

**A SOCIOLOGICAL STUDY ON THE IMPACT OF  
ELECTRONIC/TECHNOLOGICAL GADGETS ON TEENAGE IN THE  
METROPOLITAN CITY OF DELHI**



By

**SHINCY MATHEW**

Reg.No: AM15SOC019

**DEPARTMENT OF SOCIOLOGY AND CENTRE FOR RESEARCH  
ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM  
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Thesis submitted to St. Teresa's College (Autonomous), Ernakulam in *fulfillment of the  
requirements for the award of the degree of **Master of Arts in Sociology***

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**MARCH 2017**



## **CERTIFICATE**

I certify that the thesis entitled “**A SOCIOLOGICAL STUDY ON THE IMPACT OF ELECTRONIC/TECHNOLOGICAL GADGETS ON TEENAGE IN THE METROPOLITAN CITY OF DELHI**” is a record of bonafide research work carried out by (name of the student), under my guidance and supervision. The thesis is worth submitting in fulfillment of the requirements for the award of the degree of Master of Arts in Sociology.



Dr.Sajitha J. Kurup

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March 2017

## DECLARATION

I, **SHINCY MATHEW**, hereby declare that the thesis entitled “**A SOCIOLOGICAL STUDY ON THE IMPACT OF ELECTRONIC/TECHNOLOGICAL GADGETS ON TEENAGE IN THE METROPOLITAN CITY OF DELHI**” is a bonafide record of independent research work carried out by me under the supervision and guidance of **Dr. SAJITHA J. KURUP**, I further declare that this thesis has not been previously submitted for the award of any degree, diploma, associateship or other similar title.

Place: ERNAKULAM

Date: 31.03.2017

  
**Shincy Mathew**

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**SHINCY MATHEW**

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## CONTENTS

<u>CHAPTERS</u>	<u>TOPIC</u>	<u>PAGE NO.</u>
CHAPTER 1	INTRODUCTION	1-4
CHAPTER 2	REVIEW OF LITERATURE	5-27
CHAPTER 3	METHODOLOGY	28-30
CHAPTER 4	DATA ANALYSIS AND INTERPRETATION	31-61
CHAPTER 5	FINDINGS AND CONCLUSIONS	62-65
	BIBLIOGRAPHY	66-67
	APPENDIX	68-70



## LIST OF FIGURES

<b>FIGURE NO.</b>	<b>TOPIC</b>	<b>PAGE NO.</b>
4.1	Age of the respondents	31
4.2	Gender of the respondents	32
4.3	Educational qualification of the respondents	33
4.4	Family income of the respondents	34
4.5	Residential status of the respondents	35
4.6	Religion of the respondents	36
4.7	Type of family of the respondents	36
4.8	Whether the respondents owns a laptop	37
4.9	Whether the respondents own a smart phone	38
4.10	Respondents' parents having complaints regarding the use of smartphones	39
4.11	Reasons regarding the complaints by parents while using technological gadgets by respondents	40
4.12	Whether survival is difficult without technological gadgets for the respondents	41
4.13	Whether the technological gadgets are the best source of entertainment	42
4.14	Whether the respondents are aware about the surroundings while using technological gadgets	42
4.15	Whether the respondents listen to music while working	43

<b>4.16</b>	<b>Whether the social relationships are ruined due to social networking sites</b>	<b>43</b>
<b>4.17</b>	<b>Whether internet is the ultimate source of knowledge</b>	<b>44</b>
<b>4.18</b>	<b>Whether technology makes the young mass smart</b>	<b>45</b>
<b>4.19</b>	<b>Whether the excess use of technological gadgets is injurious to health</b>	<b>46</b>
<b>4.20</b>	<b>Whether technology causes generation gap between parents and children</b>	<b>47</b>
<b>4.21</b>	<b>Whether the respondents have sleeping problems while using technological gadgets</b>	<b>48</b>
<b>4.22</b>	<b>Whether the respondents have neck/shoulder pain while using technological gadgets</b>	<b>49</b>
<b>4.23</b>	<b>Whether the respondents have strain on eyes while working on laptop or computer</b>	<b>49</b>
<b>4.24</b>	<b>Whether the respondents have back-pain while working on laptop/computer</b>	<b>50</b>
<b>4.25</b>	<b>Activity done when one gets bored</b>	<b>51</b>
<b>4.26</b>	<b>Time spent by the respondents on the technological gadgets for studying purpose</b>	<b>52</b>

