004 (The New Age Extra: July 11-17, 2008).

According to law enforcement officials and other individual sources mentioned in the same report, extortion threats through phone calls using Subrata Bain's name has seen a spectacular rise over the last one month with middle class head of families being the prime target. The callers invariably claim to be Bain himself or one of the members of Bain's gang. On June 27, 2008 a man named Moazzem Hossain Khowaj was arrested from Rayerbazar with five mobile phone SIM cards in his possession by the Detective Branch (DB) of police for making extortion calls and earning many lakhs by simply using the name 'Subrata Bain'. A few years back, a similar panic had gripped Dhaka when random callers would demand extortion in houses around Dhaka using 'Kala Jahangir's' name, another most wanted criminal. The callers had in possession the victim's land and cellular phone numbers, knew the whereabouts of the family and their financial position, and could even track daily movement as well as change in address or phone number, information with which they frightened the victims.

Many people were forced to pay money, many shifted residences or changed telephone numbers, and fell seriously ill from persistent tension. The detective branch of police arrested Khowaj, an old associate of Subrata Bain, who had been collecting extortion by threatening industrialists and businessmen over phone for many of years. The police recovered 40 loose sheets of small paper containing 500 contacts of different businessmen, doctors, engineers and political leaders. Of the five mobile phone connections that he used, one of them matched the number against which the police were tracing him. The detective branch has identified that a section of fraudsters, who threaten people over phone for extortion, hail from Madaripur. In 2002, the law enforcing agency arrested 50 of them all from Madaripur on similar charges. Their network is spread across the country and mostly in operation in the Dhaka city (The New Age Extra: July 11-17, 2008).

Stalking by youth is a serious and potentially damaging form of victimization. A study examined the nature and contexts of stalking by juveniles and the utility of IOs (interventions orders) to manage this behavior. Of the 906 applications during the study period, 33.1 percent (299) met the study criteria for stalking. The majority of stalkers were male (64%) and most victims female (69%). Most pursued a previously known victim (98%) and favored direct means of contact via unwanted approaches (76%) and telephone calls or text messaging (67%). Threats (75%) and physical assaults (54%) were common (Purcell, Flower, and Mullen, 2009).

Use of cell phone during driving may cause accident and bring miserable conditions. Cell phone- News updated a list of countries that have banned the use of a cell phone when driving unless used with some form of hands-free kit including Australia, Austria, Bahrain, Belgium, Brazil, China, Denmark, France, Germany, Hong Kong, India - New Delhi, Ireland, Israel, Italy, Japan, Jordan, Kenya, Malaysia, Mexico, Netherlands, Norway, Pakistan, Philippines, Poland, Portugal, Romania, Russia, Singapore, Slovak Republic, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, Turkmenistan, UK, USA and Zimbabwe (http://www.cellular-news.com/car_bans/).

The scientific studies indicated that engagement in a cell phone conversation while driving significantly degrades driving performance and contributes to an increased risk

of vehicular incidents. Various scientific studies described vehicle control degradation as: A delay in brake activation three times longer than the reaction deterioration found in drivers under the influence of alcohol; A four-fold increase in risk associated with the use of a cell phone while driving as compared to not using a cell phone; The increase in the relative risk of vehicle collisions similar to the hazard associated with driving with a blood alcohol level at the legal limit; A diversion of the driver's attention and situational awareness from driving environment and potential hazards that may unexpectedly impact safety, during cell phone conversations; A compromise in the safety margin (e.g., following distance in adverse driving conditions) provided by a fully aware and responsive driver. This compromise is caused by secondary tasks that demand the cognitive engagement of the drivers, such as cell phone conversation engagement; The reduction in the ability to maintain lane position while operating a heavy vehicle and an increase in potential crash hazard exposures for experienced drivers who were simultaneously engaged in tasks that required the cognitive attention (e.g., cell phone conversations) of the drivers; No difference in the level of safety for the use of hands-free compared to hand-held design cell phones (Lamble, Kauranen, Laakso and Summala, 1999).

During recent political disharmony of Bangladesh, Bangladesh police received many SMS showing threat over VOIP facilities (The Daily Prothom Alo: October 27, 2013). Very recent, on 3 September, 2015 there a call was come into an OC of Dhaka metropolitan police's mobile number from IGP of Bangladesh to release a criminal immediately otherwise he will be suspended within 10 minutes. After investigation it was confirmed that the mobile number of IGP was real and criminals did the call through using internet with the help of software named Spoofing.

Before that there many mobile related crimes occurred in Bangladesh. A phone call was given to all UP members from the mobile number of Member of Parliament of Tangail-6 and demanded speed money for allocating big budget for their union parishod. Same mobile fraud was did with MP Nurunabi Shaown and UNO of Gopalgonj. Another incident was comminuted with main urban planner of Dhaka North City Corporation. A nude SMS was sent to some government high officials from this mobile number as well as he also got same SMS from his own number. After investigation, it was cleared that this mobile fraud did with the help of internet and a 10 members group doing this all

over the country. The investigator team indentified 120 fake bKash account through those money transaction were completed (The Daily Jugantor: September 09, 2015).

The Directorate General of Forces Intelligence (DGFI), confirmed that all the mobile phone operators of the country purchased equipments that help them (security organs) to tap phones from their offices. They call it Lawful Interception (LI), the legally sanctioned official access to private communications, such as telephone calls or messages. The Bangladesh Telecommunication (amendment) Act, 2006 has been made in the name of protecting 'national security' and restoring 'public order'. They cite the success of the tele-tapping process through the apprehension of JMB kingpins Shaikh Abdur Rahman and Bangla Bhai (Siddiqul Islam) by law enforcers (The New Age: March 11, 2010).

Under the ICT Act-2006, recently Ruhul Amin Khondoker, a former teacher of Jahangirnagar University sentenced three years imprisonment with fine 10 thousand taka for publishing death desiring wish of Bangladesh Prime Minister Sheikh Hasina in the Facebook. Before that on 27 July, 2013 Hafizur Rahman, lecturer of BUET and on 25 September, 2014 Tonmoy Mallik was also sentenced 7 years imprisonment under the Information and Communication Act for giving life threat to the Bangladesh prime minister as well as making and publishing controversial cartoon of Banghabondhu and Sheikh Hasina in the facebook (The Daily Prothom Alo: August 13, 2015).

On 10 April, 2011 the Education Ministry of the Government of Bangladesh has circulated an office order to its educational institutions that in many institution both teachers and students are using cell phone during conduction study. The circular gave an order to all educational institutions under the ministry for not using cell phone in the class rooms (Education Ministry Office Order, 2011).

Recently, Advocate Fazle Rabbi Mia, deputy speaker of the National Parliament of Bangladesh told many girl students are victimized through eve teasing for abusing mobile sets and he advised parents not to give mobile handsets to the students before completing HSC degree (The Daily Bangladesh Protidin: September 26, 2014).

Mobile phones have become a tool for everyday use, which creates an opportunity for the evolution of banking services to reach the previously unbanked population through mobile banking as well. The use of mobile banking can make basic financial services more accessible to low-income people, minimizing time and distance to the nearest retail bank branches (CGAP, 2006). The outstanding growth of mobile sector worldwide has created a unique opportunity to provide social and financial services over the mobile network. With over 4 billion mobile cellular subscriptions worldwide, mobile network has the ability to immediately offer mobile banking to 61% of the world population (Sultana, 2009). But still the usage of mobile banking is a debatable issue among the educated persons and professional body because of the risk involved in such transactions.

Though many of such people argue that internet and other technology based transaction is not safe, not practical and would lead to fraud, a lot of people think it safer, flexible in time and can be done anywhere and anytime (Chowdhury & Ahmmad, 2011). Besides the positiveness of mobile banking, few incidents creating panic in the mind of mobile banking clients. From the inception of bKash mobile banking system, crime incidents occurring increasingly in our country. Many bKash agents are being victimized through snatching, hijacking, demanding extortion etc (The Daily Kaler Kantho: June 19, 2014).

Now a days, bKash related fraudulent picture is a very common picture in Bangladesh and a large group working behind this. Lots of money is transferred illegally through bKash and many people is being victimized for bKash including high profile govt. officials, army person, university vice chancellor and elite persons of the society. The gang offers many good items or news such as dinner offer with novel laureate, getting a new plot, abduction news, theft & hacking news, SIM card replace, fake national ID card, get back stolen auto rickshaw or CNG, *Jiner badsha offer,* winning a lottery prize news etc. before them and advice to send money to the pre-assigned mobile bKash number. Their money demand range is between 300 to crore (onlinenews24.com, May 22, 2015).

3.5.2. The nature of interrelationship between Internet, Crime and Deviance

Day by day, the rate of cyber crime is increasing especially by using facebook in Bangladesh and the major part of this crime is bad comment or post on some one facebook wall intentionally. Recently, Nasir Hossain, a prominent Bangladesh cricketer

post a picture with sister on his facebook wall on 25 june, 2015 and many bad facebook users did bad and vulgar comments on his post. At a result he deactivate his account and Mashrafee Bin Mortoza, captain of Bangladesh cricket team also restrict his facebook ID for Bangladesh users (Amadersomoy.com, June 30, 2015). Information Minister of Bangladesh, Hasanul Haq Inu recently claimed in a press briefing that he found at least five fake facebook account in his name. He complained to the concerned body for stooping those fake accounts (The Daily Kaler Kantho: August 26, 2014).

For Cyber crime, sometimes house wife's and school, college and university studying young lady are become the ultimate victims. Secret and private photos and videos are published in online without their consent. As a result many of them are decided to commit suicide. Recently, a student of Dhaka University being victimized by such kind of crime. She made love with the boy after getting introduced with the facebook. Once the boy captured some nude picture of her and showing threat to get marry otherwise he will publish those pictures (bdtoday.net:September 20, 2014).

Narshingdi Sadar Thana Police recently recovered a young abducted boy who caught in the trap of fake facebook account in the name of Munny Akter and arrested four fraud and abductors. Police mentioned, cyber criminals attract especially young boys through fake female facebook ID and most of them are looks beautiful. They started talked with target boys with female tune and invite to see her in a pre-specified place. And, when they come, they abduct them and demand huge money (bdtoday.net:September 11, 2014).

A survey done by United Student Organization revealed that university level students passed more than six hours in a day for the purpose of using social networking sites like facebook and youtube. They are being busy for sending message and sharing video with each other. Even they do so in the class room. About 75 percent of under graduate students browse facebook and twitter at least half to two hours in a day (http://news.zoombangla.com/technology/2014-06-24-13-45-19-7-11482).

Institute of Public Policy Research Think Tank of USA recently published that half of American teen aged see sex stimulating photos and videos as their part of daily work. Somehow sexual contents web links appears before them, even they don't want to see

and in this way they becoming interesting about sexual contents in the web. Report also stated, at 11 aged teens daily see porn movies and when their age crossed 14, they stated research on sex. For these reasons, many misconceptions created about sex and at a result they faced many problems in real life (The Daily Kaler Kantho: August 22, 2014).

A recent study by Bupa on 2000 people found that a quarter of young adults aged between 18 and 24 only walk an average of five minutes a day and parents aged 42-54 years old blamed technology for keeping the young adults in the UK from walking and said they walked more than their children do when they were their age (The Daily Star: October 22, 2013).

A research team of USA and UK surveyed on 881 young girls and found that more affection of young girls about social networking media especially facebook leads worried about their own physical health and brought negative change on lifestyle, food habits, beautification etc. Even, many of them spent more time to reduce their fatness (The Daily Prothom Alo: April 12, 2014).

Even though the purpose of Facebook is effectively to reveal details about everything and anything you do, access to this knowledge could take a toll on your mental well-being. A recent study done by the Department of Behavioral Science at the Utah Valley University discovered that heavy Facebook users aren't the happiest people out there. The researchers found that just using Facebook makes you view your life more negatively. Of 400 students questioned, "those who have used Facebook longer agreed more that others were happier, and agreed less that life is fair, and those spending more time on Facebook each week agreed more that others were happier and had better lives" (Jacques, 2013).

For the excessive use of internet and technology making a man or women dependent on those facilities and day by day they losing their memories. Recently, Colombia university of USA stated that at present day people knows about gogoole and when a person need an information, they just got help from it. They don't need to keep hard copies or use library for further collection.

A British research studied on 30 thousand students and found that the teens those were addicted for using social communication media before 7 years old; today many of them

are suffering from lack of self confidence especially girls are deep concern. One in five girls chat with unknown person and one-third of total students watch porn movies and horror films in the online. Disclosure of teenager's personal life events in the online might create great negative impact on their future life style (The Daily Kaler Kantho: November 11, 2014).

After reviewed five thousand marriage separation cases, British law Institute stated in their Divorce Online page that facebook is the main cause of one-third of the separation cases in the world. Beside this, publishing inter enmity comments in the social media, strangely using facebook in the different restaurants, publishing objectionable picture in the internet etc. are the other causes of divorce/separation. Facebook is using as the most potential medium to break relationship, mistrust one another, fraud opposite gender, push far away, submit love/romance proposal, exchange cordial emotion etc. in the world. K. Jesson Krafski mentioned in his book "Facebook and Your Marriage'' that the way of proposing love at present world is totally different from traditional ways and different web sites are available for proposing love. One can easily propose and make love through these sites and there is a little possibility to catch for adultery by the guardians (prime newsbd.com: June 7, 2015).

Though everybody well aware about the danger of using cell phone during driving, many drivers are doing so during driving. An American report revealed, 90 percent drivers drive their vehicle risky while they use cell phone (The Daily Kaler Kantho: November 12, 2014).

Though porn video is a controversy, its expansion increasing day by day in the world. And this expansion rate is high in the develop countries. At present in making porn movie Canada is staying at the top and in last five years most of the porn movies made in west asia and Nigeria. At least five countries are found whose female see porn movie than the male. Report mentioned that they did not find out a single adult male who did not seen porn movie. Before 13 years, there were 70 thousand porn site in the world and at present its number is 20 crore in where 50 lakh porn sites exists in the USA. A survey found that 3 crore people watch porn movie/videos per second. AVN Award also known as Porn Oscar is given to the famous porn star and their income level is very high and in

some cases its amount is higher than Hollywood super stars (The Daily Bangladesh Protidin: August 23, 2015).

Recently a so called lover raped her girl friend and record video. The victim claimed to the police that her so called boy friend raping from one year by showing fear to upload raping video. She told, they communicate with each other through cell phone and fall in love, at last she caught into the trap of rapist (http://news.zoombangla.com/technology/).

A housewife of Chandinagar, India being gang raped by her so called facebook friend and his friends in the name of showing cinema. She became a friend with the boy by using facebook and starting communication over sharing phone number (The Daily Kaler Kantho: June 18, 2014).

Mombai heart Throop super star Ashkhoy Kumar recently got life threat from Mumbai under world naming hide gang star Robi Pujari. The criminals demand huge money extortion from him over phone and at a result police giving him 24 hours security and police claimed its not new one (The Daily Prothom Alo: October 27, 2013).

Recently, cyber hacker published some secret and private confidential photos of Hollywood celebrities through breaking their computer, mobile and online password. After this case technology specialist gave their opinion to control these type of incident and technology users have to following tips- don't capture so much secret images, if captured for necessary then delete immediately, set up strong password in hand sets, not only depend on cloud for data backup, set up complex password in online login, detect two level based online security system, avoid fishing games from cyber criminal so that they cannot know your name, credit cards number, password etc. and lastly developing awareness about cyber crime and criminals (The Daily Prothom Alo: September 8, 2014).

Prison security system as well as cyber security is fragile in Bangladesh. Recently Faribi Shafiur Rahman a known activist of banned terror group Hizbut Tahrir done his activities even staying inside the high secured Kashimpur Prison. He threatens many persons including present prime minister of Bangladesh over communication technology. He was

regular in facebook and bolgs for spreading their messages to all (The Daily Bangladesh Protidin: August 19, 2014).

Over the last three months, it seems like the bulk of the British political and media establishment has moved on to the social networking site, Facebook. Politicians are jumping on a new way to meet voters. Facebook is a small but active battlefield in May's elections of UK, and perhaps more so for the Labour party leadership and deputy leadership elections. It provides the facility to organize contacts and events and to network and discuss issues with people who share similar interests, whether they be serious or unimportant. Facebook is by no means the only online social networking facility, yet it has become "the one" for politics, far beyond any use of MySpace or LinkedIn. While Facebook was originally designed for university students, it is entirely accessible to adults of all ages. And together with the ability to organize canvassing sessions, fundraising events, and policy debates, it's no surprise really that political activists would see the benefits (Hilton, 2007).

From the beginning of the situation, in addition to social networks like Twitter, Facebook, blogs, cell phones played a vital role in propagating the news across the world and they haven't finished their role yet. The gruesome video of Neda Soltani reached world web in few minutes after Hamed filmed it and it is said she may have been targeted because she was using a mobile. Within hours the death had become one of the most potent threats faced by the Iranian regime in 30 years. The Iranian government closed the grid and blocked all cell phone uses that that period. Not only in Iran; the recent terror in Mumbai that shook India last year was machinated and maneuvered by cell phones. According to Indian investigators and police, the heavily armed attackers who set out for Mumbai by sea, navigated with Global Positioning System equipment. They carried Black Berry sets, CDs holding high-resolution satellite images like those used for Google Earth maps, and multiple cell phones with switchable SIM cards that would be hard to track. Evidently the terrorist attack in 9/11 was also promulgated by cell phone and help of contiguous swarm intelligence (Samayeen, 2009).

Bangladesh Telecommunication Regulatory Commission (BTRC) recently made a team named Bangladesh Computer Security Incident Response Team (BD-CSIRT) for fighting against cyber crime. They found more criminal and deviant activities are

committing trough using facebook and youtube. Most of the complaints are come for fake account and abuse of facebook. According to them most of the reported cyber crimes are fake facebook account opening, uploading obscene videos, threatening over cell phone and E-mail, website hacking etc (The Bangladesh Protidin: November 02, 2012).

Crime reduction through product design offers a new way of thinking about crime prevention. Technological developments will only enhance the capacity of protective designs to act as successful crime reduction tools in the future. Computers and telecommunications equipment can be used for: fraud and other white-collar crime; hacking; and malicious damage to networks, and computer systems and data (Lester, 2001).

3.5.3. The nature of interrelationship between Television/radio, Crime and Deviance

Liton Dewan is a well known numerologist from Bangladesh, caught by Law Enforcement in Bangladesh couple of years ago (on 15/08/2008). In a report of Boishakhi TV Channel he admits to his crimes on TV News and he confessed this type of business is totally fake. Liton works his fraudulent activities under name of "SHESH DARSHAN AJMERI GEMS HOUSE LTD." or "Ajmeri gems House" in Dhaka. He gave many lucrative and charismatic problem solved advertisement in the print and electronic media (https://www.youtube.com/watch?v=QSSf4QgiRhM).

Independent TV channel also made a crime report (*Talash*) on his fraudulent activities. The report stated "Not just one, but thousands of fake tantrics thrive in the capital. One of them is self-proclaimed astrologer, Samrat Liton Dewan advertises in newspapers and television. Even certain film artists and directors named ATM Shamsuzzaman, Ratna, Kazi Hayat, Ahmed Sharif, Mizu Ahmed and Rina Khan provide publicity in favor of his fraudulent business. The reporter communicates with the film stars about his charismatic power but they all confessed they performed for him only for money, commercial purposes, nothing else. So many people who are facing many problems are being misguided by this type of fraudulent person as well as advertisements. But the role of film star is questionable and only for money they cannot be performed in this type of

fraudulent business because of their social responsibility (https://www.youtube.com/watch?v=zSpKRDPnTKs).

Recently bdnews24.com, an online newspaper published that Abdur Rahman (38 years) and Lipi Begum (30 years) (husband & wife) quarrel with each other and got deadly injured for demanding to watch Bujhena se bujhena, an Indian TV (Star Jalsha) serial (Bdnews24.com, December 6, 2014). A seven class reading student named Sarna Khatun (12 years old) hanged herself for not permission to see Star Jalsha, an Indian TV channel recently (Amadersomoy.com, February 23, 2015).

Now a days many argued that TV advertisement may cause cultural dysfunction in the society. Recently, Atul Kumar Anjan, an Indian CPI political leader argued, Dunny Leone's condom advertisement played a role in the increasement of rape rate in the Indian. He mentioned it as a nude advertisement which brought sexual excitement among the young generation (The Daily Kaler Kantha, September 03, 2015).

Recently, a research team of Sao Paulo University of Brasil surveyed on 5221 Europe children and published a report in Journal of Cardiology. In the report they stated that the children, who watch television, play games in computer & video games more than two hours in a day they fall into the risk of high blood pressure (amadersomoy.com, February 26, 2015).