4.27	Time spent by the respondents on electronic gadgets for communication	53
4.28	Time spent by the respondents on technological gadgets for entertainment	54
4.29	Time spent on electronic gadgets for other purposes	55
4.30 56	Time spent by the respondents on mobile phones	
4.31	Time spent on computers/laptops by the respondents	57
4.32	Time spent on tablets by the respondents	58
4.33	Time spent on using smart phones by the respondents	58
4.34	Time spent on i-phones/i-pads by the respondents	59
4.35	Time spent by the respondents on playing on video games	60
4.36	Time spent by the respondent on earphones/headsets	61

**LIST OF TABLES:**

Table 4.1	The most common activities done by the respondents while using a PC	Page 50
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**CHAPTER ONE**  
**INTRODUCTION**

Our world is ever changing and advancing in the realm of science and technology. Our dreams become cornerstones for the future. These days it seems hard to escape the presence of technology. Most people will praise the many technological gadgets that they use in their everyday lives. Many of us depend on it to get us through the day, to do our job, to get around, and to find certain things. Technology is evolving at a very fast rate, and what most people did not even think could be real a few years ago is now becoming a reality. Some of the most prominent technological innovations are smart phones, laptops and using the internet. They have greatly affected many aspects of our lives. Today the Internet continues to grow day by day at an incredible speed. About 32.7% of the world's population has access to the internet (Howe, W., 2012). The internet has become ubiquitous, faster, and increasingly accessible to non-technical communities, social networking and collaborative services, enabling people to communicate and share interests in many more ways. Sites like Facebook, Twitter, Linked-In, YouTube, Flickr, Second Life, Delicious, blogs, wikis, and many more let people of all ages rapidly share their interests of the moment with others everywhere. Smart phones, high-end mobile phones built on a mobile computing platform, with more advanced computing ability and connectivity than a contemporary feature phone, are now replacing Personal Computers (PCs). They have now taken the world by storm, and a lot of people could not imagine what life would now be like if they did not have the internet, email, and chat features on their phones at their disposal. By the last three months of 2010, 94 million PCs and 100 million smart phones were sold. Analysts believe that this trend will never reverse as it continued in the first quarter of 2011 where 82 million PCs and 100 million smart phones were sold (according to the latest surveys).

According to the Guardian newspaper in U.K. (on 4 August 2011), smart phones (such as Blackberries, iPhones and Androids) sales increased from 4% in 2005 to 48% in 2011, 50% of people claim to use the mobile internet equally at home and outside their residence, 47% of teenagers admit using their smart phones in the toilet while only 22% of adults confessed to the same habit, and mobile-addicted teens are more likely than adults to be distracted by their phones over dinner and in the cinema.

Modern technology has allowed people to communicate with just about anyone they want to at any given time and although this may sound like a good thing, the fact remains that people do not interact personally with one another as often as they used to. This has created a barrier in personable, face-to-face communication amongst people because they no longer have to call up a friend or family member to wish them a happy birthday or congratulate them on their recent success. As a result, people are becoming lazier, and they do not feel the dire need to step outside of their home to find entertainment and fun in things that used to be fun, such as participating in sports with friends, meeting a friend, etc.... Technology is a privilege to have but interaction with other people is crucial, and being responsible for one's actions and not letting technology rule his or her life is better than becoming desensitized to society. The fact that technology is at our finger tips and at the click of a button we can undercover our entire world, presents itself as a blessing and a curse.

The internet has also become a major concern for parents, because some online activities may seriously distract adolescents from their homework. Families are less likely to spend time together, as youth go off to their rooms to spent time with their devices. Also technology can cause serious health problems. The overuse of laptops can cause several diseases.

Another great danger of the internet is internet addiction in its many forms. Each person's Internet use is different. One might need to use the Internet extensively for his work, for example, or he might rely heavily on social networking sites to keep in touch with faraway family and friends. Spending a lot of time online only becomes a problem when it absorbs too much of his time, causing him to neglecting relations, work, school, or other important things in his life. When the person feels more comfortable with his online friends than his real ones, or he cannot stop himself from playing games, gambling, or compulsively surfing, even when it has negative consequences in his life, then he may be using the Internet too much.

Many people turn to the Internet in order to manage unpleasant feelings such as stress, loneliness, depression, and anxiety. When you have a bad day and are looking for a way to escape your problems or to quickly relieve stress or self-soothe, the Internet can be an easily accessible outlet.

It is apparent that technology has the potential to harm or enhance our social skills and social life. We can all notice that our brains are not working the way they used to be anymore. For more than a decade now, we have been spending a lot of time online, searching and surfing the Internet.

A national survey reported teenagers spend, on average, 8.08 hours a day using various forms of media, not including time spent doing school work or talking or texting on a cell phone. This includes television, commercial or self-recorded video, movies, video games, print, radio, recorded music, computers, cell phones, and the Internet. Youth media use encompasses both consumption of media and creation of content from a variety of platforms as detailed below.

Most children are introduced and use the Internet while they are kindergarten age or younger. 90% of 13-17-year-olds have used some form of social media and 75% have a profile on a social networking site.

38% of youth share photos, stories, videos and art. 47% of online teens have uploaded pictures where others can see them. 27% of teens record and upload video to the Internet and 13% stream video live to the Internet for others to watch. 30% of parents stated they do not monitor their child's Facebook activity.

77% of all 8-18-year-olds have their own cell phone, up from 44% in 2004. Cell phone ownership has increased with age, as 87% of teenagers 14-17- years-old now own a cell phone, and 31% of these older teens have smartphones.

63% of all teens exchange text messages every day with people in their lives — far surpassing all other forms of daily communication including email, instant messaging, social networking and phone calling.

**Significance of the study:**

This study is conducted in the metropolitan city of Delhi, which comes under a developing country, India. This study will be an additional knowledge in the respective field of research

for the upcoming researcher. It may help the teenage to understand the impacts of the addiction to the tech-gadgets and services and make them aware about the control of the use of the devices.

The study was designed to examine the use of tech-devices by youth i.e. the time spent with the gadgets, the purposes behind use, and its impacts on mental health and life style. Using structured questionnaire, and observation by the researcher, primary data were collected from 100 respondents of the teenagers of the metropolitan city of Delhi .

The purposes of use of tech-gadgets in most cases are pleasure driven rather than necessity driven. Addiction to tech-devices has many negative impacts on the aspects relating to mental health of the respondents and has become a causal factor in the change of life style of young participants.

## CHAPTER TWO

### REVIEW OF LITERATURE

In the present era the introduction of modern technological gadgets has captured the attention of global population. The dependency of people on these technological gadgets and services provided by these has reached at such level that, without these, they can't think a step forward in the direction of their growth. The degree of dependency is leading to addiction of the tech-devices and services. Youth is the most vulnerable group among the population to be addicted to technology.

The term **technology** comes from the Greek word “**techne**”, which means the art or skill used in order to solve a problem, improve a pre-existing solution to a problem, achieve a goal, handle an applied input/ output relation or perform a specific function; technology is the making, modification, usage and knowledge of tools, machines, techniques and method of organisation (Liddel, Scott, Jones & McKenzie, 1940). That means, it can refer to the collection of tools, including machinery, modification, arrangements and procedures. Over the last 200 years there has been a significant change in the term technology. In the 20th century i.e. during the industrial revolution the term has gained its popularity worldwide (Cradock & Baldwin, 1833). Technology is the energy that acts as the driving force to drive or to run our lives.

All technology involves systems. Systems take a variety of inputs and process them in some way, usually by an interaction of subsystems, and then they generate a set of outputs, some of which are desired and some of which are unwanted by-products. All of this occurs within a context or environment. At various points during the process and at the end of the process effective systems use feedback and assessment systems to generate information about how well the purpose for which the system was designed is being achieved.