3.6. Impact of Dysfunctional use of Communication Technologies

A study retrieved some problems regarding cell phone uses. The screen of mobile phones are relatively undersized than other form of using Internet. For this, high concentration to the screen is needed. As a result, the users (especially who use much time) feel different physical problems. Most of them (41 percent) have faced the pain or other problems of their eyes. Its hampering their normal sleep, they think. Stress on head and eyes disturb on their normal sleeping habit. In case of wastages of money and time about 68.8 percent internet users do not perceive it as wastage while about 7.9 percent non users have replied as wastage. In case of cultural impact they stated as it is imported from western regions it may cause impact on local culture and it has a worry about it. Ethics is highly considered with our lifestyles and values and all of the concerns should be aware that

they are using modern technology. So, it should be in ethical manner (Hamid & Akter, 2009). In Saudi Arabia, a brother of bride withheld marriage ceremony for demanding I Phone 6 from groom as dowry (The Daily Prothom Alo: September 22, 2014).

Many educationalists and psychologists arguing that very recent HSC result was disastrous due to excessive use of smart phone, facebook and internet. It is not only in Bangladesh, in 2013 there was a study conducted in the UK for finding out the cause of result disaster and they also claimed for facebook (The Daily Jugantor: September 09, 2015).

A Bangladeshi hacker could access any bank account using any ATM card if he only knew the PIN. He learned the technique from a mate while serving a jail sentence abroad. He installed secret cameras in some ATM booths in Dhaka dodging the security guards. From the recorded images, he could read the PIN numbers of the users and withdraw cash from their accounts (Matin, 2014).

Cyber bullying is a term used to describe covert, psychological bullying behaviors among mainly teenagers through email, chat rooms, mobile phones, text messages, mobile phone cameras and websites. As a relatively new phenomenon, there is limited research on cyber bullying. The rise of cyber bullying is attributed primarily to increased adolescent access to the internet and mobile phones, facilitated by the anonymity provided by the internet (Campbell, 2005; Brown, Jackson & Cassidy, 2006).

3.6.1. Social and Economic Impacts
Mobile telephone fraud is a more recent area of concern. In the United States, Brooks and Davis (1994) estimate that cellular telephone fraud is costing over a million dollars a day to the industry, with the equivalent of A $900 million a year lost on illegal calls actually detected. In Britain, the Parliamentary Office of Science and Technology (1995) estimates that between twelve and fifteen thousand analogue and up to 1000 digital mobile telephones are stolen each month while subscription fraud is estimated to amount to the equivalent of A$144 million per annum or 1 per cent of network turnover.

Customs Detective and Inquiry Department recently seized more than illegal 400 hundred expensive brand mobile sets including I-phone, HTC, Nokia, Samsing,

Blackberry, Sony Experia, Motorolla etc.from Banani, Dhaka. Law enforcements stated that these are imported from neighbor countries without any legal documents and at a result Bangladesh depriving from huge revenue collection. Customers are depriving from getting real sets due to absence of registered IMEI number as well as law enforcements face problems to detect these types of hand sets (Bangla News24.com: August 28, 2014). Recently Reuters Institute for the Study of Journalism (RISJ) mentioned in their report that the financial future of online newspaper might be faced big trouble due to continuous popularity grow of reading news in the smartphone and social communication networking media. Now a days people mostly search news trough using search engine and social communication networking media. A smart phone user spent most of time for using facebook following youtube, twitter, whatsapp, instragram and snapchat. For the purpose of reading news, a smart phone user spent half time out of total spent time on using smart phone (The Daily Prothom Alo: June 16, 2015).

Mohankumar (2010) provided the information on Social Problems related to Cell phone Abuse: In attention blindness; Caller Hegemony; Cognitive load, Accidents and Psychological problems.

Inattention Blindness: Cell phone use in social situations may result in overload – both physical and mental; Local interaction with the surroundings and remote interaction with the other person demands certain attention- e.g. when we talk in a bus stand or crossing the road; In public places makes the user "blind "to local cues due to cognitive overload. e.g. when we use cell phone while walking through the road, we will not see a vehicle coming close to you; Reduces the reaction time to events around the user. e.g. we will not get time to move away from a danger; Reduced attention to local situation may disturb others since the user is not attending the social situation. e.g. our conversation and body language may be annoying to others; Use of Mobile phones in gatherings, meetings, entertainment places etc disturb others through inattention blindness.

Caller Hegemony: The alarming ring tone may demand higher attention to the phone rather than the local settings. If anyone uses cell phones in busy areas, trains or buses, the sudden ring tone may alter our attention or the message from the caller may cause a disturbed feeling. This will leads to inattention blindness. Caller Hegemony is the asymmetric relationship between the caller and answerer.

Cognitive Load: Mobile phone use in public places makes the user overloaded and become unaware of the details of communicative behavior of co- located individuals as well as other relevant features of the social situation. It is advised that not use cell phones while driving a vehicle or operating machinery or crossing the road.

Accidents: Mobile phone use while driving may cause accidents due to inattention blindness and cognitive load. Cell phone conversation distracts the driver's attention, increase reaction time, and reduce visual field attention; Cognitive load rises above visual sensation and diverts attention. Reaction to and memory of visual inputs while driving will drastically reduce if the cognitive load increases. The same negative effects may also happen if the driver uses a hands free phone. e.g. If the actual distance between two vehicles is 5 meters, due to cognitive load, the driver may feel that, it is 10 meters. This is the reason for the accidents, if cell phone is used while driving a vehicle.

Psychological problems: Over use of Cell phones may cause two New generation Psychological problems. *No-Mo phobia (NoMobile phobia):* When we run out of credit or battery, lose of phone or are in an area with no reception, being phoneless can bring a panic symptom referred to as NoMo Phobia or No Mobile phobia. *Ringxiety- Ringtone anxiety*: Ringxiety is the sensation and false belief that one can hear his or her mobile phone ringing or fell it vibrating. Humans are sensitive to auditory tones between 1000 and 6000 Hz. The ring tone frequency falls within this range. The term is also used to explain the condition in which a person frequently takes the cell phone to see whether there is any a miscall or messages.

Dependence: One study finds that 37 percent of teens felt they wouldn't be able to live without a cell phone once they had it. This study also shows that the more friends a teen has, the more likely they are to feel dependent on their phone and let calls or text messages interfere with their daily schedule.

Dishonesty: The Pew Internet & American Life Project found that 39 percent of cell users ages 18-29 say they are not always truthful about where they are when they are on the phone.

Expense: Parents often experience sticker shock when they receive the bill for their child's cell phone. Special ring tones, text, picture and video messaging, downloadable games, overage minutes and connecting to the Internet can all be very expensive and heavily used by teens.

3.6.2. Health Impacts

Technology analysts recently claimed that long time use of smart phone and electronic device like tap before go to sleep can make a long term impact on sleep and health of users. Recently, Business and Technology related website published a report related to the issue. Artificial blue ray emitted from smart phone screen can destroy sleeping circle and felt an impact on health. Besides this other problems like eye visualization problem due heavy impact on eye retina, create eye asthenia, bad impact on mental temperament etc. may occur in the life users. Many users use their smart phone or tab from keeping distance 18 cm instead of 40 cm. As a result zin related problems may also found in the users life (The Daily Prothom Alo: September 6, 2014.).

The effect mobile phone radiation has on human health is the subject of recent interest and study, as a result of the enormous increase in mobile phone usage throughout the world (GSM Association, 2009). British skin experts mentioned in a report that for using mobile phone one kind of skin disease might be appeared in the human body. They mentioned its name as mobile phone dramatizes. Today's most of the mobile phones body made of steal and nickel coating. For such kind of devices mouth, ear, nose of human body might be affected more than other parts of body. They warned females more than male for this disease. Because, females are the more suffering from this mobile phone dramatize disease (The Daily Ittefaq: October 23, 2010).

Recently, American researchers stated, male reproduction capability decreased for using cell phone, especially when they keep their cell phones in the pants pocket for long term. For justifying these impacts seven countries researchers conducted research on these issues. Among them USA, China and Australian experts mentioned, sperm production rate very much decreased, if cell phone kept in the pants pocket as in active mode. American Nobel Prize Winner Dr. Devra Davis found that the young people who use cell phone about 4 hours in a day, their sperms rate become half and most of the sperms

shape became weak, thin and unable to swim in the ovum (The Daily Bangladesh Pratidin: October 11, 2010).

Beside much usefulness, there have many health risks related downsides of Cell Phones use and abuse (http://www.cmch.tv/mentors/hottopic.asp?id=70).

Mental health: Problematic use of cell phones and found a link between low self-esteem and problem cell phone use. A study measuring the link between cell phones and mental health found that teens who used cell phones the most were more likely to be anxious and depressed.

Bullying: Text messaging is increasing used by bullies to torment their victims. Cyber bullying, psychological harassment in text or instant messaging is more often perpetrated by girls, who initiate inappropriate messages or spread damaging gossip.

Eye strain and "digital thumb": Just like other repetitive strain injuries that can result from computer use and other repetitive tasks, these conditions can result from focusing continually on a small screen and typing on small buttons.

Bacteria: Because of the close proximity to the mouth where germs can be passed from breathing, coughing and sneezing, most cell phones are crawling with bacteria. Additionally, many people use their phone everywhere, even in the bathroom.

Brain tumors and low sperm counts: While some research investigating the effects of electromagnetic radiation from cell phones in close proximity to the body have found statistical associations, other studies have found no increased risk.

Lack of sleep: One study found that some teen cell phone users are likely to be woken at night by incoming text messages or calls, and are therefore more likely to be tired and less able to focus throughout the day.

3.6.3. Potentially Dangerous Elements of Cell Phones

As cell-phone use continues to grow, so does concern about the possible health risks of prolonged exposure to cell-phone radiation. Wireless cell phones transmit signals via radio frequency (RF), the same kind of low-frequency radiation used in microwave ovens and AM/FM radios. Scientists have known for years that large doses of high-frequency radiation the kind used in X-rays causes cancer, but less is understood about the risks of low-frequency radiation. According to the American Cancer Society, the low energy level emitted from cell phones and absorbed by human tissues makes it unlikely that they cause cancer. Some studies have indicated that using a cell phone an hour a day for 10 years or more can significantly increase the risk of developing a rare brain tumor (West. 2010).

Most RF from cell phones comes from the antenna, which sends signals to the nearest base station. The farther the cell phone is from the nearest base station, the more radiation it requires to send the signal and make the connection. As a result, scientists theorize that the health risks from cell-phone radiation would be greater for people who live and work where base stations are farther away or fewer in number. In December 2007, Israeli researchers reported in the American Journal of Epidemiology that long-term cell-phone users who live in rural areas face a "consistently elevated risk" of developing tumors in the parotid gland compared with users who live in urban or suburban locations. The parotid gland is a salivary gland located just below a person's ear. And in January 2008, the French Health Ministry issued a warning against excessive cell phone use, especially by children, despite the lack of conclusive scientific evidence linking cell-phone use with cancer or other serious health effects. The amount of RF a person is exposed to with the use of a cell phone depends on a number of factors: The distance from the base station; The duration and frequency of cell phone use; The age of the phone (older analog models involve higher exposure than newer, digital ones) (West, 2010).

Impact of Cell phone Radiation: The World Health Organization (2000 & 2005), based upon the consensus view of the scientific and medical communities, has stated in the past that cancer is unlikely to be caused by cellular phones or their base stations and that reviews have found no convincing evidence for other health effects. Many scientific studies have investigated possible health effects of mobile phone radiations. These

studies are occasionally reviewed by some scientific committees to assess overall risks. A recent assessment was published in 2007 by the European Commission Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR, 2007).

Radiation absorption: Part of the radio waves emitted by a mobile telephone handset is absorbed by the human head. The radio waves emitted by a GSM handset can have a peak power of 2 watts, and a US analogue phone had a maximum transmit power of 3.6 watts. Other digital mobile technologies, such as CDMA 2000 and D-AMPS, use lower output power, typically below 1 watt, UVA. The maximum power output from a mobile phone is regulated by the mobile phone standard it is following and by the regulatory agencies in each country. In most systems the cell phone and the base station check reception quality and signal strength and the power level is increased or decreased automatically, within a certain span, to accommodate for different situations such as inside or outside of buildings and vehicles. The rate at which radiation is absorbed by the human body is measured by the Specific Absorption Rate (SAR), and its maximum levels for modern handsets have been set by governmental regulating agencies in many countries. In the USA, the Federal Communications Commission (FCC) has set a SAR limit of 1.6 W/kg, averaged over a volume of 1 gram of tissue, for the head. In Europe, the limit is 2 W/kg, averaged over a volume of 10 grams of tissue. SAR values are heavily dependent on the size of the averaging volume. SAR data for specific mobile phones, along with other useful information, can be found directly on manufacturers' websites, as well as on third party web sites.

Thermal effects: The effect of microwave radiation is dielectric heating, in which any dielectric material (such as living tissue) is heated by rotations of polar molecules induced by the electromagnetic field. In the case of a person using a cell phone, most of the heating effect will occur at the surface of the head, causing its temperature to increase by a fraction of a degree. In this case, the level of temperature increase is an order of magnitude less than that obtained during the exposure of the head to direct sunlight. The brain's blood circulation is capable of disposing of excess heat by increasing local blood flow (SCENIHR, 2007).

Non-thermal effects: The communications protocols used by mobile phones often result in low-frequency pulsing of the carrier signal. Whether these modulations have

biological significance has been subject to debate. Some researchers have argued that so-called "non-thermal effects" could be reinterpreted as a normal cellular response to an increase in temperature. The German biophysicist Roland Glaser, for example, has argued that there are several thermoreceptor molecules in cells, and that they activate a cascade of second and third messenger systems, gene expression mechanisms and production of heat shock proteins in order to defend the cell against metabolic cell stress caused by heat (Glaser, 2005).

Blood-brain barrier effects: Swedish researchers from Lund University have studied the effects of microwave radiation on the rat brain. They found a leakage of albumin into the brain via a permeated blood-brain barrier (Salford, Brun, Perrson, Eberhardt, and Malmgren, 2003).

Cancer: In 2006 a large Danish study about the connection between mobile phone use and cancer incidence was published. It followed over 420,000 Danish citizens for 20 years and showed no increased risk of cancer (Schüz, Jacobsen, Olsen, Boice, McLaughlin, and Johansen, 2006). In order to investigate the risk of cancer for the mobile phone user, a cooperative project between 13 countries has been launched called INTERPHONE. The idea is that cancers need time to develop so only studies over 10 years are of interest. The INTERPHONE study group from Japan published the results of a study of brain tumor risk and mobile phone use. They used a new approach: determining the SAR inside a tumor by calculating the radio frequency field absorption in the exact tumor location. Cases examined included glioma, meninigioma, and pituitary adenoma. They reported that the overall odds ratio (OR) was not increased and that there was no significant trend towards an increasing OR in relation to exposure, as measured by SAR (Takebayashi, Varsier, Kikuchi, Wake, Taki, Watanabe, Akiba, and Yamaguchi, 2008).

In 2007, Dr. Lennart Hardell, from Örebro University in Sweden, reviewed published epidemiological papers (2 cohort studies and 16 case-control studies) and found that: Cell phone users had an increased risk of malignant gliomas; Link between cell phone use and a higher rate of acoustic neuromas; Tumors are more likely to occur on the side of the head that the cell handset is used and One hour of cell phone use per day significantly increases tumor risk after ten years or more

(http://oem.bmj.com/cgi/reprint/64/9/626.pdf). A publication titled "Public health implications of wireless technologies" Sage found age is a significant factor. The report repeated the finding that the use of cell phones before age 20 increased the risk of brain tumors by 5.2, compared to 1.4 for all ages (Sage, 2009).

Cognitive effects: A 2009 study examined the effects of exposure to radiofrequency radiation (RFR) emitted by standard GSM cell phones on the cognitive functions of humans. The study confirmed longer (slower) response times to a spatial working memory task when exposed to RFR from a standard GSM cellular phone placed next to the head of male subjects, and showed that longer duration of exposure to RFR may increase the effects on performance (Luria, Eliyahu, Hareuveny, Margaliot, Meiran, 2009).

Electromagnetic hypersensitivity: Some users of mobile handsets have reported feeling several unspecific symptoms during and after its use; ranging from burning and tingling sensations in the skin of the head and extremities, fatigue, sleep disturbances, dizziness, loss of mental attention, reaction times and memory retentiveness, headaches, malaise, tachycardia (heart palpitations), to disturbances of the digestive system.

Genotoxic effects: A large recent meta-study of 101 scientific publications on genotoxicity of RF electromagnetic fields shows that 49 report a genotoxic effect and 42 do not (Ruediger, 2009). In 1995, in the journal Bioelectromagnetics, Wengong Lai and Mohinder Singh reported damaged DNA after two hours of microwave radiation at levels deemed safe according to government standards (Harrill, 2005).

Sleep and EEG effects: Sleep, EEG and waking rCBF have been studied in relation to RF exposure for a decade now, and the majority of papers published to date have found some form of effect. German research from 2006 found that statistically significant EEG changes could be consistently found, but only in a relatively low proportion of study participants (12 - 30%) (Bachmann, Lass, Säkki, Tomson, Tuulik, Hinrikus, 2006).

Health hazards of base stations: Another area of concern is the radiation emitted by the fixed infrastructure used in mobile telephony, such as base stations and their antennas, which provide the link to and from mobile phones. This is because, in contrast to mobile

handsets, it is emitted continuously and is more powerful at close quarters. On the other hand, field intensities drop rapidly with distance away from the base of the antenna because of the attenuation of power with the square of distance.

Several surveys have found increases of symptoms depending upon proximity to electromagnetic sources such as mobile phone base stations. A survey study by Santini et al, 2002 in France found a variety of self-reported symptoms for people who reported that they were living within 300 metres (984 ft) of GSM cell towers in rural areas, or within 100 m (328 ft) of base stations in urban areas. Fatigue, headache, sleep disruption and loss of memory were among the symptoms reported (Santini, Santini, Danze, LeRuz, Seigne, 2003).

Occupational health hazards: Telecommunication workers who spend time at a short distance from the active equipment, for the purposes of testing, maintenance, installation, etc. may be at risk of much greater exposure than the general population. A variety of studies over the past 50 years have been done on workers exposed to high RF radiation levels; studies including radar laboratory workers, military radar workers, electrical workers, and amateur radio operators. Most of these studies found no increase in cancer rates over the general population or a control group. Many positive results could have been attributed to other work environment conditions, and many negative results of reduced cancer rates also occurred (Moulder, Erdreich, Malyapa, Merritt, Pickard, and Vijayalaxmi, 1999).

3.6.4. Teenagers most affected
The researchers pointed out that 12-26 week old rats are comparable in age to human teenagers, the most frequent users of mobile phones. This level of damage to the nerve cells is worrying, as "it may result in reduced brain reserve capacity". In other words, the teenagers' brains may age prematurely. A study by retail analysts Mintel found that up to 80% of 11 to 14 year-olds have a mobile phone in the United Kingdom. There is now evidence that a wide range of frequencies in the electromagnetic spectrum can have biological effects from DNA damage in brain cells to childhood leukemia (ISIS, 2004).

3.6.5. Precautionary principle

According to the WHO (2002), the "precautionary principle" is "a risk management policy applied in circumstances with a high degree of scientific uncertainty, reflecting the need to take action for a potentially serious risk without awaiting the results of scientific research." They involve recommendations such as the minimization of cell phone usage, the limitation of use by at-risk population (such as children), the adoption of cell phones and microcells with ALARA levels of radiation, the wider use of hands-free and earphone technologies such as Bluetooth headsets, the adoption of maximal standards of exposure, RF field intensity and distance of base stations antennas from human habitations, and so forth.

In order to protect the population living around base stations and users of mobile handsets, governments and regulatory bodies adopt safety standards, which translate to limits on exposure levels below a certain value. There are many proposed national and international standards, but that of the International Commission for Non-Ionizing Radiation Protection (ICNIRP) is the most respected one, and has been adopted so far by more than 80 countries. For radio stations, ICNIRP proposes two safety levels: one for occupational exposure, another one for the general population. Currently there are efforts underway to harmonise the different standards in existence (International Commission for Non-Ionizing Radiation Protection home page, 2008).

4   FINDINGS FROM SURVEY

4.1. Demographic Characteristics of the Respondents

4.1.1. Sex, Marital Status and Age

It is revealed from the study that about 72 percent communication technology users is male followed by female (about 28 percent) and most of the users are single (about 53 percent) followed by married (about 45 percent) and others (about 3 percent). In case of age group most of the users are belong to the age group 20-30 Years (about 53 percent) followed by 31-Above Years (about 31 percent) and 13-19 Years (about 16 percent) (Table 1).

Table 1: Respondent's Sex, Marital Status and age group (n=150).