Technology is nothing but the results of the innovations and creativity of human beings. It converts the natural resources into consumer goods which are used by the society and human beings. It has brought the automation level into such a height that human effort and his time has been saved to a great extent. Due to this, the access to information has now become easier and the distant locations are getting closer. IT and communication system has provided such facilities that the world is now feeling like a small globe virtually. Technology is the extension of our human capability, in order to satisfy our needs or wants.

**Technology** has revolutionized our lives completely today we cannot think of living without a television, mobile phones and the latest addition' our addiction to the internet.

The wise internet has everything in it, what one wants to know. It not only provides connectivity with others but it is Store house of knowledge, music, and entertainment. As matter of fact, because we have the power of connecting, we feel we have lone our duty and do not make an effort to meet friends and relatives personally. This creates a vacuum, a gap in relationships. It also makes us me in a false world which encourages pretence.

#### **Impact of technology on Health and Lifestyle:**

Technology can have a large impact on users' mental and physical health. Being overly connected can cause psychological issues such as distraction, narcissism, expectation of instant gratification, and even depression. Besides affecting users' mental health, use of technology can also have negative repercussions on physical health causing vision problems, hearing loss, and neck strain. Fortunately, there are steps that can be taken to help alleviate these health issues.

“Whether or not changes in our behavior due to technology use classify as a disorder, there is no denying that technology is affecting the way our minds operate. It remains to be seen exactly how technology will affect our psyches, but some changes are already starting to become apparent”.--Liz Soltan

Networking sites such as Facebook, MySpace and Twitter are said to shorten attention spans, encourage instant gratification and make us more self-centred, with some experts claiming they can cause alarming changes in the brains of young users.

Today, emails, iPhones, laptops, and cell phones dominate our modern world. Our uber-connected lives have made us virtually available at any time, at any place -- the movies, the golf course, traffic lights, you name it.

Easy and convenient it may be, however, even though technology benefits our lives greatly, it can go a bit too far.

Technological advances have ameliorated our lives but we are becoming too dependent on it with each passing day. Our love affair with new-age developments is leading to health concerns.

The impact of technology on our social, mental, physical and environmental health can be devastating. Listed below are a few such health concerns that you need to look out for and be aware of if you too are victims of technological dependence.

1. **Cellphone use:** According to the National Cancer Institute, the use of mobile phones could potentially pose a risk of brain cancer. Moreover, mobile phone users are more likely to be involved in accidents both in automobiles and on foot.
2. **Poor sleeping habits:** Cuddling up with that laptop in bed or late night phone conversations keep us up till the wee hours. These constant interruptions take a toll on our mental states, making it difficult to turn off our brains.
3. **Development issues:** Today's children, irrespective of the age group, are using more technology than ever before. When it comes to the cognitive development of children, the negative effects that technology aides are far greater.
4. **Back and neck pain:** Overuse of mobile phones and computers can put a strain on the neck and/or back. Using them in a right manner or a fixed duration can keep you from such discomforts but excess of anything is bad for health, therefore it is essential to limit yourself.

5. **Strain on the eyes:** We spend most of our times glaring at laptops and cell phone screens. Prolonged screen-gazing can make you suffer from a long list of eye problems including burning sensations, changes in colour perception or blurred vision.
6. **Lack of privacy:** Social media and the internet strip one's privacy. You can try your best but can't keep your information safe from prying eyes. The use of phishing techniques and hacking gives those with menacing intentions easy access all your privy information.
7. **Risk of obesity:** Technology is a crutch. Fascinated by gadgets and gizmos, we don't move much and gradually get fat. If you don't want to get unhealthy or overweight, limit the use of technology.
8. **Stress:** Switching from platform to platform and doing several things simultaneously can cause serious problems. Our brain is not capable of multi-tasking and when it happens, there can be severe stress which can also turn into rage.
9. **Relationship issues:** Social networking platforms are to blame for most problems, including breakups and divorce. These platforms also create negative feelings, low self-confidence and self-doubt.

But technology also has good effects on health care.

As technology improves every day, new developments are constantly infiltrating our lives. Whether it's the way you shop, how you communicate with friends, the job you do, or the way you travel, technology is transforming the way we behave.

Take healthcare, for example. Breakthroughs in information gathering, research, treatments, and communications have given medical providers new tools to work with and fresh ways to practice medicine.

The use of information technology has made patient care safer and more reliable in most applications.

The fact that nurses and doctors who are working on the frontline are now routinely using hand-held computers to record important real-time patient data and then sharing it instantly within their updated medical history is an excellent illustration of the benefits of health IT.

Being able to accumulate lab results, records of vital signs and other critical patient data into one centralized area has transformed the level of care and efficiency a patient can expect to receive when they enter the healthcare system.

An increased level of efficiency in data collection means that a vast online resource of patient history is available to scientists, who are finding new ways to study trends and make medical breakthroughs at a faster rate.

### **Software Improves Healthcare and Disease Control**

The development of specific software programs means that, for example, the World Health Organization has been able to classify illnesses, their causes and symptoms into a massive database that encompasses more than **14,000 individual codes**.

This resource allows medical professionals and researchers to track, retrieve and utilize valuable data in the fight to control disease and provide better healthcare outcomes in general.

Software also plays a pivotal role in tracking procedures and using billing methods that not only reduce paperwork levels, but also allow practitioners to use this data to improve quality of care and all around efficiency.

Doctors report that they are deriving enormous benefits from the drive toward a total system of electronic medical records; patients enjoy the fact that software has created a greater degree of transparency in the healthcare system.

The reach of technological innovation continues to grow, changing all industries as it evolves. In healthcare, technology is increasingly playing a role in almost all processes, from patient registration to data monitoring, from lab tests to self-care tools.

Devices like smartphones and tablets are starting to replace conventional monitoring and recording systems, and people are now given the option of undergoing a full consultation in the privacy of their own homes. Technological advancements in healthcare have contributed to services being taken out of the confines of hospital walls and integrating them with user-friendly, accessible devices.

The following are ten technological advancements in healthcare that have emerged over the last ten years.

- 1. The electronic health record.** In 2009, only 16 percent of U.S. hospitals were using an EHR. By 2013, about 80 percent of hospitals eligible for CMS' meaningful use incentives program had incorporated an EHR into their organizations. "For such a long time we had such disparate systems, meaning you had one system that did pharmacy, one did orders, one that did documentation," says Jeff Sturman, partner at Franklin, Tenn.-based Cumberland Consulting Group. "Integrating these systems into a single platform, or at least a more structured platform, has allowed more integrated and efficient care for patients," he says.

While the EHR has already created big strides in the centralization and efficiency of patient information, it can also be used as a data and population health tool for the future. "There's going to be a big cultural shift over the next several years of data-driven medicine," says Waco Hoover, CEO of the Institute for Health Technology Transformation in New York. "Historically, that hasn't been a big part of how medicine is practiced. Physicians go to medical school and residencies, but each organization has its own unique ways they do things. That's one of the reasons we see varied care all over the country. When data is what we're making decisions off of, that's going to change and improve outcomes of the consistency of medicine delivered."

- 2. m-Health.** Mobile health is freeing healthcare devices of wires and cords and enabling physicians and patients alike to check on healthcare processes on-the-go. An R&R Market Research report estimates the global mHealth market will reach \$20.7 billion by 2019, indicating it is only becoming bigger and more prevalent. Smartphones and tablets allow healthcare providers to more freely access and send information.

Physicians and service providers can use mHealth tools for orders, documentation and simply to reach more information when with patients, Mr. Sturman says.

However, mHealth is not only about wireless connectivity. It has also become a tool that allows patients to become active players in their treatment by connecting communication with biometrics, says Gopal Chopra, MD, CEO of PINGMD, and associate professor at Duke University Fuqua School of Business in Durham, N.C. "Now I can make my bathroom scale wireless. I can make my blood pressure mount wireless. I can take an EKG and put it to my smartphone and transfer that wirelessly," he says. "mHealth has the opportunity to take healthcare monitoring out of the office, out of the lab and basically as a part of your life."