Sex of the respondents		
Sex	Frequency	Percent
Male	108	72.0
Female	42	28.0
Total	150	100.0

Marital Status of the Respondent		
Marital Status	Frequency	Percent
Single	80	53.3
Married	67	44.7
Others	3	2.0
Total	150	100.0

Respondent's age group		
Age group	Frequency	Percent
13-19 Years	24	16.0
20-30 Years	79	52.7
31-Above Years	47	31.3
Total	150	100.0

4.1.2. Education level, Occupation and Monthly Income Level

The study found that most of the communication technology user's education level is graduation (about 38 percent) followed by HSC/diploma (about 28 percent), SSC (about 14 percent), primary (about 12 percent) and illiterate (about 8 percent) (Table 2).

Most of the communication technology users occupation is Student (about 37 percent) followed by Govt./ Private service holder (about 23 percent), Wage earner (about 17 percent), Unemployed/House Wife (about 13 percent) and Businessmen (about 11 percent) (Table 2).

The study also found that about 48 percent communication technology users monthly income level is 0-5000 BDT followed by 15,001 BDT − Above (about 27 percent), 10,001-15,000 BDT (about 17 percent) and 5001-10,000 BDT (about 9 percent) (Table 2).

Table 2: Respondent's Education level, Occupation and Monthly income level (n=150).

Education level of the respondents		
Education level	Frequency	Percent
Illiterate	12	8.0
Primary	18	12.0
SSC	21	14.0
HSC/Diploma	42	28.0
Graduation	57	38.0
Total	150	100.0

Occupation of the Respondents		
Occupation	Frequency	Percent
Unemployed/House Wife	19	12.7
Student	56	37.3
Wage Earner	25	16.7
Govt./Private Service Holder	34	22.7
Businessman	16	10.7
Total	150	100.0

Monthly income level of the respondent		
Monthly income level	Frequency	Percent
0-5000 BDT	72	48.0
5001-10,000 BDT	13	8.7
10,001-15,000 BDT	25	16.7
15,001 BDT – Above	40	26.7
Total	150	100.0

4.1.3. Living Area, Living place and Resident Status

The study revealed that most of the communication technology users of Dhaka city are living in Rented house/Flat (about 53 percent) followed by Hall/ Mess (about 27 percent) and Own house/Flat (about 20 percent). In case of resident status, most of communication technology users are migrants (about 73 percent) followed by permanent residents (about 27 percent) (Table 3).

Table 3: Respondent's living place and Resident status (n=150).

Respondent's living place

Living place	Frequency	Percent
Hall/ Mess	40	26.7
Own house/Flat	30	20.0
Rented house/Flat	80	53.3
Total	150	100.0

Resident status of the respondent

Resident status	Frequency	Percent
Migrant Resident	110	73.3
Permanent Resident	40	26.7
Total	150	100.0

4.2 Different aspects of Communication Technology

4.2.1. Types of Communication Technology

In case of multiple response, it is found that most of the communication technology users mostly use cell phone/land phone (about 94 percent) followed by internet (about 49 percent) and Television/radio (about 46 percent) as priority basis (Graph 1).

Graph 1: Types of communication technology users use most (n=150)
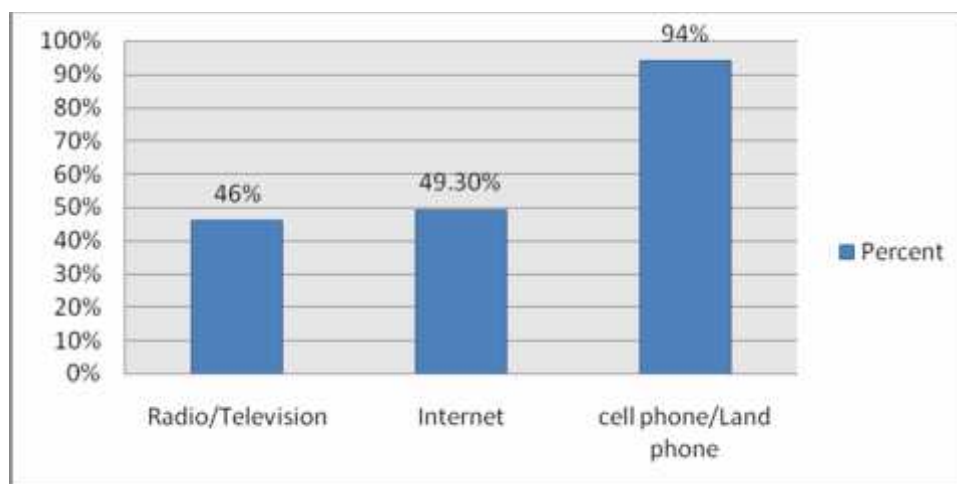
4.2.2. Purposes of using Communication Technology

As priority basis, most of the respondents uses different communication technologies for the purposes of personal (about 84 percent) followed by entertainment (about 65 percent), education (about 33 percent), official (about 20 percent) and others (business) (about 2 percent) (Graph 2).

Graph 2: Purposes of using communication technology (n=150)
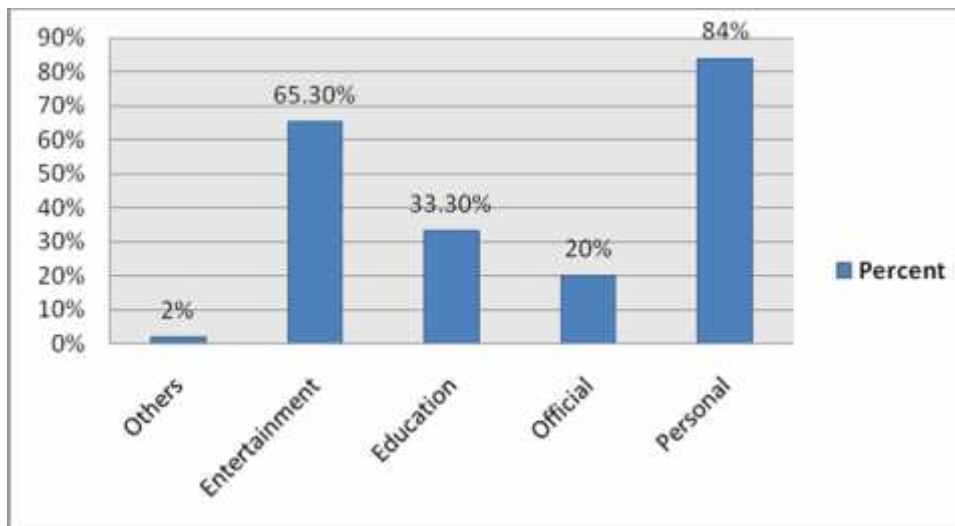

4.2.3. Facilities taken from Communication Technologies

The study found that communication technology users are taking different facilities from different types of communication technologies. From cell phone users are taking mostly talking facility (about 91 percent) followed by internet browsing (about 48 percent), others (about 32 percent) including alerting, breaking news, alarm, f.m radio, hearing news/music etc services. and playing games (about 2 percent) (Graph 3).

Whereas, from broadband internet users are mostly taking using social networking sites and blogs facility (about 69 percent) followed by e-mail (about 51 percent), watching/downloading online videos/audios (about 41 percent), browsing (about 36 percent) and others (about 5 percent) like watching online TV channels. In case of TV/Radio most of the users are taking watching/hearing song/drama/serial/natok/movie facility (about 67 percent) followed by news (about 53 percent), special program (about 34 percent) and others (about 5 percent) (Graph 3).

Graph 3: Taking Facilities from Cell phone (n=150), Broad band internet (n=114) and Radio/Television (n=143)
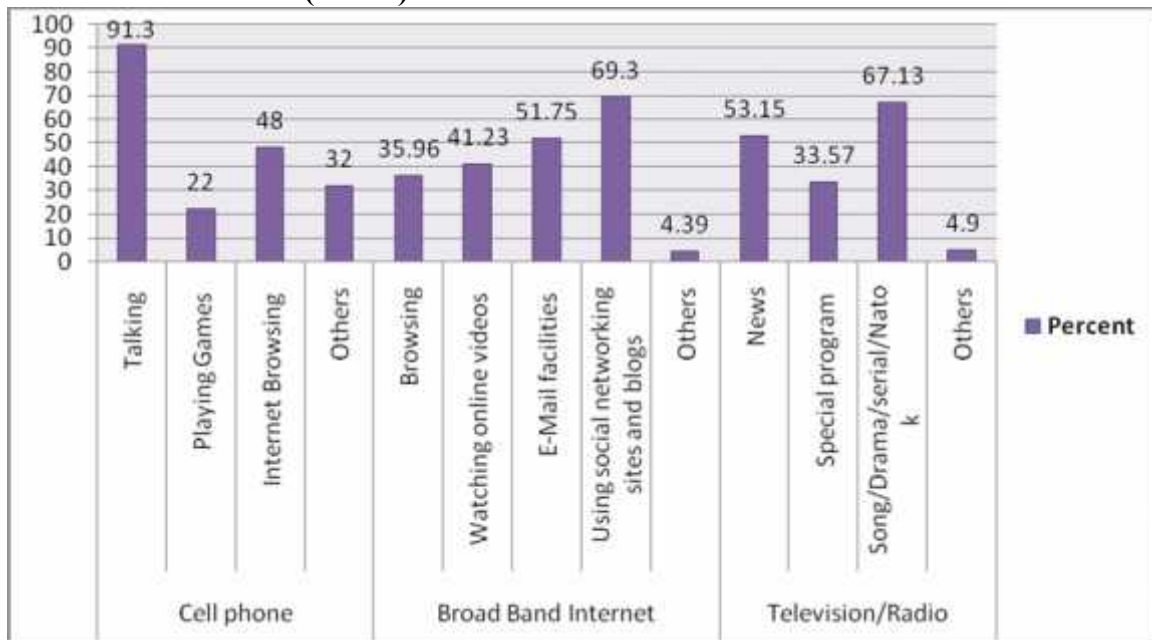
4.2.4. Number of Cell phone, SIM card and E-mail ID

It is found from the study that most of the communication technology users are using 1 cell phone (about 75 percent) followed by 2 cell phone (about 23 percent) and 2+ cell phone (about 2 percent). Whereas, they are mostly using 2 SIM card (about 62 percent) followed by 1 SIM card (about 21 percent) and 2+ SIM card (about 17 percent). In case of E-mail ID, most of the users are using 1 ID (about 61 percent) followed by 2 ID (about 31 percent) and 2+ ID (about 8 percent) (Graph 4).

Graph 4: Number of Cell phone (n=150), SIM Card (n=150) and E-Mail ID used by the respondents (n=106)
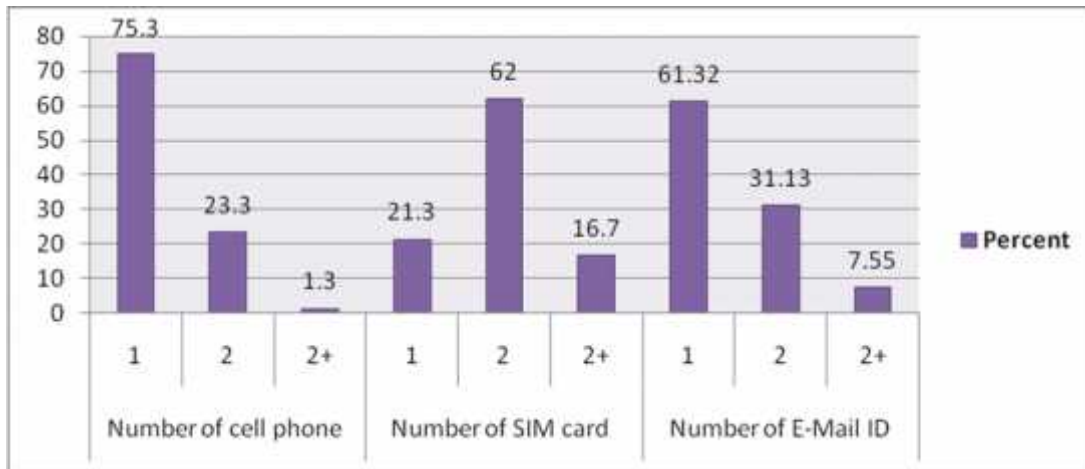
4.2.5. Source of Money and Monthly Expenditure

The study found that the main sources of money for expenditure is own income (about 52 percent) followed by family (about 43 percent) and others (about 5 percent) including office & relatives. In case of expenditure level identification, most of the communication technology users monthly expenditure level is 200-500 BDT (about 39 percent) followed by 501-800 BDT (about 35 percent), 801-1100 BDT (about 20 percent) and 1101 BDT – Above (about 6 percent) (Table 4).

Table 4: Respondent's Sources of money and Monthly expenditure level for using communication technologies (n=150)

Sources of money for expenditure

Sources	Frequency	Percent
Own income	78	52.0
Family	65	43.33
Others	7	4.67
Total	150	100.0

Monthly expenditure level

Expenditure level	Frequency	Percent
200-500 BDT	58	38.7
501-800 BDT	53	35.3
801-1100 BDT	30	20.0
1101 BDT - Above	9	6.0
Total	150	100.0

4.2.6. Duration of talking, internet use and watching/hearing TV/Radio

The study revealed that about 39 percent of the respondents' daily talk time duration is 36 min – above min and 21-35 min followed by 5-20 min (about 23 percent). For the purposes of internet use, most of the respondents daily time passing duration is 2 hr-above (about 37 percent) followed by 01-60 min (about 32 percent) and 1 hr-2 hr (about 30 percent). Whereas, most of the respondents daily duration of watching/hearing TV/radio is 01-60 min (about 41 percent) followed by 1 hr- 2hr (about 37 percent) and 2 hr –above (about 22 percent) (Graph 5).

Graph 5: Respondent's daily spend time for the purposes of talking over cell phone (n=150), internet use (n=122) and watching/hearing TV/Radio (n=136)
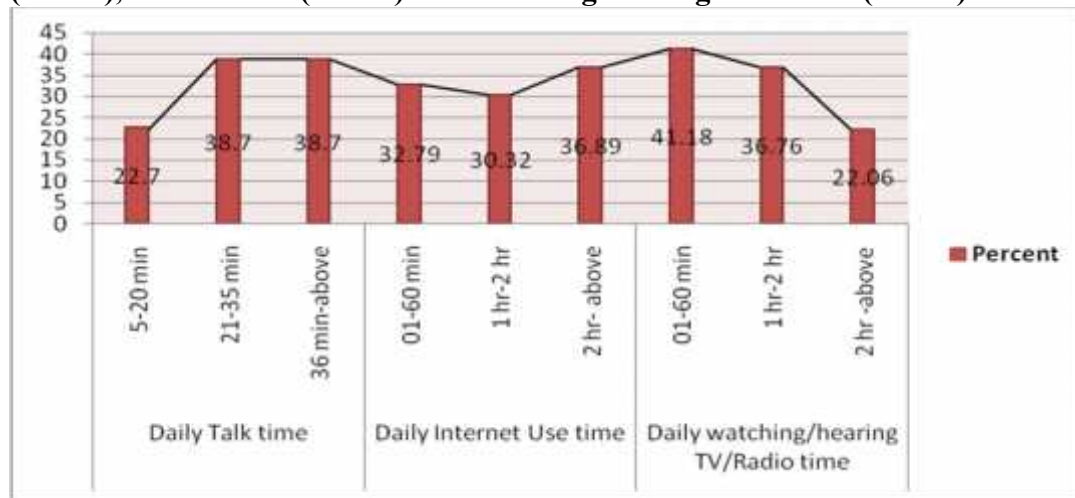
4.2.7 Age group of Respondents by Daily talk time

The study revealed that 20-30 years age group of respondents mostly talk daily than other age group of respondents. About 23 percent of 20-30 years age group respondents talk 21-35 minutes daily followed by 36 min-above (about 19 percent) and 5-20 minutes (about 11 percent) (Graph 6). Among 31-above age group respondents, about 16 percent respondents talk 36 min-above minutes daily followed by 21-35 minutes (about 10 percent) and 5-20 minutes (about 5 percent) (Graph 6). In case of 13-19 age group respondents, about 6 percent respondents talk 5-20 minutes and 21-35 minutes followed by 36min-above minutes (about 4 percent) (Graph 6).

Graph 6: Age group of respondents by Daily talk time (n=150)
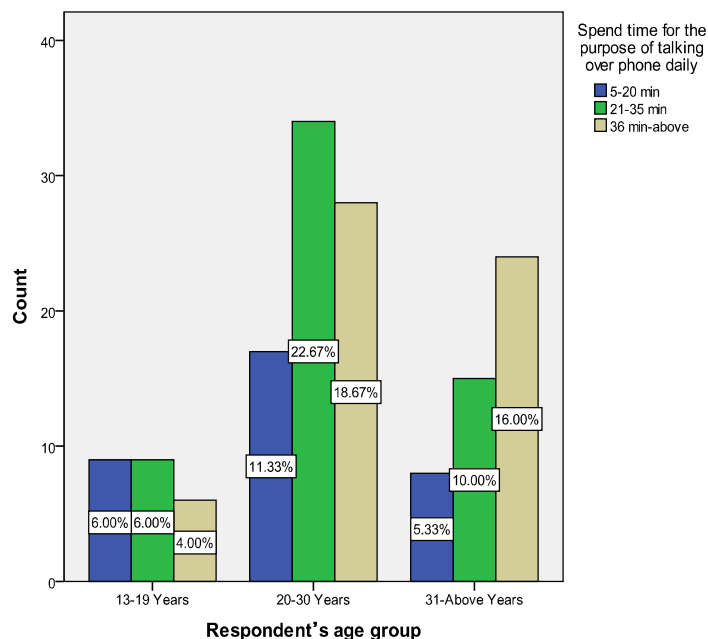
4.2.8. Age group of Respondents by Daily internet use time

It is found from the study that 20-30 years age group of respondents mostly use internet daily than other age group of respondents. About 25 percent of 20-30 years age group respondents use internet 2hr-above hours daily followed by 01-60 minutes (about 18 percent) and 1hr-2hr (about 17 percent) (Graph 7).

Among 31-above age group respondents, about 9 percent respondents use internet 01-60 min and 1hr-2hr daily followed by 2hr-above (about 7 percent) (Graph 7).

In case of 13-19 age group respondents, about 6 percent respondents use internet 01-60 minutes daily followed by 2hr-above (about 5 percent) and 1hr-2hr (about 4 percent) (Graph 7).

Graph 7: Age group of respondents by Daily internet use time (n=122)
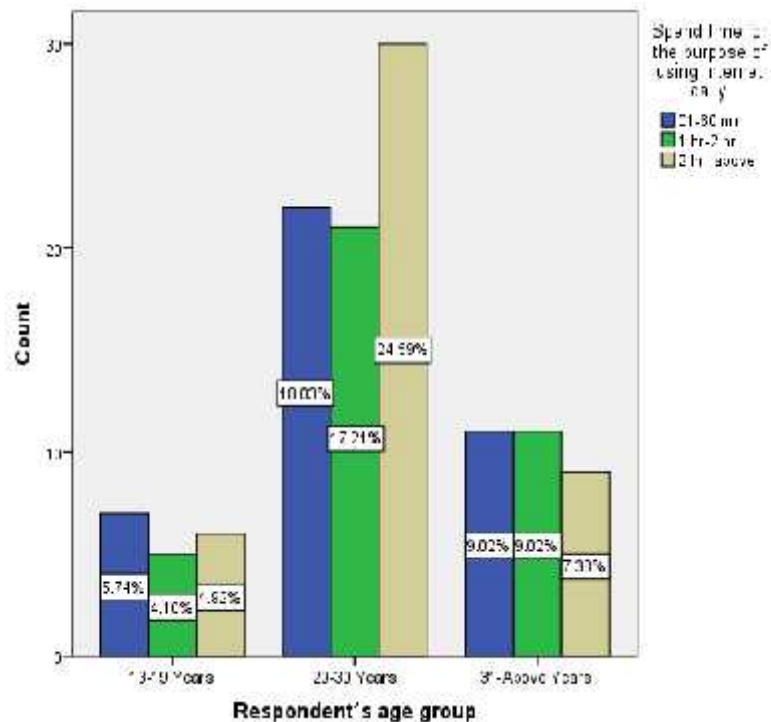
4.2.9. Age group of Respondents by Daily watching/hearing TV/Radio time

The study showed that 20-30 years age group of respondents mostly watch/hear TV/Radio daily than other age group of respondents. About 26 percent of 20-30 years age group respondents watch/hear TV/Radio 1hr-2hr daily followed by 01-60 minutes (about 17 percent) and 2hr-above (about 14 percent) (Graph 8).

Among 31-above age group respondents, about 15 percent respondents use watch/hear TV/Radio 01-60 min daily followed by 1hr-2hr (about 7 percent) and 2hr-above (about 6 percent) (Graph 8).