**3. Telemedicine/Telehealth.** Studies consistently show the benefit of telehealth, especially in rural settings that do not have access to the same resources metropolitan areas may have. A large-scale study published in CHEST Journal shows patients in an intensive care unit equipped with telehealth services were discharged from the ICU 20 percent more quickly and saw a 26 percent lower mortality rate than patients in a regular ICU. Adam Higman, vice president of Soyring Consulting in St. Petersburg, Fla., says while telemedicine is not necessarily a new development, it is a growing field, and its scope of possibility is expanding.

The cost benefits of telehealth can't be ignored either, Mr. Hoover says. For example, Indianapolis-based health insurer WellPoint rolled out a video consultation program in February 2013 where patients can receive a full assessment through a video chat with a physician. Claims are automatically generated, but the fees are reduced to factor out traditional office costs. Setting the actual healthcare cost aside, Mr. Hoover says these telemedicine clinics will also reduce time out of office costs for employees and employers by eliminating the need to leave work to go to a primary care office.

**4. Portal technology.** Patients are increasingly becoming active players in their own healthcare, and portal technology is one tool helping them to do so. Portal technology allows physicians and patients to access medical records and interact online. Mr. Sturman says this type of technology allows patients to become more closely involved and better educated about their care. In addition to increasing access and availability of medical information, Mr. Hoover

adds that portal technology can be a source of empowerment and responsibility for patients. "It's powerful because a patient can be an extraordinary ally in their care. They catch errors," he says. "It empowers the patient and adds a degree of power in care where they can become an active participant."

**5. Self-service kiosks.** Similar to portal technology, self-service kiosks can help expedite processes like hospital registration. "Patients can increasingly do everything related to registration without having to talk to anyone," Mr. Higman says. "This can help with staffing savings, and some patients are more comfortable with it." Automated kiosks can assist patients with paying co-pays, checking identification, signing paperwork and other registration requirements. Mr. Higman says there are also tablet variations that allow the same technology to be used in outpatient and bedside settings. However, hospitals need to be cautious when integrating it to ensure human to human communication is not entirely eliminated. "If a person wants to speak to a person, they should be able to speak with a person," he says.

**6. Remote monitoring tools.** At the end of 2012, 2.8 million patients worldwide were using a home monitoring system, according to a Research and Markets report. Monitoring patients' health at home can reduce costs and unnecessary visits to a physician's office. Mr. Higman offers the example of a cardiac cast with a pacemaker automatically transmitting data to a remote center. "If there's something wrong for a patient, they can be contacted," he says. "It's basically allowing other people to monitor your health for you. It may sound invasive but is great for patients with serious and chronic illnesses."

**7. Sensors and wearable technology.** The wearable medical device market is growing at a compound annual growth rate of 16.4 percent a year, according to a Transparency Market Research report. Wearable medical devices and sensors are simply another way to collect data, which Dr. Chopra says is one of the aims and purposes of healthcare. He says sensors and wearable technology could be as simple as an alert sent to a care provider when a patient falls down or a bandage that can detect skin pH levels to tell if a cut is getting infected. "Anything we are currently using where a smart sensor could be is part of that solution," Dr. Chopra says. "We're able to take a lot of these data points to see if something abnormal is happening."

**8. Wireless communication.** While instant messaging and walkie-talkies aren't new technologies themselves, they have only recently been introduced into the hospital setting, replacing devices like beepers and overhead pagers. "Hospitals are catching up to the 21st century with staff communicating to one another," Mr. Higman says, adding that internal communication advancements in hospitals followed a slower development timeline since they had to account for security and HIPAA concerns.

Systems like Vocera Messaging offer platforms for users to send secure messages like lab tests and alerts to one another using smartphones, web-based consoles or third-party clinical systems. These messaging systems can expedite the communication process while still tracking and logging sent and received information in a secure manner.

**9. Real-time locating services.** Another growing data monitoring tool, real-time locating services, are helping hospitals focus on efficiency and instantly identify problem areas. Hospitals can implement tracking systems for instruments, devices and even clinical staff. Mr. Higman says these services gather data on areas and departments that previously were difficult to track. "Retrospective analysis can only go so far, particularly in places constantly changing like emergency departments," he says, but tracking movement with a real-time locating service can highlight potential issues in efficiency and utilization.