In case of 13-19 age group respondents, about 10 percent respondents watch/hear TV/Radio 01-60 minutes daily followed by 1hr-2hr (about 4 percent) and 2hr-above (about 2 percent) (Graph 8)

Graph 8: Age group of respondents by daily watching/hearing TV/Radio time (n=136).
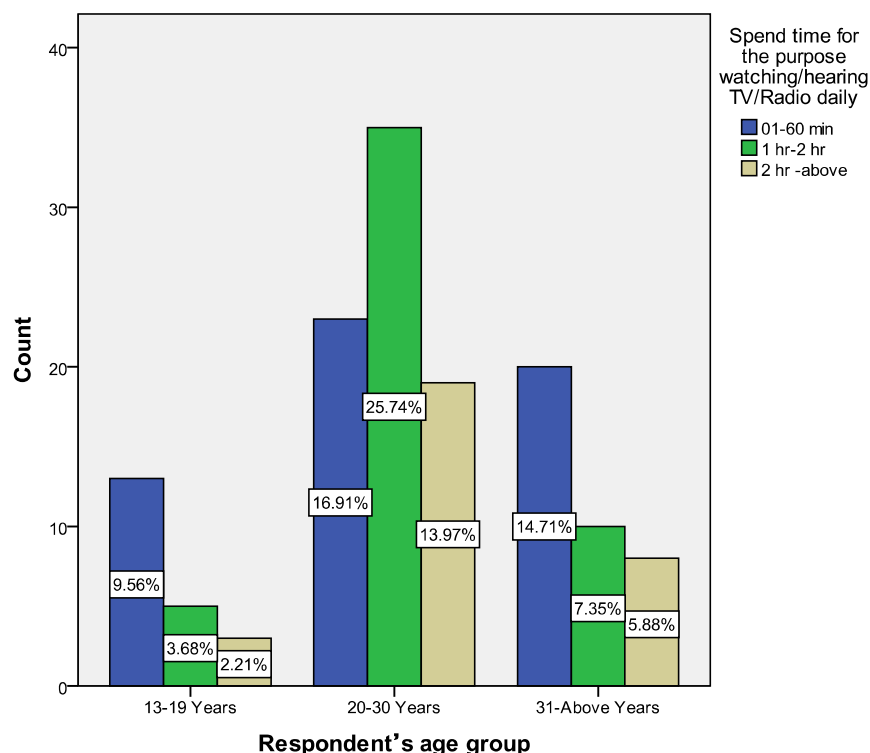
4.3. Communication Technology based Crime and Deviance in Bangladesh

4.3.1. Involvement in Communication technology based deviant and criminal activities

It is revealed from the study that about 51 percent and about 35 percents of the respondents are involved in different types (cell phone/land phone, internet and TV/radio) of communication technology based deviant and criminal activities respectively (Graph 9). On the other hand, about 65 percent respondents also mentioned that they are witnessed other individual, community members or strangers involvement in communication technology based deviant activities followed by criminal activities (about 62 percent) (Graph 9).

Graph 9: Respondent's and others involvement in communication technology based deviant and criminal activities (n=150)
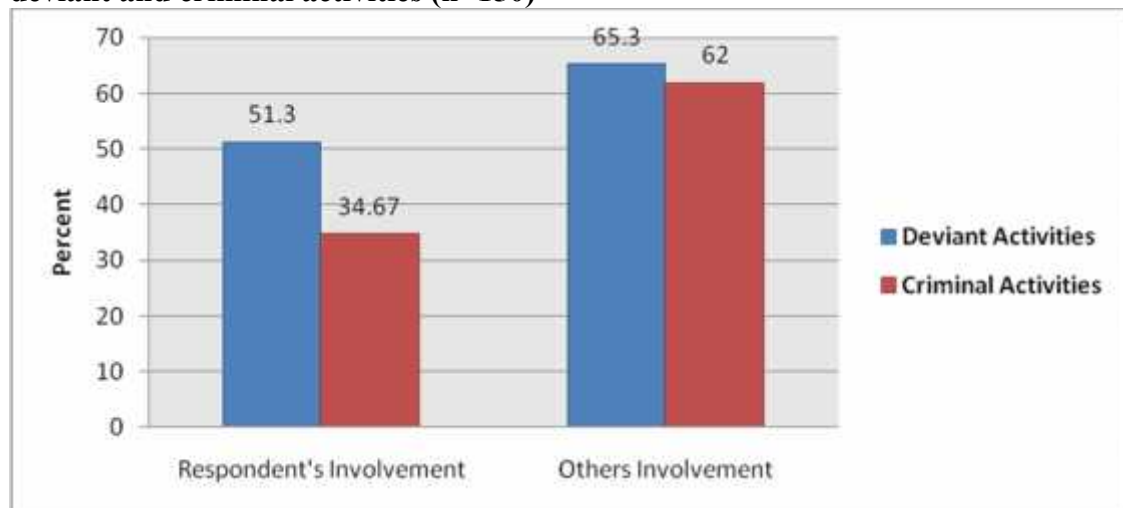
4.3.2. Involvement in cell phone based deviant activities

The study found that most of respondents (about 34 percent) are involved in habitually unnecessary use before going to sleep related cell phone based deviant activities followed by speaking/hearing song loudly over phone (about 32 percent), Excessive playing games (about 27 percent), Late night talking regularly (about 27 percent), Disturbing someone through call/missed call/SMS (about 26 percent), Excessive browsing mobile internet (about 26 percent), Talking/browsing internet not following privacy (about 19 percent), Playing ringtones without cause (about 18 percent), Create pressure on family for buying cell phone (about 4 percent) and Spreading rumors (about 2 percent) (Graph 10).

Graph 10: Respondents involvement in cell phone based deviant activities (n=73)
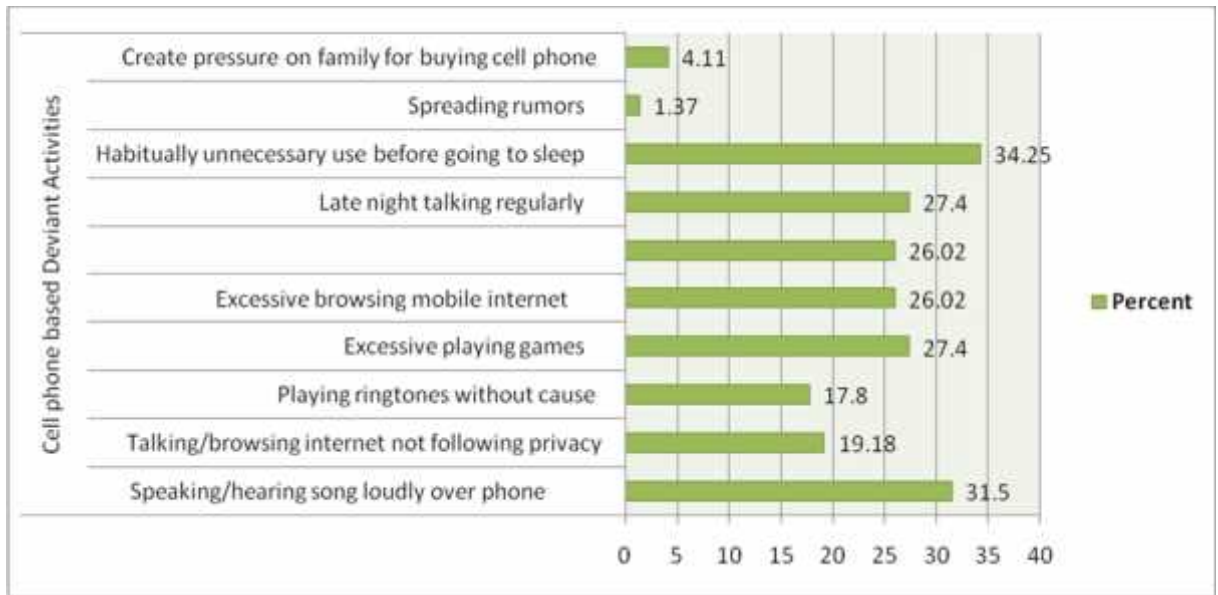
4.3.3. Involvement in internet based deviant activities

The study found that about 75 percent of the respondents are passing excessive time in the social networking media related internet based deviant activities followed by watch and download porn videos and photos (about 37 percent), using fake account for bad intention (about 13 percent), attempt to cyber theft or hacking (about 10 percent), others (about 5 percent) like practicing lie and uploading and posting nude videos and photos (about 2 percent) (Graph 11).

Graph 11: Respondents involvement in internet based deviant activities (n=63)
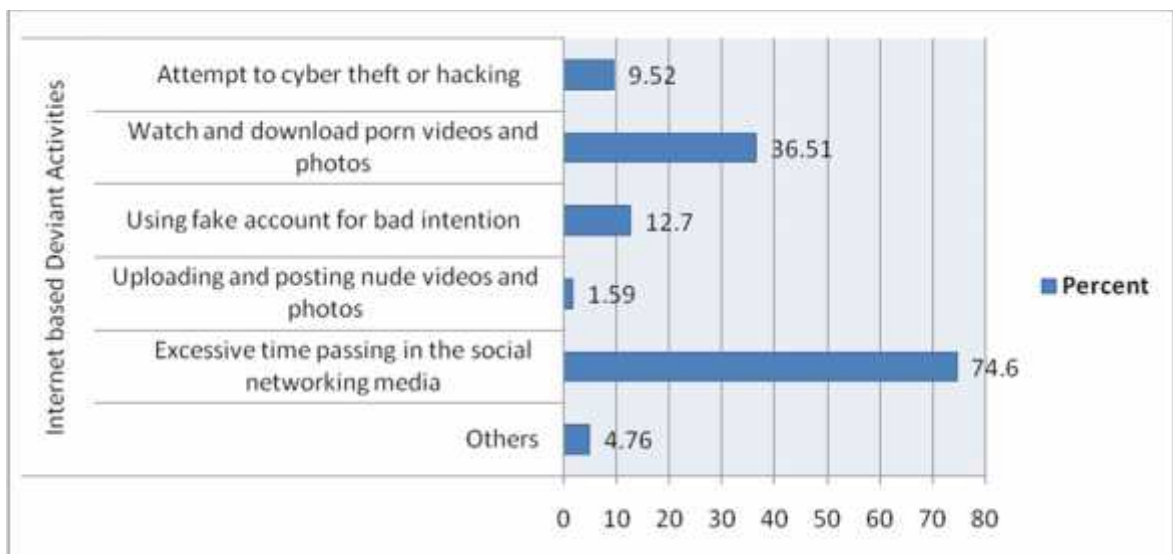
4.3.4. Involvement in Television/Radio based Deviant Activities

The study revealed that about 71 percent of the respondents are not maintaining time schedule, food habit, study period etc. for involvement of TV/radio based deviant activities followed by watch Television/hear radio abnormally (about 27 percent), showing abnormal behavior following Television/radio artist character (about 13 percent) and others like follow others cultures etc. (about 11 percent) (Graph 12).

Graph 12: Respondents involvement in TV/Radio based deviant activities (n=56)
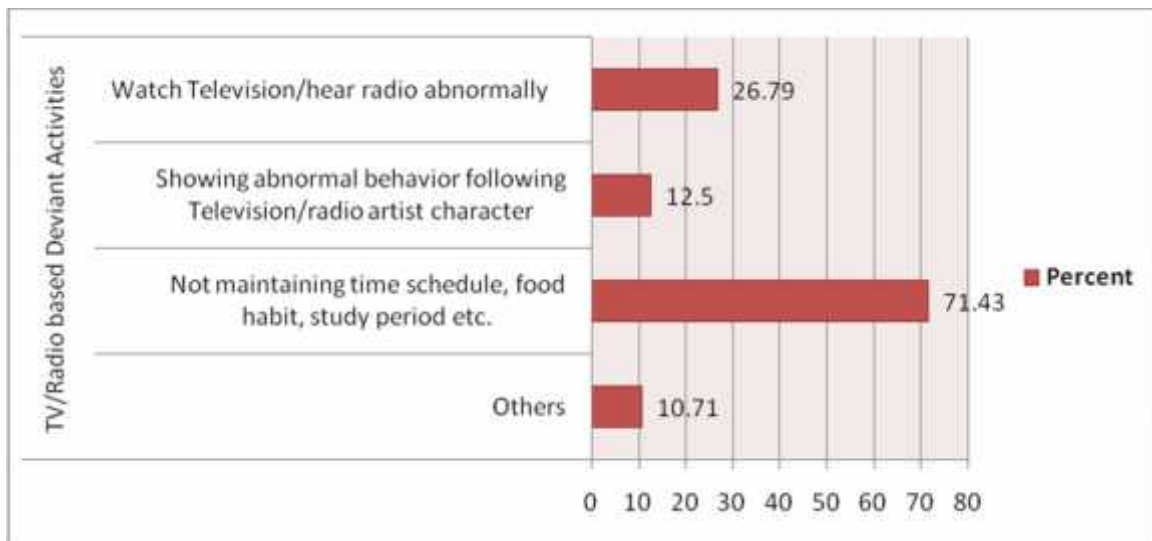
4.3.5. Involvement in Communication Technology based Criminal Activities

The study revealed that respondents are involved in different kinds communication based criminal activities and threatening (about 40 percent) is most committed activity followed by keeping/sharing porn videos in cell phone/computers (about 38 percent), illegal use in examination (about 33 percent), eve teasing (about 21 percent), fraud/ cheating (about 13 percent), record secret moments without permission (about 12 percent), talking over cell phone during driving (about 10 percent), organizing criminal activity (about 8 percent), hacking/spreading virus (about 4 percent) and publishing fake or controversial report/video/photo etc. for bad intention (about 4 percent) (Graph 13)

Graph 13: Respondents involvement in communication technology based criminal activities (n=52)
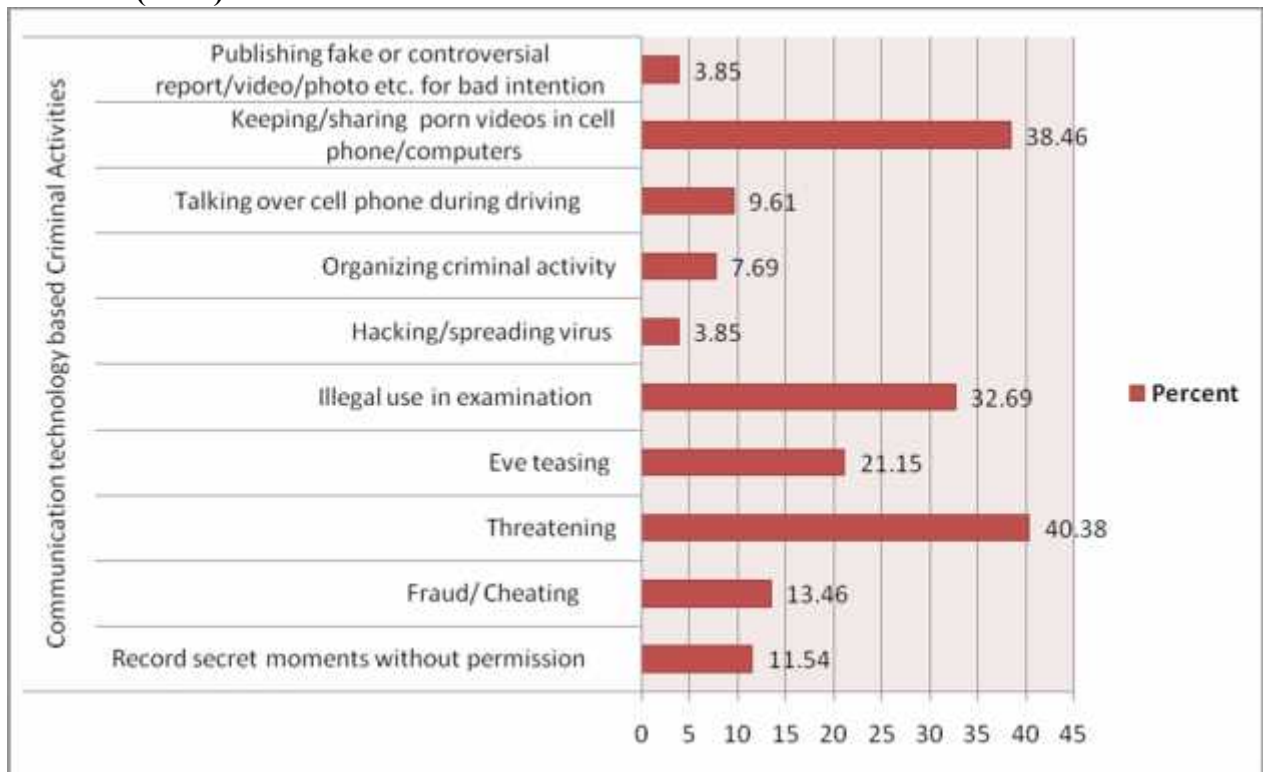
4.3.6. Age Group by involvement in Deviant and Criminal Activities

The study showed that 20-30 years age group of respondents are more involved in both deviant and criminal activities than the other group of respondents. About 49 percent of 20-30 years age group respondents are involved in deviant activities followed 31 years-above (about 27 percent) and 13-19 years (about 23 percent) Graph 14).

In case of criminal activities, 20-30 years (about 48 percent) age group of respondents are mostly involved followed by 13-19 years (about 29 percent) and 31 years-above (about 23 percent) (Graph 14).

Graph 14: Age group by respondent's involvement in deviant (n=77) and criminal activities (n=52).
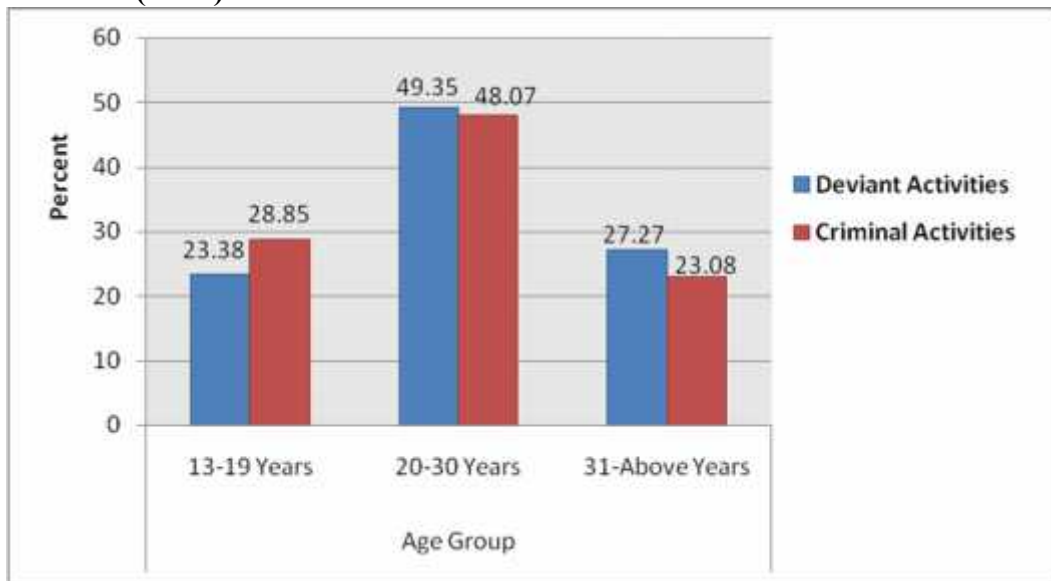
4.3.7. Occupation by involvement in Deviant and Criminal Activities

The study revealed that students are more involved in both deviant and criminal activities than the other occupations respondents. About 39 percent of student respondents are involved in deviant activities followed govt./private service holders (about 22 percent), wage earner (about 14 percent), unemployed/house wife (about 12 percent) and businessmen (about 8 percent) (Graph 15).

In case of criminal activities, students (about 46 percent) are mostly involved followed wage earner (about 17 percent), govt./private service holders (about 13 percent), businessmen (about 12 percent) and unemployed/house wife (about 10 percent) (Graph 15).