These tools also allow flexibility for last minute changes. "If [a physician has] an add-on case today, do they have instruments on hand, and where are [the instruments]?" he asks. At the most basic level, these services can ensure equipment and supplies aren't leaving the building, and for high-cost equipment and supplies of which hospitals may only have one or a few, being able to track their location can help verify its utilization, he says.

**10. Pharmacogenomics/genome sequencing.** Personalized medicine continues to edge closer to the forefront of the healthcare industry. Tailoring treatment plans to individuals and anticipating the onset of certain diseases offers promising benefits for healthcare efficiency and diagnostic accuracy. Pharmacogenomics in particular could help reduce the billions of dollars in excess healthcare spending due to adverse drug events, misdiagnoses, readmissions and other unnecessary costs.



### **Role of technology in our lives:**

We are living in a society which is called "technologically civilized" society. Every small work we do is technology dependent. Today every other person is recognized with the device or gadget, he carries; which is technically advanced. Ultimately, we can say that, "living without technology is like living without air" in this technical world of today. Therefore, we are much dependent on technology. Technology made our lives simple but much dependent on it. We can sit in a corner and get connected to the world. Thus making the world a "global community." Communicate with a person in remote area within fraction of seconds, make a trip of the world within no time, all these are possible with the advanced technology, making us more dependent on its usage.

In the health sector, technology advanced to a great extent that today a machine can assist a person in intensive care and monitor him, which was a tiresome and risky job to do manually before. In a way we are coming closer with the machines developed technically.

Technology is making the multitask functions to be available in a single device. Thus we can have multifunctional usage of the single device we own. The more simple, the work gets with technology, the more we get dependent on it.

Technology makes us lethargic with little or no physical activity, in one aspect; but the same technology provides a inspiration or motivation to do creative jobs including physical activity

Example games like "V" games which are challenging video games and at the same time recreational, helping to spend time in a joyful way. Today, we don't find even a single young kid without using the available technology to him/her. Technology made us dependent on it and we can't expect or imagine a life without using the word "technology" in it.

Increasingly, technological solutions are being applied to the many serious challenges facing the world. These include use of new energy technologies to combat global warming, healthcare technologies to increase longevity and quality of life; foods, transportation, information and communications technologies, materials science and other fields are all being used and promoted to address many of the challenges that face modern society.

Such technologies are also potential sources of economic growth and business competitiveness. Nations and firms that develop some advantage in these areas will be able to both create employment and economic growth.

Given the importance of technologies to modern society, there has never been a more opportune time for professionally trained technology managers to assist and support the management of innovation to help foster the development and exploitation of modern technologies.

Current technology is complex and the culmination of years of work and advanced research, involving a multitude of different actors and agents. A significant amount of time and resources continues to be necessary to improve and exploit technological developments. However, the technology that is truly requisite over coming years will be unlikely to develop without the existence of advanced strategic planning focused squarely on the needs of future generations.

The process for developing new products and improved technologies cannot reach their full potential without first establishing a foundation of innovation management and technology strategy.

Technology is important in today's society because it creates business competitiveness, economic growth and addresses the challenges of the present. With economic growth, a country is able to create more employment for its people.

Food security and food production technologies can help agricultural producing countries like Mexico improve their economy. The importance of technology is most clearly seen in the various issues facing developing countries compared to developed nations.

People hailing from different geographical regions can virtually communicate through video calls, e-mails as well as many social media platforms available. Business owners have realized the power of using internet to achieve more customers for their products easily by creating business websites where customers click on the items to buy them at the comfort of their homes.

Another importance of technology in our daily lives is that it has eliminated the bulkiness associated with paperwork. With technology, information can now be stored virtually in various storage devices such as compact disks and microchips. More so, the information stored

in these technological devices is secured with passwords and codes which are only known by the proprietors of the information, making it a better way of storing confidential information.