Graph 15: Occupation by respondent's involvement in deviant (n=77) and criminal activities (n=52).
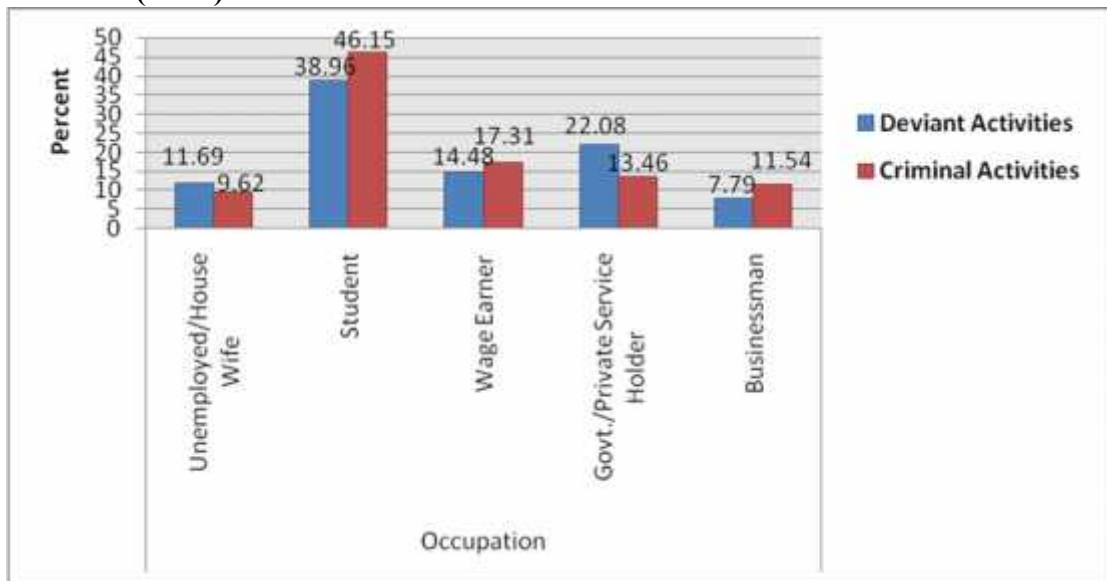
4.3.8. Ways of involvement in Deviant or Criminal Activities

The study found that there are various factors are worked behind respondents involvement in deviant or criminal activities and searching entertainment (about 46 percent) is the most important factor followed by personal gain (about 17 percent), curiosity (about 14 percent), provocation (about 13 percent), political gain (about 7 percent) and other instigating factors (about 4 percent) (Table 5).

Table 5: Respondents ways of involvement in deviant or criminal activities (n=72)

Ways of involvement	Frequency	Percent
Provocation	9	12.50
Personal gain	12	16.67
Political gain	5	6.94
Searching entertainment	33	45.83
Curiosity	10	13.89
Other instigating factors	3	4.17
Total	72	100.0

4.4. Impacts of Communication Technology and Modernization based Dysfunction

4.4.1. Social dysfunction

The study found that occurrences of different patterns of social dysfunctions are accelerating for abusing communication technologies. In this regard, respondents are opined that cyber crime (about 42 percent) is committed mostly for abusing communication technologies followed by disinterest in study (about 37 percent), sexual abuse/verbal abuse (about 33 percent), losing family intimacy (about 33 percent), adultery (about 31 percent), separation (about 29 percent), pre marital sexual relations (about 28 percent), divorce (about 25 percent), delinquency rate (about 25 percent), fraudgery (about 22 percent), rape/gang rape (about 21 percent), suicide tendency (about 8 percent) and others (about 7 percent) including loss of social norms & values, children marriage, economic loss, dishonesty etc. (Graph 16).

Graph 16: Patterns of social dysfunction accelerating for abusing communication technologies (n=150).
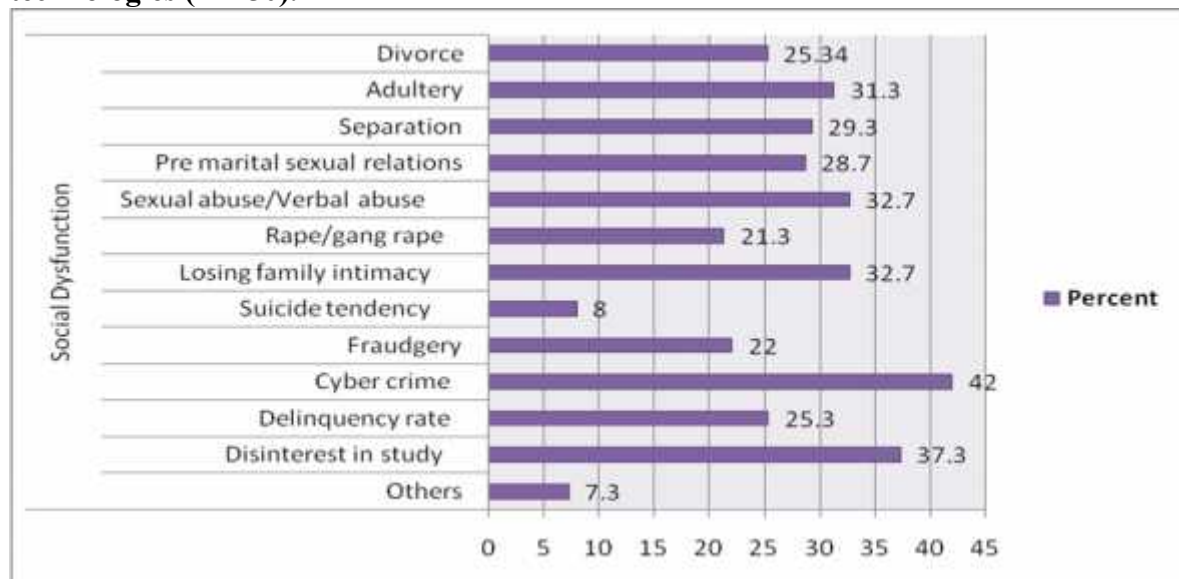
4.4.2. Cultural dysfunction

It is found from the study that abuse of communication technologies have a great impact on our cultural dysfunction. Most of the respondents (about 57 percent) are argued that our culture is being misguided by other cultures followed by unable to retain own culture (about 38 percent), demand of extra need (about 33 percent), prevalence of imitation (about 27 percent), increased dependency (about 16 percent) and others (about 2 percent) including losing religious norms and values (Graph 17).

Graph 17: Patterns of cultural dysfunction accelerating for abusing communication technologies (n=150).
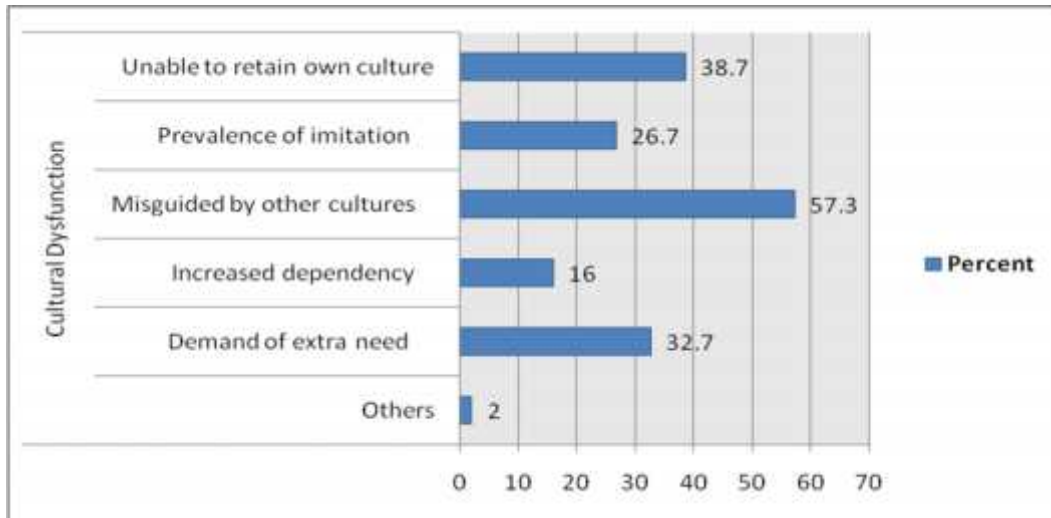
4.4.3. Economic dysfunction

The study indicates that economic dysfunctions are accelerating for abusing different types of communication technologies. In this regard, about 43 percent respondents are agreed that prevalence of increased expenditure is notable economic dysfunction happening for abusing communication technologies followed by additional load to maintain unlimited demand of family members (about 38 percent), motivated by irrational competition (about 36 percent), excessive domination of foreign technologies (about 23 percent) and others (about 4 percent) including problem in manpower (Graph 18).

Graph 18: Patterns of economic dysfunction accelerating for abusing communication technologies (n=150).
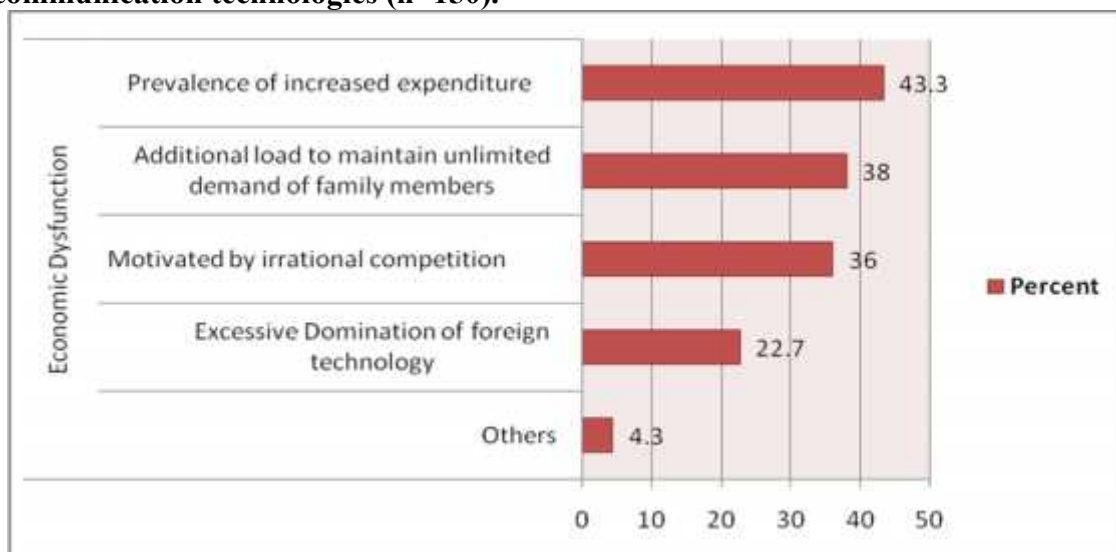
4.4.4. Health related dysfunction

The respondents are opined that communication technology users are suffered from various types of health related dysfunction for both use and abuse of communication technologies and late morning rise (about 47 percent) is most significant one followed by ear/hearing problem (about 44 percent), sleepiness (about 42 percent), eye problem (about 31 percent), physical illness (about 29 percent), change of food habit (about 21 percent), malfunction of genital organ (about 7 percent) and less beautification (about 5 percent) (Graph 19).

Graph 19: Patterns of health related dysfunction accelerating for using or abusing communication technologies (n=150).
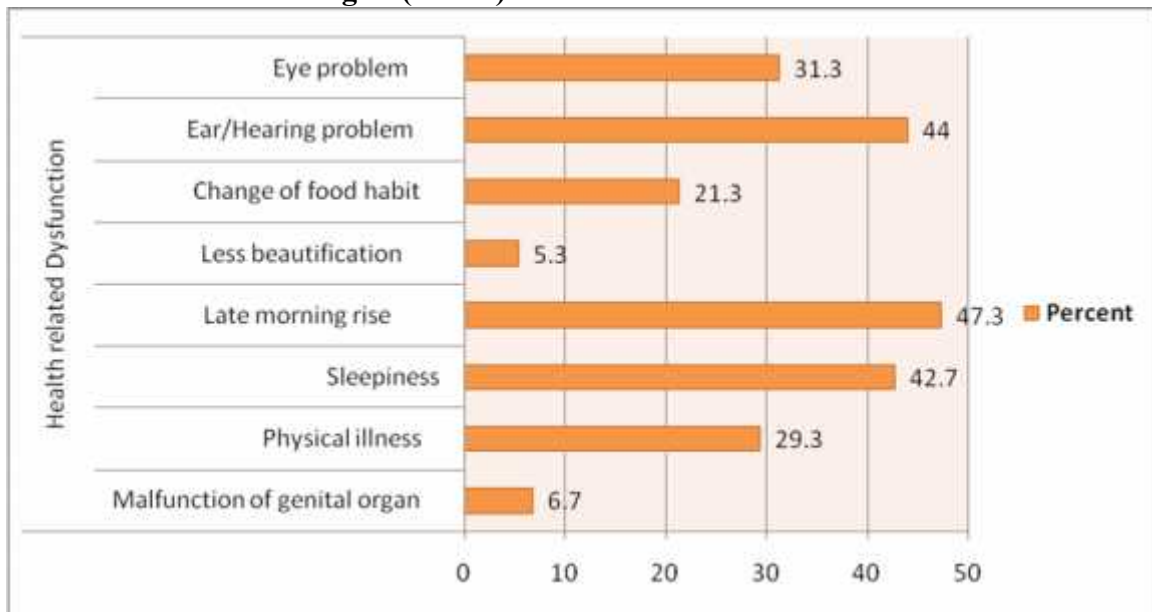
4.4.5. Political dysfunction

According to the respondents political defamation/false publicity (about 54 percent) is the most common type of political dysfunction committing for abusing communication technologies followed by religious furore/rage (about 37 percent), spreading propaganda (about 35 percent), ill motive campaign (about 24 percent) and others (about 4 percent) (Graph 20).

Graph 20: Patterns of political dysfunction accelerating for abusing communication technologies (n=145).
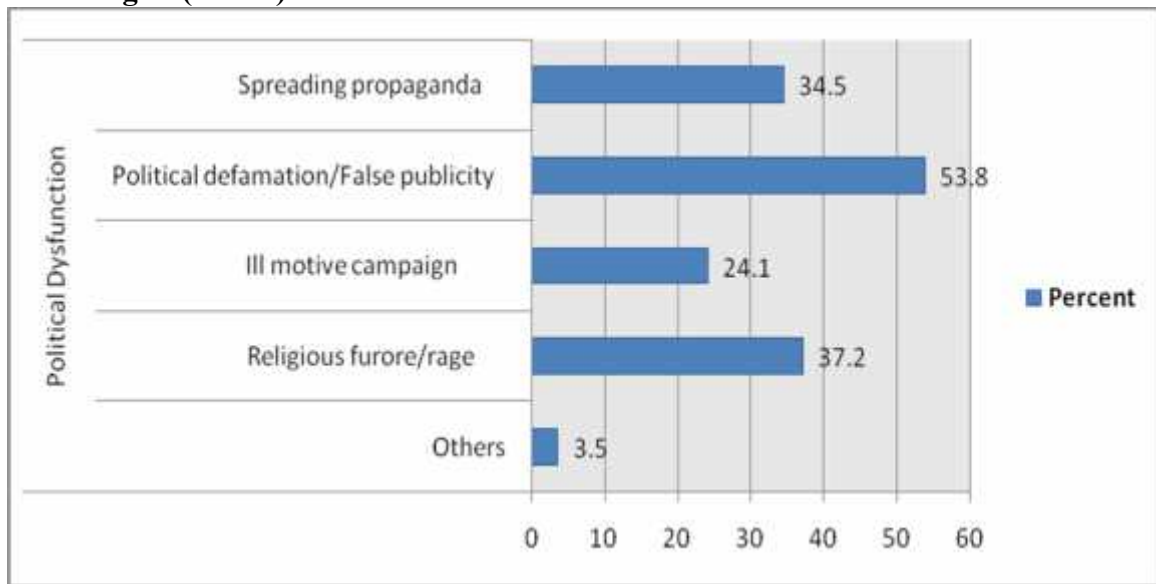
4.4.6. Environmental dysfunction

The study found that most of respondents thought, natural biodiversity is destroying (about 58 percent) for use and abuse of communication technologies followed by noise pollution (about 57 percent) and others (about 5 percent) (Graph 21).

Graph 21: Patterns of Environmental dysfunction accelerating for using or abusing communication technologies (n=137).
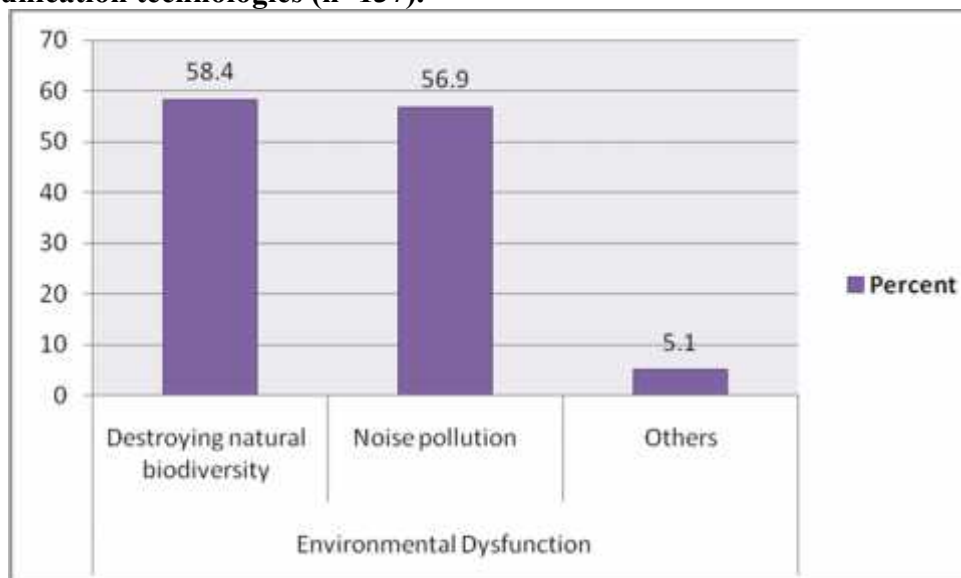
4.4.7. Psychological dysfunction

The study revealed that suffered from depression (about 42 percent) is the most common type of psychological dysfunction accelerating for using and abusing communication technologies followed by stressed (about 41 percent), mental illness (about 27 percent), mental breakdown (about 23 percent), increased temperament/emotion, excitement (about 22 percent) and traumatized (about 15 percent) (Graph 22).

Graph 22: Patterns of psychological dysfunction accelerating for using or abusing communication technologies (n=150).
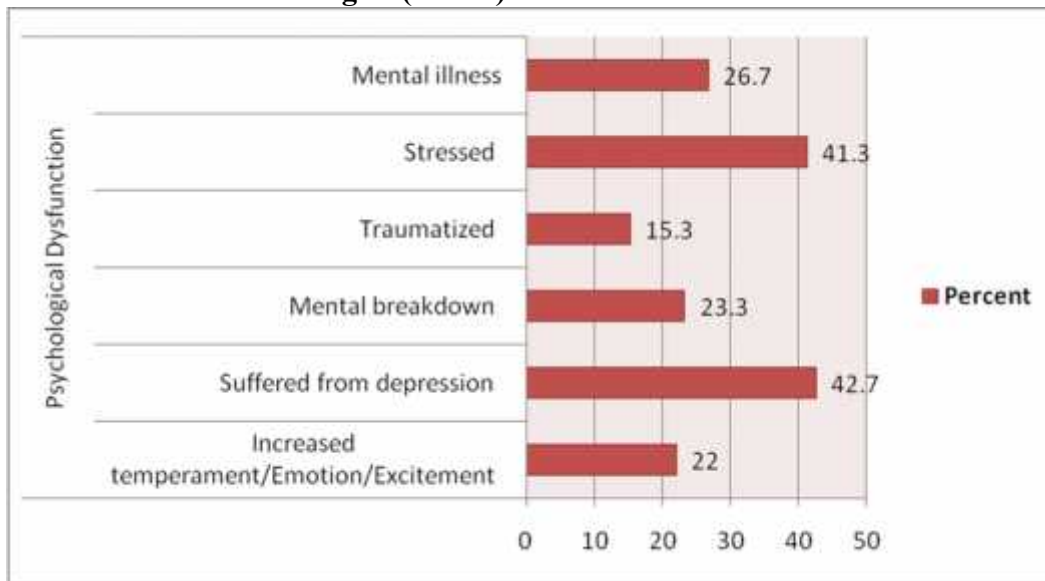
4.5. Issues and Factors of Abusing Communication Technologies

Respondents are requested to give their opinion about issues and factors of abusing different kinds of communication technologies in Bangladesh. They gave single as well as multiple answers in response of the question. Following are the priority basis issues and factors of abusing communication technologies in Bangladesh (Graph 23).

1) **Abuse of social media sites (about 58.85 percent)**
   - Using fake facebook and e-mail account
   - Addiction and dependence on social media network like facebook and YouTube
   - Writing contradictory or false religious articles in the facebook or blogs
   - Spreading political or ill motive publicity in the social media sites

2) **Lack of family and institutional control and supervision (about 51.35 percent)**
   - Lack of social and family bond
   - Unawareness of guardians
   - Broken family
   - Lack of proper parental supervision and monitoring
   - Parents carelessness for children
   - Parents spending low time with children
   - Over parental control

3) **Open internet resources (about 48.50 percent)**
   - Illegal access to computer data
   - Easy access to internet, social media networking sites
   - Opportunities of online dating, watching, uploading & downloading porn images and videos
   - Unprotected internet browsing
   - Availability of porn/nude sites on web
   - Availability of wireless internet facilities

4) **Unregistered technological devices and equipments (about 43.48 percent)**
   - Unregistered SIM card
   - Illegal imported cell phone

5) **Lack of entertainment facilities (about 39.32 percent)**

6) **Influence of peer groups (about 38.00 percent)**
   - Peer groups or friends influence

- Desire to maintain social status
- Irrational peer competitions for modern technological devices
- Relationship breakup

7) **Curiosity and technological dependency (about 36.46 percent)**

8) **Negative cultural impact (about 35.75 percent)**
- Increasement of extra demand
- Negative impact of western cultures
- Tendency of mixing foreign culture with domestic one.
- Misguiding lucrative offer, publicity & advertisement
- Prevalence of imitation
- Irrational demand

9) **Lack of awareness (about 33.41 percent)**
- Unable to measure what is right or wrong
- Adolescents low control over their expenditure

10) **Lack of governmental monitoring & execution of existing laws (about 27 percent)**

11) **Lack of social/religious norm and values (about 23.39 percent)**
- Lack of religious norms and values
- Lack of social norms and values
- Moral degradation

12) **Lack of cyber/technology security and education (about 21.09 percent)**
- Lack of education related to online or cyber facilities
- Unawareness of using internet

13) **Law enforcements weaknesses (about 18.24 percent)**
- Lack of training among law enforcements
- Law enforcements unawareness about cyber law and crime
- Technological weakness among law enforcements

14) **Domination of foreign TV channels (about 10.13 percent)**
- More watching Indian movie and serial
- Dominations of foreign TV channels
- Abnormal competition among TV Channels or media

15) **Competitive corporate market (about 9.10 percent)**
- Low cell phone call rate
- Cheap facilities of modern communication technologies
- Cheap price of modern communication technologies

Graph 23: Issues and factors of abusing communication technologies in Bangladesh (n=137).
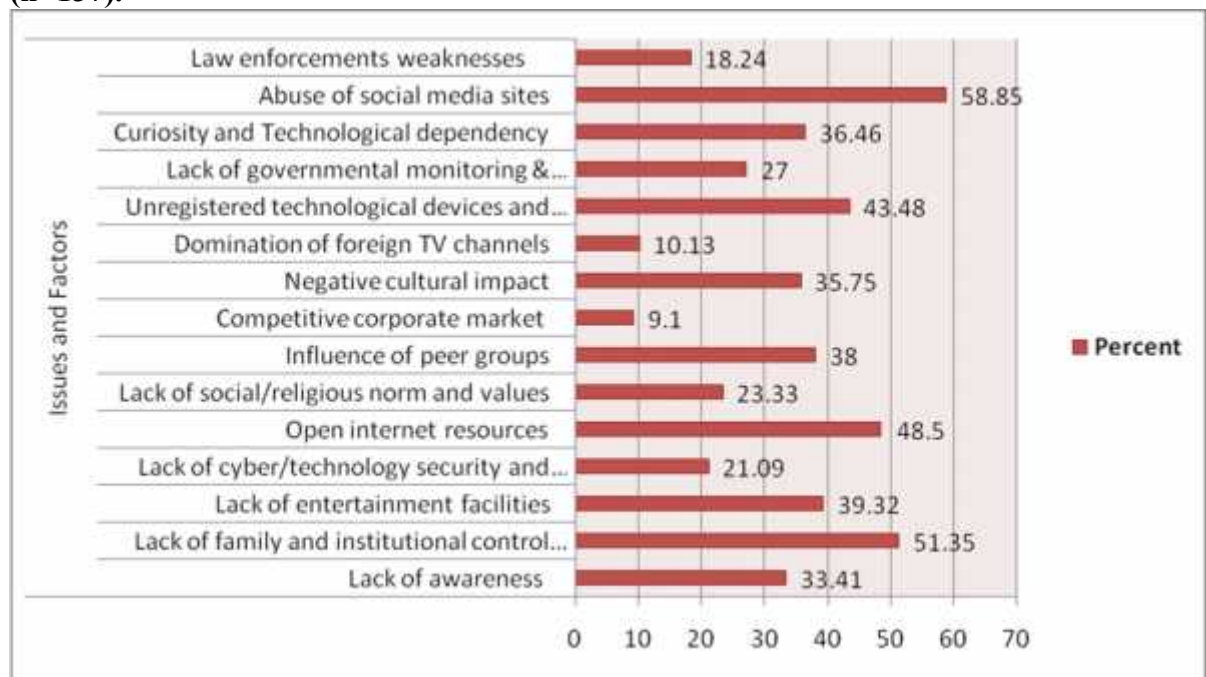
4.6. Recommendations

Respondents are also requested to give their suggestive opinion for controlling abuse or dysfunctional use of different kinds of communication technologies in Bangladesh. They gave single and multiple answers in response of the question. Following are the priority basis suggestive measures for controlling dysfunctional use of communication technologies in Bangladesh (Graph 24).

1. **Growing awareness (about 71.15 percent)**
   - Growing public awareness about proper communication technology uses
   - Awareness campaign program should be started at root level
   - Develop self control to identify what is right or wrong

2. **Taking proper governmental policy measures (about 63.33 percent)**
   - Ensuring registration of unregistered SIM card and cell phone
   - Cell phone call rate should be at standard level
   - Banning low call rate
   - Disconnect illegal internet line
   - Impose age restriction for using cell phone and social media networking sites
   - Controlling communication technology devices supply

- Stop Indian TV channels and ensure proper guidelines

- Not permit bad foreign languages Movies

- Late night special TV or Radio programs should be stopped

- Mutual work between government and mobile phone operators must be strengthen

- Sanction on mobile phone operator for doing any bad or harmful activities

3. **Controlling internet use and cyber security (about 56.34 percent)**

- Controlling and monitoring social media networking sites

- Filtering nude or porn sites

- Pornography censorship

- Improve cyber security

- Handle cyber crime strictly

- Upgrade computer security system

4. **Parental & educational supervision and guidelines (about 50.67 percent)**

- Ensure proper parental supervision and guidance

- Engaging children with family affairs

- Parental guidance to select good peer groups or friends

- Openly discuss about any matter

- Motivate children and student positively

5. **Entertainment facilities (about 37.44 percent)**

- Ensuring sufficient entertainment facilities

- Playing field games and facilities should be increased

6. **Developing morality (about 34.34 percent)**

- Developing social norms and values

- Learning and practicing religious values

7. **Execute existing laws (about 25.45 percent)**

- Deterrent punishment for technology abuser or dysfunctional use

- Enact new law for controlling communication technology abuse

- Proper implementation of existing law

8. **Controlling cell phone operative services (about 21.11 percent)**

9. **Develop digital culture (about 13 percent)**

- Develop digital culture

- Need proper technological knowledge

10. **Technological training for law enforcements (about 9.14 percent)**

Graph 24: Suggestive measures to control abuse of communication technology (n=130)

5 CASE STUDIES AND KEY INFORMANT INTERVIEWS
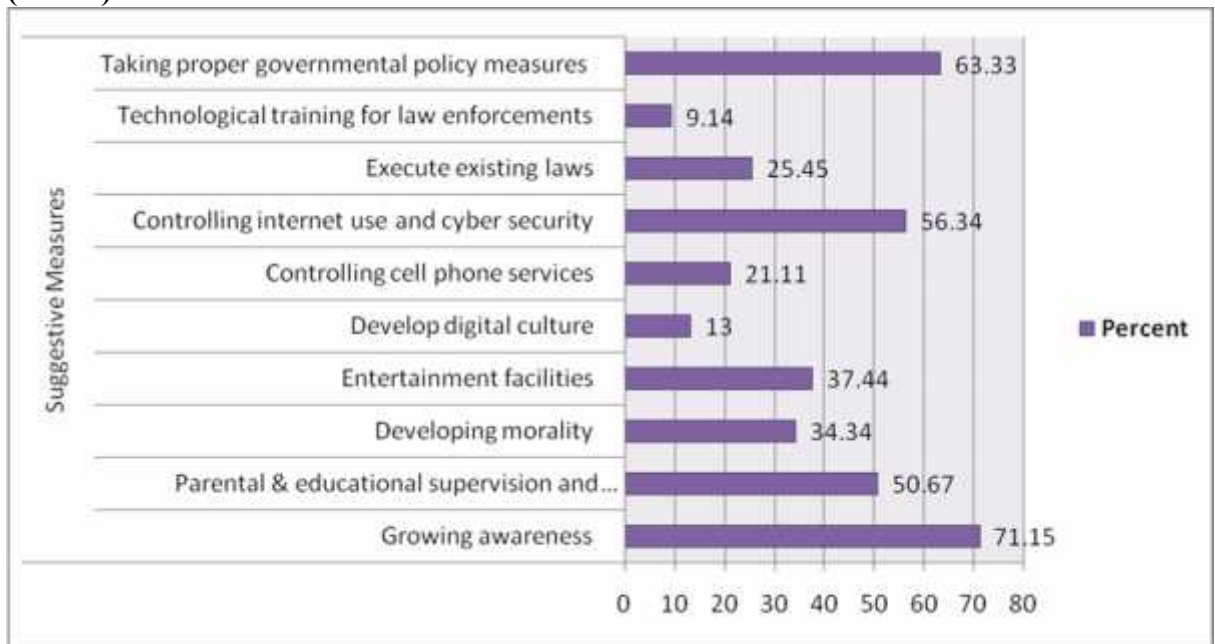
5.1. Case Studies

5.1.1. Case Study 1

Mr. B (pseudo name), a young 17 years old and is a student of English medium school. He is using smart phone since 5 years with two SIM cards as well as now using internet with the cell phone and broadband internet connected with computer. He has facility of watching 36″ LED TV with wifi facilities. Through cell phone he communicates with his friends & family. He learned how to use internet, facebook and you tube from his close friends. Usually, he talked around 30 minutes and spend 3-4 hours for using internet each day by the cell phone and broadband internet connection. For these purposes, a total of 1500 taka spent each month. Technologically, he always tries to keep him up to date and maintain social status with his friend circles. He himself think, guardians are bound to response his demand as only child of the family. Internet can provide more entertainment than TV as it has easy access to porn clips and images. He generally access porn hubs at the late night especially when parents went to bed for sleep. Sharing and watching porn videos with friends at the school period is a common picture. Sometimes he faces problem to weak up early at the morning and missed classes many times. In spite of these problems, passing a single day without cell phone and internet is impossible to him.

5.1.2. Case Study 2

Ms. H (pseudo name) is a 25 years old girl and a student of master's degree in a govt. university. She doing two tuitions for maintains her monthly expenditure and from tuitions she earned around 5000 taka each month. She has one smart mobile phone with two SIM cards. She preferred news channels rather than TV serials. But sometimes she did not watch news for sacrificing time for other family member's interest. Her monthly expenditure for using communication technologies is almost 1000 taka. She mainly uses internet with the smart phone. On an average she spends 1.5 hours each day for the purposes of talking with family members, relatives and boy friend. Sometimes she purchased talk time for free offer for talking with boy friend more time at night. Talking duration rate increased in absence of her guardians at home. For the purposes for browsing internet she spends two hours every day. She also has experience of giving threats and using vulgar languages to unknown persons while they disturb her over call and SMS. Sometimes she gave those disturbing numbers to her cousins and boy friend for threatening. She also received many affair proposals from unknown persons. Recently, she made a complaint against an unknown person to the local police for continuous disturbing her at night. Her own sister is also a victim of cell phone abuse. A fake facebook ID opened in the name of her sister.

She uses internet mainly at night, but stay logged in with facebook all day and night. She is very much dependent on using Facebook and watching video on you tube. For the first time, she watched porn video in the mobile with her boy friend and now it is regular phenomenon. Some dysfunctional use of cell phone like hearing song and ringtones with loud volume and using vulgar languages made her very much annoyed. Several of her friends captured other girl's sensitive part of the body and feeling happy. In her community, she has few known husband and wife who are doing adultery through cell phone.

5.1.3. Case Study 3

Mr. K (pseudo name), 30 years old, service holder of a renowned private bank. His monthly income is about 32,000 taka and spends almost 2000 taka for the purposes of using different patterns of communication technologies. He use internet with the cell phone and broadband at home and office. For using internet, he spends 3-4 hours daily. Using internet especially facebook, you tube, online TV, text message etc. are the main facilities he taking from communication technologies devices. Passing a single day without smart phone and internet is impossible to him. He even use internet at official time regularly. He has many unknown friends in his facebook account. Several times, he chats with them about sexual matters and send love proposal to a woman. In case of cell phone, he regularly talked with few girls and spent lots of time. Now, he feels communication technology devices are the only entertainment option and he is very much dependent on those devices. Few years ago, he was misguided by an advertisement on sexual problems. He took medicine and use on genetic organ according to their directions but faced adverse impact and got physically injured. At a result he spent lot of money for cure. He also experienced mobile fraud in few months ago. A phone call has come to his mobile from GP number that he has won a lottery prize and for this he has to send 20,000 taka to him via bKash. But he did not sent after getting advised by friends. He also has experience of abusing cell phone when he firstly appeared banking diploma exam one year ago. He has seen many examinees are using cell phone at the exam hall. He has failed in two subjects at first semester. In the next year he again give exam for passing those two subjects with the help of cell phone and internet at the exam hall and got passed finally.

5.1.4. Case Study 4

Mr. "A" (pseudo name), 25 years, is a master's degree student of a university. He come university from a long distance everyday. He uses internet and facebook in the cell phone to communicate with his friends and family. Cell phone became a part and parcel of is life and can't think a day without it. At present he is using three registered SIM cards and two multimedia sets. He is keeping more SIM cards just to enjoy different data package offered by the cell phone operators. He usually downloads study materials for different courses, makes assignments and reports, works for thesis paper, applies for job and maintains social network with facebook. He used to listening music and FM radio, takes pictures of important events & notes, maintains daily routine by setting reminder option in the cell phone. He usually passes 3 to 4 hours for using computer. Sometimes when he feels boarded, he visited porn sites for recreation. Most of his friends have same experiences and shared porn movies through pen drive, shareit, wifi, and Bluetooth of cell phone. His monthly expenses nearly 500 taka just for internet and 300 taka for communication purposes. All his expenses come from his family. He discovered some negative tendencies in his life like giving priority talking with opposite sex, sometimes just to draw attention, maintaining relation with girls or woman at a time, group selfie mania, feeling excitement for seeing facebook comments, habitually use cell phone before going to sleep, watch more porn video in the web etc.

5.1.5. Case Study 5

Mr. P (pseudo name), married, 35 years old is selling SIM card including Flexi load, various mobile accessories and bKash service since 2010 at Fakirapool, Motijheel area. He himself uses 3 SIM cards and 2 mobiles for communicating with family members and business purposes. Watching TV, internet use, browsing facebook and watching online videos in you tube etc. are the main technological entertainment to him. He is the authorized SIM card retailer of different mobile operators. Every day, he sells almost 10 SIM cards to the various levels of citizens of the city. In some cases, buyer's tried to convince him to buy SIM cards without registration and in many cases buyers express unwillingness to provide necessary documents including photographs. As a mobile phone accessories sellers he stated that most of mobile phone users are using multimedia handsets, especially China set. This type of mobile's prize is less than other brand mobile. So, they buying easily and there is a scope of cell phone abuse opportunity exists, which we can't deny. It is also experienced, some community members requested him to give specific girl's mobile number. In case of bKash service, he is helping commuters for financial transaction without knowing the source or destination of the money. On an average 50,000.00 taka transact daily and problem raised when one's money sent to another person. Receiving treat over SMS and voice call from unknown person is the common matter he faced.

5.1.6 Summary Findings of Case Studies

Modern communication technologies specially cell phone and internet became part and parcel of all aged user's regular life activities. Without those technologies they cannot think a day. The study revealed from case respondents that most of the communication technology users are youths and students. They are spending lots of money for the purpose of using communication technologies. Its true that modern communication technologies have so many advantages at this information age. Beside the advantages, these technologies brought many miseries to the life of communication technology users. These technologies brought many negative impacts on their personal & family life as well as have economic, health, psychological problems. Communication technology became a part and parcel to its users. Many users especially youth aged users think nice and smart devices is a symbol of status. Most of the case respondents are using smart phone and internet based communication technology. They expenses on an average

3000tk. Per month for maintaining those type of technologies as well as spent huge time (about 3 hours) of a day. About 80 percent of internet users are using social networking media like facebook in the smart phone and broadband internet connected with PC. They can get remainder and any notification easily with the help of communication technology devices. Sharing audios, videos, images, documents, software etc. with each other is a common phenomenon to the technology users. Most of the case respondents use different communication technologies for the purposes of personal followed by entertainment and educational purposes. These communication technological dependencies derivates them into dysfunctional use and instigate deviant and criminal activities. Case respondents especially youths are experienced abusive use of communication technologies in their life and others commuters of their living or working area in the city. Some respondents said that smart phone is the only way to communicate with their boy/girl friend especially at night and this call duration increased while their guardians sleep or absence at the house. Some of them were experienced physical illness and missed schedule class routine and regular activities due to long time talking at night. Social media network like facebook and cell phone became only entertainment option to them. Even they use facebook during class period. Some of them opened fake E-mail and facebook ID for hiding themselves. Most of the youth and adult case respondents watch, keep and share nude pictures and porn videos in their smart phone and broadband connected PC. Other forms of communication technology based criminal activities are illegal use in examination, fraud/ cheating, hacking/spreading virus and publishing or sharing fake or controversial report/video/photo etc. for bad intention etc. Some of them said that they searched women's cell phone number for making love. They also said, some of their relatives and community members are doing adultery with the help of cell phone. As a result few of them got physical punishment by the husband's family and lastly declared divorced.

5.2. Key Informant Interviews

Five key informant interviews were conducted for retrieving various aspects of communication technology, modernization and social dysfunction; communication technology based crime & deviance; its causes & consequences relating social dysfunction in Bangladesh and policy recommendations for controlling dysfunctional use of communication technologies by the users.

5.2.1. Criminologist

According to criminologist cellular phone and internet are the major communication technology systems running in Bangladesh. Talking, texting, voice & audio chatting, e-mailing, browsing, e-commerce, entertainment, educational information sharing etc. are the major facilities/services those taking by the communication technology users from communication technology devices. At present all socio-economic classes' people are using modern communication technologies with exception of internet users confined to the middle through upper classes. Communication technologies are not the symbols but essential ingredients of Modernization. They are associate with antisocial and deviant behaviors and also used as facilitators of crime and violence in Bangladesh. As the number of communication technology users and diversity of users are increasing, the number of cyber crimes, technology based crimes and deviant activities occurring at present days in Bangladesh.

These types of criminal activities are concentrated in the cities and towns than rural areas. These technologies facilitate the potential offenders to engage in crimes but not the causes of crime. If these technologies are used for watching sexual videos etc. these can lead to motivate to involve in crime and as a result adultery, suicide, divorce and family disharmony rate might be increased due to abuse of communication technologies devices. In recent years some job seekers and students used these technologies in their admission test for illegal purposes. And in some cases it is reported in the newspaper that criminals are using communication technology devices for organizing criminal activities even from staying inside the prison.

Communication technologies especially electronic media and social networking sites are using as easy tools for spreading rumors, propaganda and political purposes serving medium. Cyber stalking, teasing, threatening, pornography, hacking, piracy etc. are the most common type of communication technology devices based crime and deviance occurring in Bangladesh.

There have many social, cultural, economic and political impacts of communication technology based dysfunction in Bangladesh. Social value system affecting, social intuitions are classifying roles, sky culture and violence driven movies affecting our kids, huge economic loss for the cost of crime, abuse of social media like Rammu tragedy, political violence and conflict may occur for the abuse of these technology devices. Peer influence, drug addiction, poverty, unemployment, easy access to phone and internet among the young people are the major instigating factor of abusing communication technologies and young people (aged 18-35 years) are mostly abusing communication technologies.

Lack of supervision and parental control over kids, lack of teacher's supervisions and regulation, not maintaining proper registration system by the mobile phone operators, not properly implementing laws by the law enforcements etc. are mostly liable to abuse communication technologies. Proper parental supervision and guidance can ensure proper use of communication technology. In family level kids will learn what is right or wrong, what is appropriate or not, and focus on their study, learn values and norms that make them good people in future. At the legal and institutional level proper implementation of laws regarding registration, identification & verification by the service providers, proper justice for the victims and punishing the criminals etc. can combat communication technology based crime and deviance in Bangladesh?

The key security actors are looking after to address the problem of abuse of communication technologies. The state security and monitoring sector is not doing well and there have rooms for improvement. There is no nation that can deal with the problems without relationship among different stakeholders. Police, educational institutions, municipal/local governments etc. and stakeholders need to be united under one office. There are some challenges the law enforcing and monitoring agencies are facing during controlling abuse of communication technologies including issues with the

evidence act, still not adequate laws for using technology based evidence sources in the justice system, lack of technology evidence collection, lack trained investigators, lack of policies and lack of awareness among security forces and law enforcements.

5.2.2. Sociologist

According to Sociologist, the use of communication technologies are extended in various fields like business, officials' activities, study purposes and communications with family members, friends, girls or boyfriends etc. But unfortunately, these technologies are being abused more than proper use. For the technological innovation, crime patterns are changed and the notable crime resulted from abuses of these technologies phone are threat, extortion, cyber crime etc. Besides these various new forms of crimes are remerging due to excessive abuse of cell phone in Bangladesh.

There are many bad impacts are present for both excessive use and abuse of cell phone at family and social life. These are: nature of crime is changing, family and social bonding becoming weaker, adultery and divorce rate are increasing, speaking lying rate is increasing etc. Now a day, cell phone using became one kind fashion especially among the young generation and kids. Kids mostly like playing games, chatting and browsing internet through cell phone (multimedia). Sometimes parents are bound to give cell phone to their teenage children due to present environment of the country. Teenaged children's behavior with family members, friends and teachers are being changed for using cell phone. Parents had to spent a huge money for using cell phone and expenditure regarding cell phone including continuous flexi load, internet fee etc. Now our modern society became facebook based and we are facing huge cultural variation.

According to them, there are some factors exists in our society those are increasing cell phone abuse. These are: there are some bad people who write cell phone number of others on Taka, seats of vehicle or on wall; collect number from facebook or other free websites; collecting number from flexi or refill shop; provide number to other friends or relatives for threaten etc. For excessive use of cell phone physical outcome/visible rate decreased than previous period. Interaction between children and parents (children's visit at home) decreased due to use of cell phone.

Bangladesh is a developing country with huge population. Many first develop countries always try to attract the business market of Bangladesh and cell phone business is one of them lucrative business. They always try to catch mobile market through various lucrative business and clients opportunities to sell cultural goods like cell phone. They also provide various opportunities in the period Ramadan, Eid and other festivals and occasions.

To control cell phone abuse, government as well as mobile phone operators along with citizens can take following initiatives: must ensure proper registration of SIM card and indentifying fake SIM card, one man one SIM card and one mobile, cell phone users will be above 18+ years old, ensure original voter ID card and character certificate for buying SIM card, proper monitoring of callers information/transparent voice recording system, specific law on cell phone/internet/cyber crime is very essentials and lastly, government have to show behave as a responsible state.

5.2.3. Psychologist

From the psychological point of view Human child becomes the adult man. His mentality also develops with the growing of physical size, learns from environment, experience the situation he faces and become socialized through the process of socialization. Learning is a process which is initiated by the family from the early age of a human child. As they grow their mental health and mind setup also develops. When their mind remains simple and uncomplicated to believe everything they see, feel, experience and makes the foundation of their mental growth. Now a day's cell phone is a gadget of communication. The persons of underworld, terrorist, evil man, drug supplier anyone could use cell phone for their own benefit or to lead antisocial activities. Even it is heard that the terrorists, *mastans,* extortionists manage and supervise their activities even locked in jails or remained imprisoned via cell phone.

Psychological trait is the cause of crime and deviance. This trait refers to extroversion or introversion, dominance of submission, self-confidence or its absence etc. In this case, Emotional interaction of a child within the family can be mentioned. Inappropriate way of socialization process within the family, a child can show deviant behavior and which can instigate crime in future. They can be crazy for cell phone and being abused by cell phone and become a victim. A child requires a close & continuous relationship with its

primary caregiver up to the age of about 5. Affectionless character might lead to delinquent behavior. A person's deviant activity and crime can be determined by temperament & environment.

There are some Humanistic Psychological Factors by which human being are motivated by a hierarchy of basic needs. They are physiological (food, water and procreational sex); safer (security, stability, freedom from fear, anxiety, chaos); belongingness and love (friendship, love, affection, acceptance); esteem (self-esteem and the esteem of others) and self-actualization (being true to one's nature, becoming everything that one is capable of becoming). With these humanistic psychological factors, communication technologies have some links. Through these technologies one can make love, friendship, sex etc and one can also be victimized for using it. So, if anyone has weak mind set up or weak social interaction, then cell phone might be abused by him/her. Excessive use of facebook and other social networking media accelerating social, family and psychology oriented problems. The technology abusers are forgetting everything. They are becoming fat due to not playing games or exercise. The state of their physical and mental health breaking down and many problems are creating like loss of appetite, depression, physical disabilities, eye problems, losing short temper, ferocious mind, nerve problems, get involvement in early affairs etc. For these reasons they are becoming unable to maintain study schedule as well as losing social norms and values. Many students are doing bad result in the examination for abusing those technologies.

At present time, many guardians and parents are coming to us for seeking help and guidelines for their facebook addicted children. Though drivers are well aware about the danger of using cell phone during driving, many of the doing so and it is very risky than the normal rate. Many drivers think text messaging & calling with touching vehicle steering is very easy, but they don't know their mind reside very reaction mode to the matters. In this matter dopamine hormone started to work and when some indecision related matters comes to his/her mind then accident might be occurred.

The new technology, vast media, internet, social network etc couldn't be blamed. For example flower contains both honey and toxic. But the bee collects honey and the spider collects toxic according to their needs. So it is the choice of their (present generation) owns whether to collect or learn the good things or bad. It is the duty of teachers,

guardians and society to teach them the right things thus they become able to decide or select the right things.

There are some specific issues and factors of abusing cell phone in Bangladesh. It is like, if we unable to play the prefect role at right time and right place, we have to face many unexpected problems like cell phone abuse. In the absence of responsible state and family life, domination of western economy, education, and culture are now pandemic disease in our own systems. The develop countries are working with our psychology and made us dependent on them and being caught by bad western culture.

There are some initiative and security measures can control abuse of communication technology in Bangladesh including encouragements of morality and ethics; presentation of example with real activities and exposure of role model is must; education policy and teaching system should be enough to support the student's basic need with modern world; vocational education should be further developed for industrial development and higher education should be according to the demand of the country that will help to remove unemployment problems; good interaction, understanding and controlling power of BTTB over cell phone Operator Company should be strong and effective; registration of all SIM card, SIM card dealer and retailer, should be must by verified information; all information of every single cell phone user should be collected, and if any abuse happened they must be pursued and be kept under law; database should be maintained by verified information with socio economic background of all SIM card holder (or against a number) and that should be maintained by a specially empowered authority, and if necessary those information should also being made accessible to BTTB and law enforcers who can file any complain against a number, co-ordinate him, track his position and investigate him and if found guilty the person should be made judged and punished according to law in a short span of time; These authority should be very efficient and transparent to their duty, in practicing their power and the system or proceedings should be made easy for all people and to do this regarding law should be very updated with the very changing information and communication technology and electronics to solve the interaction problem among BTTB, Cell Phone Operator Company, Police and Cell Phone User in a legal framework; the vigilance of this authority is very important for deterrence effect on society; ensure to establish the rule of

law and justice in every aspect of society from child education, their moral development, to state governing policy and politics of politician.

5.2.4. IT Expert

This Dhaka city kept our children in like custody where communication technology like facebook is one kind of window for them. This is being used by the school students and in course of being older they making boyfriend or girlfriend. In this age they don't have enough capacity to choose right things and increase probability of being victimized. The young generation is abusing these communication devices rather than educational purposes. At present it is not necessary to use facebook in the computer or laptop. Now its possible with cheap rated hand set and at a result its using there and there. Many students use facebook after morning rise to sleep at night even they use facebook, chatting etc at class period. So, where is their concentration for study? Many children are reluctant to add their parents as friend in the facebook for avoiding them. But it is necessary to stay in touch with them for supervision so that their children's mind cannot go in wrong way. In this case parents have much role to play. Within very short time Bangladesh has 2.5 crore facebook users where most of them about 90 percent are under 25 years old. Facebook is necessary, it should not be stopped and government has to take initiative to filtering facebook, twiter and youtube contents, grow much awareness among the people, age restriction for using facebook might be applied until develop digital culture in the country.

Now a days facebook is using as tool of cyber crime and facebook spam using for that purposes. Sometimes facebook users seen some beautiful unknown girls' picture on friend's timeline, request of donation for children, winning a lottery, easy income opportunity etc. and when a user or friend like and click on the link he/she might be felt in trouble. These type of post are cyber hackers designed malwares and able to steal personal information as well. It would be better to avoid such kind of posts and can be followed some facebook use related security measures like never click on star related rumor posts like breaking news!, hidden news *(gopon khobor, gomor phas),* hidden information leaked, rear news *(adaler khobor);* don't be excited after seeing any breaking news because it could be malware. For clear and true information Google search engine can be used; do not like any like demanded post. A facebook user can verify whatever he likes past to go through activity logs option; keep away from clicking

on food or diet advised related posts; don't click on fake news websites. Here a facebook user can use authentic and reputed newspapers websites to avoid big troubles and avoid any facebook gift card because this type of prize winning malware want personal information and there is a possibility to download virus in your computer

5.2.5. Law enforcement

RAB (Rapid Action Battalion) and Police officials of Dhaka Metropolitan area mentioned that cell phone is the most essential component to all age group people. But this cell phone also the cause of various patterns of crime in Bangladesh. According to law enforcement officials extortion threats through phone calls using various name has seen a spectacular rise over the last few months with middle class head of families being the prime target. Hardcore criminals mainly target businessmen and other high officials. Threat complains mostly come from residential area of the city like Uttara, Gulshan, Dhanmondi etc.

Each day many complaints lodged in to the different unit of police and RAB due to disturb, threat, in boxing bad comments & pictures and teasing in the social networking media and among these teasing female is notable. Law enforcements receive 70 such complaints on an average every day. After getting complains both police and RAB investigate the matter and try to apprehend the criminals. But, in some cases victims are unwilling to file case against criminals and in some cases they try to resolve the matter themselves. Those who abuse the social networking media, most of them use fake ID and few are abusing from abroad. For these problems most of them are remain untouched. Law enforcement agencies are aware about the dysfunctional use of communication technologies and cyber crime. For an instance, identification and apprehend of spreading communal hate through publishing fake picture of torturing rohinga muslims in the facebook.

Meanwhile, law enforcers stated, the biggest barrier to tracking these criminals is the large number of unregistered mobile phones still out in the market. Law enforcement officials say, that the first step to dealing with this situation is not panic. 'Most people switch off their phones or change their numbers and sit tight. RAB and Police said that they were failed to trace offenders in ninety percent cases due to user's fake registration.

Bangladesh police and RAB are now more capable to identifying criminals and their locations by tracking criminal's devices. They also mentioned, it is possible to identify the criminal but it requires time to identify his location technologically. Both technical devices and informants have to apply to track such criminals. They cite the success of the tele-tapping process through the apprehension of JMB kingpins Shaikh Abdur Rahman and Bangla Bhai (Siddiqul Islam) by law enforcers and a incident of Pichi Hannan, a pseudonym of the godfather in Ramna area, the heart of Dhaka was caught with evidence and related clues from a cell phone left in the crime scene.

According to them unregistered SIM card, using excessive number of cell phone and SIM by single user, cell phone use by bellow 18 years, adultery by the women whose husband living in abroad, enmity of one another are the main issues for abusing cell phone in Bangladesh. Earlier, victims were asked to wait at a point on the street and a street urchin was sent to him to collect the parcel containing money but this has failed after police got hold of a few criminals in this way. Over the years the extortionists have adopted innovative methods of collecting extortion money. Police receive many complaints of phone threat every month and so many are remaining unreported. The first step to dealing with this situation is not panic. Most people switch off their phones or change their numbers and sit tight. This might not be the best technique all the time as the extortionist realizes how scared you are. It is best to inform police once receive the first call. It is possible to identify the criminal but it requires time to identify his location technologically. Both technical devices and informants have to apply to track such criminals. Meanwhile, law enforcers say, the biggest barrier to tracking these criminals is the large number of unregistered mobile phones still out in the market. The criminals are using Spoofing software (a fun software) for committing most of the mobile related fraud. In this case, if any person gets mobile fraud call or SMS, he/she can primarily maintain some guidelines like: don't feel nervous and stay normal after getting such kind of abnormal call/SMS from unknown; after finishing the call or cut off the call, redial the same number for justification, if the call is internet/technology based redial call would not be possible; informing the matter to the police as soon as possible; doing GD can play a vital role for proper investigation.

Proper use of ICT act, parental and institutional supervision, practicing norms and values, banning all unregistered SIM card, technological development of law enforcers,

best to inform law enforcers after receiving the first threat call and growing more public awareness and morality against cell phone use etc. can control communication technology abuse.

5.2.6 Summary Findings of Key Informant Interviews

Modern communication technologies are blessed of modern science to us. It's using field is vast and at present all socio-economic classes' people are using modern communication technologies with exception of internet users confined to the middle through upper classes in Bangladesh. Communication technologies are not the symbols but essential ingredients of Modernization. Within very short time Bangladesh has 2.5 crore facebook users, where most of them about 90 percent are under 25 years old. These technologies facilitate the potential offenders to engage in crimes but not the causes of crime. They are associate with antisocial and deviant behaviors and also used as facilitators of crime and violence in Bangladesh. For the technological innovation, crime patterns are changed and the notable crime resulted from abuses of these technologies are threat, extortion, cyber crime etc. According to law enforcement officials extortion threats through phone calls using various name has seen a spectacular rise over the last few months with middle class head of families being the prime target. Each day many complaints lodged in to the different unit of police and RAB due to disturb, threat, in boxing bad comments & pictures and teasing in the social networking media. Law enforcements receive 70 such complaints on an average every day. Hardcore criminals mainly target businessmen and other high officials. Threat complains mostly come from residential area of the city like Uttara, Gulshan, Dhanmondi etc.

From social and psychological point of view, psychological trait is the cause of crime and deviance. This trait refers to extroversion or introversion, dominance of submission, self-confidence or its absence etc. There is also having some humanistic psychological factors (physiological, safer, belongingness and love, esteem and self-actualization) by which human being are motivated by a hierarchy of basic needs. With these humanistic psychological factors, communication technologies have some links. Even though drivers are well aware about the danger of using cell phone during driving, many of the doing so and it is very risky than the normal rate. Inappropriate way of socialization process within the family and lack of supervision and parental control over kids a child can show deviant behavior and which can instigate crime in future. Peer influence, drug

addiction, poverty, unemployment, easy access to phone and internet among the young people are the major instigating factor of abusing communication technologies. If these technologies are used for watching sexual videos or entertainment purposes only these can lead to motivate to involve in crime and as a result adultery, suicide, divorce and family disharmony & speaking lying rate might be increased. Social value system affecting, social intuitions are classifying roles, sky culture and violence driven movies affecting our kids, huge economic loss for the cost of crime, abuse of social media like Rammu tragedy, political violence and conflict may occur for the abuse of these technology devices. The state of technology abusers physical and mental health breaking down and many problems are creating like loss of appetite, depression, physical disabilities, eye problems, losing short temper, ferocious mind, nerve problems, get involvement in early affairs etc. For these reasons they are becoming unable to maintain study schedule as well as losing social norms and values. Many students are doing bad result in the examination for abusing those technologies.

Day by day the rate communication technology related crime and deviance occurring increasingly for so many unregistered SIM card, devices and fake IDs etc. According to law enforcements, they were failed to trace offenders in ninety percent cases due to user's fake registration. The best option to deal with the situation is to not get panic. Informing law enforcements in right time and doing GD can help apprehend the criminals as well as in proper investigation. Beside these, unfortunately the people of underdeveloped countries welcome the negative sides of modern culture more than the positive things like sincerity to duties. To protect our young generation, government has to take initiative to filtering facebook, twiter and youtube contents, growing awareness among the people, age restriction for using facebook might be applied until develop digital culture in the country. Proper parental supervision and guidance can ensure proper use of communication technology. In family level kids will learn what is right or wrong, what is appropriate or not, and focus on their study, learn values and norms that make them good people in future. At the legal and institutional level proper implementation of laws regarding registration, identification & verification by the service providers, proper justice for the victims and punishing the criminals etc. can combat communication technology based crime and deviance in Bangladesh.

| **6** | **FINDINGS OF DISCUSSION** |

The study objectives were to investigate different aspects of communication technology, modernization and social dysfunction; communication technology based crime & deviance; its causes & consequences relating social dysfunction in Bangladesh. From the findings of survey, case studies, KIIs and literature review the study found some significant issues and factors which are tends to recommend on controlling cell phone abuse.

6.1. Demographic features of communication technology users in Bangladesh

It is found from the study that male, single and youths (20-30 years of age) are using different types of communication technologies in Bangladesh. Most of the users' occupation is students, completed graduation degree and monthly income range is 0-5000 taka. In case of resident status, most of communication technology users are migrants and living in rented house/flat at the study area. Though most of the users using one cell phone and one E-mail ID, they have at least 2 SIM cards at a time.

Most of the communication technology users are maintaining expenditure from their own income whose monthly expenditure level is 200-500 taka. Majority of the respondents' cell phone talk time duration is above 36 minutes, passing time for internet use is above 2 hours and duration of watching/hearing TV/radio is 01-60 min per day. For the purposes of using communication technologies, on an average a user is spending more than 3 hours per day.

6.2. Purposes of using communication technology

Among different types of communication technologies cell phone is being used mostly for the purposes of personal use and entertainment. Following are different facilities those users are taking from modern communication technologies:

1) **Cell phone:** Talking, internet browsing, some beneficial services like setting alerting, breaking news, alarm etc, hearing F.M radio, news/music etc. and playing games.

2) **Internet:** Using social networking sites like facebook, twitter and blogs, E-mail, watching/downloading online videos/audios, browsing and watching online TV channels.

3) **TV/Radio:** Watching/hearing song/drama/serial/natok/movie, news and some kind of special program.

6.3. Communication technology based crime and deviance in Bangladesh

It is revealed from the study that communication technology users are more involved in different types (cell phone/land phone, internet and TV/radio) of communication technology based deviant activities rather than criminal activities. They also witnessed other individual, community members or strangers' involvement in communication technology based deviant activities followed by criminal activities. The study also found that students and 20-30 years age group of users (youths) are more involved in both deviant and criminal activities than the other group of users and searching entertainment is the most important factor of their involvement in such kind of deviant or criminal activities.

6.3.1. Cell phone based deviant activities

- Habitually unnecessary use before going to sleep
- Speaking/hearing song loudly over phone
- Playing ringtones without cause
- Excessive playing games
- Late night talking regularly
- Disturbing someone through call/missed call/SMS/MMS
- Excessive browsing mobile internet
- Talking over phone or browsing internet not following privacy
- Giving unusual pose for taking selfie or showing abnormal behavior in the name of selfie
- Create pressure on family for buying new cell phone
- Spreading rumors for self interest
- Practicing dishonesty or talking lie over phone
- Using cell phone at the class/meeting or cell phone prohibited places.
- Thinking cell phone as only entertainment option in life
- Thinking cell phone or smart devices as a symbol of social status.

6.3.2. Internet based deviant activities

- Passing excessive time in the social networking media like facebook, twitter, blogs etc.
- Watch and download porn videos and photos
- Uploading and posting nude videos and photos
- Using or opening fake account for bad intention
- Attempt to cyber theft or hacking
- Spreading virus for curiosity
- Giving false information in the web
- Meaningless chatting with friends
- Sending odd website links to the known subscribers/friends
- Enjoying 'porn' websites very much than other sites.
- Sharing more about yourself in the web
- Logged in facebook after few times and again without any cause
- Showing abnormal behavior for adding someone as friend
- Using artificial user name in the social media sites instead of real name
- Feeling excitement after seeing new post notifications
- Giving status about every location of yourself
- Using facebook silently during official time
- Tendency to add unknown persons as friend to increase the number of facebook friends
- Suddenly checking facebook status after weak up from sleep at night

6.3.3. TV/Radio based deviant activities

- Not maintaining time schedule, food habit, study period etc.
- Watch Television/hear radio abnormally
- Showing abnormal behavior following Television/radio artist character
- Craziness about foreign/western cultures
- Showing rude attitude or feeling bad for missing any favorite TV program/serial

6.3.4. Communication technology based criminal activities

- Threatening
- Keeping/sharing porn videos in cell phone/computers
- Illegal use in examination
- Eve teasing

- Cyber stalking
- Cyber theft
- Fraud/cheating
- Record secret moments without permission
- Talking over cell phone during driving
- Organizing criminal activity
- Hacking/spreading virus
- Publishing fake or controversial report/video/photo etc. in the web for bad intention
- Opening fake account for heinous purposes
- Broadcasting indecent advertisement
- Tracking someone without permission

6.4. Impacts of communication technology and modernization based dysfunction in Bangladesh.

The study found that incidences of different patterns of communication technology and modernization's related dysfunctions are accelerating for abusing communication technologies. In this regard, respondents are opined about social, cultural, economic, health, political, environmental and psychological dysfunctions in Bangladesh.

6.4.1. Social dysfunction
- Increasing cyber crime
- Increasing cyber stalking
- Increasing disinterest in study of students
- Decreases student's academic performance
- Decrease face to face communication skill
- Increasing sexual abuse/verbal abuse
- Losing family intimacy
- Increasing adultery rate
- Increasing separation rate
- Increasing divorce rate
- Increasing children marriage rate
- Increasing pre marital sexual relations
- Increasing rape/gang rape rate

- Increasing delinquency rate

- Increasing fraudgery

- Increasing suicide tendency rate

- Losing social norms & values

- Decrease cohesion of social relation

- Both guardians and users are facing economic loss

- Increasing dishonesty practice

6.4.2. Cultural dysfunction

- Own culture is being misguided by other/western cultures

- Unable to retain own culture

- Increasing demand of extra need

- Increasing prevalence of imitation

- Increasing dependency rate

- Losing religious norms and values

6.4.3. Economic dysfunction

- Prevalence of increased expenditure

- Additional load to maintain unlimited demand of family members

- Users are being motivated or misguided by irrational corporate competition

- Excessive domination of foreign technologies

- Creating problem in potential manpower

6.4.4. Health related dysfunction

- Late morning rise

- Facing Ear/hearing or eye problem

- Feeling Insomnia and sleepiness in day time

- Sensing physical illness

- Change of food habit

- Malfunction of genital organ

- Less beautification

- Becomes fatty for avoiding exercise and games

- Feeling back pain

- Feeling bad headache

- Imbalance of weight

6.4.5. Political dysfunction

- Increasing political defamation/false publicity in the social media websites.
- Creating religious furore/rage in the social media websites.
- Spreading propaganda and rumor in the social media websites.
- Organizing criminal/deviant activities with the help of communication devices.
- Ill motive campaign at the websites.

6.4.6. Environmental dysfunction

- Destroying natural biodiversity
- Increasing Environmental and Noise pollution

6.4.7. Psychological dysfunction

- Suffered from depression, stressed, mental illness and breakdown.
- Increased temperament/emotion/excitement
- Became a Traumatized victim
- Become extremely lazy
- Sacrificing own normal life for virtual life
- Thinking life is impossible without facebook or cell phone
- Thinking cell phone and internet are the sole option for entertainment and these smart devices are the symbol of social status.
- Feeling loneliness and thinking about own fault
- Comparing yourself with others and feelings jealous others

6.5. Issues and factors of abusing communication technologies in Bangladesh

1) Abuse of social networking media sites
2) Lack of family and institutional control and supervision
3) Open internet resources/easy access to internet
4) Unregistered technological devices and equipments
5) Lack of entertainment facilities
6) Influence of peer groups
7) Curiosity and technological dependency
8) Negative cultural impact
9) Lack of awareness
10) Lack of governmental monitoring & execution of existing laws
11) Lack of social/religious norm and values
12) Lack of cyber/technology security and education

13) Law enforcements weaknesses

14) Domination of foreign TV channels

15) Irrational competitive corporate market

7 CONCLUSIONS AND RECOMMENDATION

7.1 Conclusions

We are living in the information age where a communication technological device like cell phone and internet are not just modern technology but also used for making calls, video calls, sending text messages as well as in these devices users can use many features like operating system, facebook, you tube, third-party apps and user interface, reminder of important tasks, calendar, online libraries, dictionaries and so many more. It acts like small entertainment box. Overall, it is arguably true that people tend to "take the easiest route," thereby becoming more dependent on technology. At present all socio-economic classes' people are using modern communication technologies with exception of internet users confined to the middle through upper classes. Within very short time Bangladesh has 2.5 crore facebook users, where most of them about 90 percent are under 25 years old. Young people (aged 18-35 years) are mostly abusing communication technologies. As the number of communication technology users and diversity of users are increasing, the number of cyber crimes, technology based crimes and deviant activities occurring at present days in Bangladesh. These technologies facilitate the potential offenders to engage in crimes but not the causes of crime. They are associate with antisocial and deviant behaviors and also used as facilitators of crime and violence in Bangladesh.

For the technological innovation, crime patterns are changed and the notable crime resulted from abuses of these technologies are cyber crime, cyber stalking, demanding extortion, eve-teasing, threatening, illegal use in examination, organizing criminal activity etc. Dysfunctional uses of these technologies have many bad impacts on our personal life, social norms and values, cultural, economic, politics and environment. Inappropriate way of socialization process within the family, a child can show deviant behavior and which can instigate crime in future. They can be crazy for cell phone and being abused by cell phone and become a victim. Lack of supervision and parental control over kids, lack of teacher's supervisions and regulation, not maintaining proper registration system by the mobile phone operators, not properly implementing laws by the law enforcements etc. are mostly liable to abuse communication technologies. Peer

influence, drug addiction, poverty, unemployment, easy access to phone and internet among the young people are the major instigating factor of abusing communication technologies. There also have some other instigating factors for abusing communication technologies like writing cell phone numbers on currency *(taka)*, seats of vehicle or on wall; collect number from facebook or other free websites; collecting number from flexi or refill shop; provide number to other friends or relatives for threaten etc.

If these technologies are used for entertainment purposes only these can lead to motivate to involve in deviance and crime and as a result adultery, suicide, divorce and family disharmony & speaking lying rate might be increased. Social value system affecting, social intuitions are classifying roles, sky culture and violence driven movies affecting our kids, huge economic loss for the cost of crime, abuse of social media, political violence and conflict are occurring for the abuse of these technology devices. Teenaged children's behavior with family members, friends and teachers are being changed, interaction between children and parents (children's visit at home) decreased due to use of cell phone. Parents had to spent a huge money for using cell phone and expenditure regarding cell phone including continuous flexi load, internet fee etc.

The state of their physical and mental health breaking down and many problems are creating like loss of appetite, depression, physical disabilities, eye problems, losing short temper, ferocious mind, nerve problems, get involvement in early affairs etc. For these reasons they are becoming unable to maintain study schedule as well as losing social & religious norms and values. Many students are doing bad result in the examination for abusing those technologies. Dysfunctional use of modern communication technologies can bring many miseries to us and that's why now it's a matter of deep concern to everybody. Cell phone, internet, facebook and other communication technologies are necessary for present days and these should not be stopped. Government along with others has to take initiative to stop and control dysfunctional use of modern communication technologies and to develop proper digital culture in the country.

7.2. Recommendations

The study revealed that teenage and youth age group of communication technology users are the most vulnerable/risk groups for dysfunctional use of those technologies. Around 90 percent of technology users are belonging under 30 years of age. So, many teenagers, youths as well as adults are involved in deviant and criminal activities. Teenagers and youths related abuse of communication technology control mostly concerned with their parents and educational institutions supervisions and guidelines. As a whole governmental policy level activities and initiatives can ensure proper use guidelines, execution & enactment of new laws, monitoring and controlling whole communication technology system. The following recommendations might be taken by government along with others concerned bodies to stop and control dysfunctional use of modern communication technologies as well as to develop proper digital culture in the country.

1) Awareness and learning regarding proper communication technological use should be increased through different campaigns and programs stating at root level. People should know how this technology can be used for their betterment.

2) Government should be technologically self sufficient to protect and fight against cyber crime and SIM cloning call from unknown sources. Ensuring technological and cyber crime related training and logistics supports for law enforcements can make them efficient to deal with the matters.

3) Controlling and monitoring different mobile banking that these services cannot be used as a medium of terror/criminal financing.

4) Government has to provide meaningful instruction to its service providers, users, and other stakeholders time to time so that none can able to mistreat it as well as increase moral and ethical standard of these technology users.

5) The competitive environment in this market should be free and fair. All organizations should get competitive facilities so that they can take it to the peak. If that is possible, the government will get maximum revenue and the public will enjoy superior services.

6) It's a matter of deep concern that domestic violence and other forms of crime and deviance are increasing for abusing these modern technologies. So, BTRC should take quick initiative to use national ID card number and E-mail ID in case of

opening new Facebook/twitter/blogs etc. accounts and bring all unregistered SIM cards and devices under proper registration system.

7) Censorship in case of surfing porn or vulgar websites or social media sites can be imposed like other develops countries.

8) Criminals/accused/convict and examinee/students should not allow to keep/use communication technological devices in the secured area, like prison and examination or class room.

9) Recently criminals used internet communication technologies like viber, imo, whatsapp, tengu etc. for organizing criminal activities. So these services should be monitored deeply and if necessary, should be stopped temporally to resolve any crisis situation.

10) Government has to think and monitor that does some Indian channel really creating problem in our domestic culture or social dysfunctions or not? If some channel or TV programs doing so, these should be stooped.

11) Family and educational institutions can be prime and primary steps for ensuring proper cyber education and to motivate and build awareness for proper use of communication technologies. Ensuring good relation and understanding between parents and children, teachers and students can establish trust, openness and feelings sharing among themselves.

12) Ensure sufficient recreation facilities that the users cannot think smart devices and internet are the only entertainment option.

13) Practicing moral, social, religious norms and values at family, social and institutional level can enrich moral psychology and security.

14) Communication technology users have to aware, learn and follow cyber security options, tools and guidelines to avoid cyber crime and harassments. If such things happen, doing GD and informing the matter to the police as soon as possible can play a vital role for proper investigation and to get rid of the situation.

15) Government and law enforcements have to execute present cyber laws and communication technology related laws properly. Indecent advertisement and publication can misguided a user and as a result users might be sufferers. If necessary, government can enact new laws or update existing laws for proper use of communication technologies.

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APPENDICES

Appendix 01: Survey Questionnaire

Thesis Title: Communication Technology and Modernization's Impact on Social Dysfunction in Bangladesh: Addressing Remedial Measures

Study Purpose: This study is being undertaken for obtaining M.Phil degree from University of Dhaka, Bangladesh. This study aims to investigate different aspects of communication technology, modernization and social dysfunction; communication technology based crime & deviance; its causes & consequences relating social dysfunction in Bangladesh. The study covered 150 communication technology users in the Dhaka City and you had been selected one of the respondents.

Ethical Issue: All the information below will be used for research purposes only and the respondent's identity will be kept in secret.

Respondent's ID:

Section A: Demographic Characteristics of the Respondents

1. Sex of the respondent.
   1) Male   2) Female

2. Respondent's age.

3. Respondent's age group.
   1) 13-19 Years   2) 20-30 Years   3) 31-Above

4. Marital Status of the Respondent.
   1) Single   2) Married   3) Others

5. Education level of the respondents.
   1) Illiterate   2) Primary   3) S.S.C   4) H.S.C /Diploma   5) Graduation

6. Occupation of the Respondents.
   1) Unemployed/House Wife   2) Student   3) Wage Earner
   4) Govt./Private Service Holder   5) Businessman

7. Monthly income of the respondents.

8. Monthly income level of the respondent. ☐

   1) 0-5000 BDT   2) 5001-10,000 BDT   3) 10,001-15,000 BDT

   4) 15,001 BDT – Above

9. Resident status. ☐

   1) Migrant Resident   2) Permanent Resident

10. Respondent's living place. ☐

   1) Hall/ Mess   2) Own house/Flat   3) Rented house/Flat   4) Others (Specify)……

Section B: Different aspects of communication technology, modernization and social dysfunction in Bangladesh

11. Type of communication technology you use most (Priority basis). ☐

   1) Cell phone/Land Phone   2) Internet   3) Radio/Television

12. What kind of communication do you do with such technologies (Priority basis)? ☐

   1) Personal   2) Official   3) Educational   4) Entertainment

   5) Others (Specify)………..

13. Taking facilities from Cell Phone (Priority basis). ☐

   1) Talking   2) Internet Browsing   3) Playing Games   4) Others ………

14. Taking facilities from Broadband/other service Internet (Priority basis). ☐

   1) Simply browsing   2) Use social network sites & Blogs   3) E-mail

   4) Watching/downloading online videos/audios   5) Others (Specify)………………

15. Taking facilities from Radio/Television (Priority basis). ☐

   1) News   2) Song/Drama/serial/*Natok/*movie   3) Special Program

   4) Others (Specify)………………..

16. Number of cell phone, SIM card and E-mail ID you used.

SL	Category	Number			Code Number
16.1	Cell phone	1) 1	2) 2	3) Above 2	
16.2	SIM Card	1) 1	2) 2	3) Above 2	
16.3	E-Mail ID	1) 1	2) 2	3) Above 2	

17. Monthly expenditure for using communication technologies ☐

   1) 200- 500 BDT   2) 501-800 BDT   3) 801-1100 BDT   4) 1101 BDT-Above

18. Sources of money for using communication technology. ☐

   1) Own income   2) Family   3) Relatives   4) Others (Specify)…………

19. How much time do you spend daily for communication?

SL	Purposes	Time	Time Limit	Code
19.1	Talking over phone		1) 5-20min 2) 21-35 min 3) 36 min-Above	
19.2	Internet		1) 01-60min 2) 1hr-2hr 3) 2 hr-Above	
19.3	Television/Radio		1) 01-60min 2) 1hr-2hr 3) 2 hr-Above	

Section C: Communication technology based crime and deviance in Bangladesh.

20. Have you ever involved in communication technology based deviant activities? ☐

   1) Yes   2) No

21. If yes, what are the Cell phone based Deviant activities you involved in: ☐

   1) Speaking/hearing song loudly over phone   2) Talking/browsing internet not following privacy   3) Playing ringtones without cause   4)   Excessive playing games   5) Excessive browsing mobile internet   6) Disturbing someone through missed call/call/SMS   7) Late night talking regularly   8) Habitually unnecessary use before going to sleep   9) Spreading rumors   10) Create pressure on family for buying cell phone   11) Others (Specify)…………………

22. If yes, what is the internet based Deviant activities you involved in: ☐

   1) Excessive time passing in the social networking media   2) Uploading and posting nude videos and photos   3) Using fake account for bad intention   4) Watch and download porn videos and photos   5) Attempt to cyber theft or hacking   6) Others (Specify)…………….....

23. If yes, what are the Television/Radio based Deviant activities you involved in: ☐

   1) Watch Television/hearing radio abnormally   2) Showing abnormal behavior following Television/radio artist character   3) Not maintaining time schedule, food habit, study period etc.   4) Others (Specify)……… …………

24. Have you ever involved in communication technology based criminal activities? ☐

   1) Yes   2) No

25. If yes, what type of Communication Technology based Criminal activities you involved ☐

   1) Record secret moments without permission   2) Fraud/ Cheating   3) Threatening

   4) Eve teasing   5) Illegal use in examination   6) Hacking/spreading virus

   7) Organizing criminal activity   8) Talking over cell phone during driving

   9) Keeping/sharing porn videos in cell phone/computers   10) Publishing fake or controversial report/video/photo etc. for bad intention

26. How have you got involved in such kind of deviant or criminal acts? ☐

    1) Provocation   2) Personal gain 3) Political gain 4) Searching entertainment

    5) Curiosity   6) Other instigating factors (Specify)………………….

27. Any individual, community member, stranger or other persons are ever involved in deviant activities? ☐

    1) Yes   2) No

28. If yes, what are the Cell phone based Deviant activities he/she involved in: ☐

    1) Speaking/hearing song loudly over phone   2) Talking/browsing internet not following privacy   3) Playing ringtones without cause   4) Excessive playing games 5) Excessive browsing mobile internet   6) Disturbing someone through missed call/call/SMS   7) Late night talking regularly   8) Habitually unnecessary use before going to sleep   9) Spreading rumors   10) Create pressure on family for buying cell phone   11) Others (Specify)………………

29. If yes, what is the internet based Deviant activities he/she involved in: ☐

    1) Excessive time passing in the social networking media   2) Uploading and posting nude videos and photos   3) Using fake account for bad intention

    4) Watch and download porn videos and photos   5) Attempt to cyber theft or hacking 6) Others (Specify)……................

30. If yes, what are the Television/Radio based Deviant activities he/she involved in: ☐

    1) Watch Television/hearing radio abnormally   2) Showing abnormal behavior following Television/radio artist character   3) Not maintaining time schedule, food habit, study period etc.   4) Others (Specify)………………

31. Any individual, community member, stranger or other persons are ever involved in criminal activities? ☐

    1) Yes   2) No

32. If yes, what type of Communication Technology based Criminal activities he/she involved in: ☐

    1) Record secret moments without permission 2) Fraud/ Cheating   3) Threatening

    4) Eve teasing   5) Illegal use in examination   6) Hacking/spreading virus

    7) Organizing criminal activity   8) Talking over cell phone during driving

    9) Keeping/sharing porn videos in cell phone/computers 10) Provocation/misguiding from Television/Radio programs/*natok*/serial   11) Publishing fake or controversial report/video/photo etc. for bad intention.

33. How has he/she got involved in such kind of deviant or criminal acts? [   ]

    1) Provocation   2) Personal gain   3) Political gain   4) Searching entertainment

    5) Curiosity   6) Other instigating factors (Specify)………………

Section D: Social, cultural, economic, health, political, environmental etc. impacts of communication technology and modernization based dysfunction

34. According to you, what type of social dysfunction accelerating for abusing communication technologies? [   ]

    1) Divorce   2) Adultery   3) Separation   4) Pre marital sexual relations   5) Sexual abuse/Verbal abuse   6) Rape/gang rape   7) Losing family intimacy   8) Suicide tendency   9) Fraudgery   10) Cyber crime   11) Delinquency rate   12) Disinterest in study 13) Others (Specify)…………

35. According to you, what type of Cultural dysfunction accelerating for abusing communication technologies? [   ]

    1) Unable to retain own culture   2) Prevalence of imitation   3) Misguided by other cultures 4) Increased dependency 5) Demand of extra need

    6) Others (Specify)…………...

36. According to you, what type of Economic dysfunction accelerating for abusing communication technologies? [   ]

    1) Prevalence of increased expenditure   2) Additional load to maintain unlimited demand of family members   3) Motivated by irrational competition   4) Domination of foreign technology 5) Others (Specify)………………

37. According to you, what type of Health related dysfunction found in you or in your family members for using or abusing communication technologies? [   ]

    1) Eye problem   2) Ear/Hearing problem   3) Change of food habit

    4) Less beautification   5) Late morning rise   6) Sleepiness   7) Physical illness

    8) Malfunction of genital organ 9) Others (Specify)………………

38. According to you, what type of Political dysfunction/instability accelerating for abusing communication technologies? [   ]

    1) Spreading propaganda   2) Political defamation/False publicity

    3) Ill motive campaign 4) Religious furore/rage 5) Others (Specify)………

39. According to you, what type of Environmental dysfunction accelerating for abusing communication technologies? ☐

    1) Noise pollution 2) Destroying natural biodiversity   3) Others (Specify)……….

40. According to you, what type of psychological dysfunction accelerating for abusing communication technologies? ☐

    1) Mental illness   2) Stressed   3) Traumatized   4) Mental breakdown

    5) Suffered from depression   6) Increased temperament/Emotion/Excitement

    7) Others (Specify) ……….

Section E: Issues and factors of abusing communication technologies in Bangladesh.

41. Identify some of the major issues and factors contribute abusing communication technologies?

    1) ……………………………………………………………………………

    2) ……………………………………………………………………………

    3) ……………………………………………………………………………

    4) ……………………………………………………………………………

    5) ……………………………………………………………………………

42. Suggestive measures to control abuse of communication technology.

    1) ……………………………………………………………………………

    2) ……………………………………………………………………………

    3) ……………………………………………………………………………

    4) ……………………………………………………………………………

    5) ……………………………………………………………………………

Thank you very much for your cooperation.

Name of interviewer………………………….. ……

Signature………………..…….. Date…………………

Appendix 02: Location of Study Area

Appendix 03: Some collected photos of dysfunctional use of communication technologies.

Photo 1: One out of five Fake Facebook ID in the name of Hasanul Haq Innu, Minister, Ministry of Information of Government of Bangladesh (Source: The daily kaler kantha; dated: August 26, 2014).

Photo 2: Cyber criminal captured by the police from Narshingdi for blackmailing male by opening fake female facebook ID (source: bdtoday.net; dated: 11 Sep, 2014).

Photo 3: At least 40 people, including 38 students were killed at Mirsharai for bus crash where the truck driver was reportedly running the vehicle recklessly and talking over a mobile phone just before the accident
(source: https://en.wikipedia.org/wiki/Mirsharai_bus_crash and teakdoor.com).

Photo 4: Modern science claiming, talking over cell phone may cause harm in brain by its released electromagnetic wave and children are most vulnerable (Source: internet).

Photo 5: Customs Intelligence and Investigation Directorate of Bangladesh seized some 409 illegally imported handsets of different brands worth about Tk 1.5 crore from two showrooms of Gadgets N Gear those International Mobile Equipment Identity (IMEI) numbers are not registered and not be possible to trace the mobile sets or its users by law enforcers if those are used in criminal activities (Source: The daily prothom alo; Dated: August 28, 2014).

Photo 6: Using cell phone before going to sleep (source: internet)

Photo 7: An internet user can easily watch and download porn videos in the web freely (source: case respondent).

Photo 8: Watching, keeping and sharing sexual contents in the cell phone or web by the users (source: case respondent).