Telephone has evolved over the decades in terms of technology as the scientists have realized the need for people to communicate at anytime, anywhere. This necessity has led to invention of highly portable cellular phones which have taken communication a notch higher as people can network easily. The device is also fun to use as they are coupled with extraordinary entertainment features such as games. We cannot fail to mention that technology have been of great benefit to agricultural industry. Contrary to the agrarian revolution period which happened decades ago, it's now possible to determine the climatic changes as well as climatic conditions that favor various plants. Domesticated animals can as well be taken care of as technology has seen inventions of vaccines and other medications to treat them for various diseases. The importance of technology, as seen from the above information, cannot be underestimated. It has led to great things especially when it comes to use of internet to communicate across the globe: a great technological invention of all times that will enhance communication worldwide and thus more discoveries. The scientists are working on more advanced projects that will make almost all our daily tasks easier to accomplish, making the world a better place to be.

With the rapid growth of world trade, companies must implement changes quickly. Technology is a means to achieve this goal. Companies must bring new products to market quickly, while meeting the quality requirements of the customer. To succeed in the international market, companies must also eliminate unnecessary products and make management to reduce costs and time in product development measures. The growth of global quality standards and processes in business has also increased the need for companies to use technology to implement the necessary changes and comply with the new requirements.

Another importance of technology in business is the ability for computers to perform multiple tasks simultaneously. Assuming the hardware is able to stand, the operator can have many different programs running simultaneously. Even computers are generally able to perform complex calculations, such as math equations or travel distances, very quickly and accurately.

Advances in technology provide companies with the opportunity to put the authority of the

decision at an optimal level. Companies can use technology to centralize purchasing and logistics and take advantage of cost savings. Decentralization of responses to customer needs provides an opportunity for companies to make decisions as marketing and adapt to rapidly changing local markets. Companies can also take advantage of advances in technology to integrate their systems with their customers and suppliers.

Hence, technology plays a major role in our lives.

### **Technological/Electronic Gadgets:**

A gadget is a small technological object (such as a device or an appliance) that has a particular function, but is often thought of as a novelty. Gadgets are invariably considered to be more unusually or cleverly designed than normal technological objects at the time of their invention. Gadgets are sometimes also referred to as gizmos.

Over recent years, science and technology has emerged far way beyond the reach than expected with inventions like the PC and cellular phones. These inventions have created a huge impact in society, especially with young children. Even though, some people believe that this is a good development for children.

Firstly, computers are already the latest trend and are used by almost all organizations, institutions and companies. The entire world is dependent on computers, as a result growing students are encouraged to buy a computer. This could not only help in learning about computers and programming but also securing a position in the future.

Secondly, mobile phones are of great use. This will help them to get out of isolated situations.

Nowadays, children as young as two play with electronic devices. These devices include video games, television, mobile and apart phone apps, computers, tables, and PSP games. Children tend to be active consumers and many electronic products are targeted to the youth market. It is also true that parents use gadgets and devices to keep their children quiet and in one place for a period of time.

Electronic devices can be useful but also have negative impact if they are over-used.

Today's modern life is surrounded with tech products. The technology has been growing rapidly for quite some time, and has now become an important part of life. The technology has its impact on people of all fields and ages.

## **Positive Impacts of Technology on Children**

### **Help in Education**

The technology has been proven to be useful in education. Children can access the web and get the detailed knowledge about any topic. The education games help them to perform well in academics.

### **Competitive Skills**

All kids like to play video games. When playing such games with their friends/relatives, they earn the competition skills. The competitive skills that children learn from the video games help them compete with others in the real world.

## **Negative Impacts of Technology on Children**

### **Health Problems**

The technology is causing many health issues in children. The surveys conducted from time to time tell that due to increasing use of gadgets, children are suffering from the health problems like back pain, weak eyesight etc. Due to less physical activities, the fatness is common to see in today's children.

### **Social Relationship**

Technological gadgets have posed a bad impact on social relationships. Children are addicted to gadgets. They don't have time to sit with their parents and to spend some good time with them. They prefer to connect with their friends and relatives via text messaging, chatting etc., rather than meeting them actually. Means, they are connected with others in the virtual world, but not in the real world.

### **Poor Academic Performance**

Technology has been found to have its negative impact on academic performance on most of children. There are many technological gadgets to which children are addicted. They waste their valuable time on these silly gadgets without worrying about the studies. This is resulting in their poor academic performance.

### **Negative Impact on Character**

This is one of the biggest problems created by growing technology. Children are future of our country, our world. The sad thing is that due to increasing technology, children have been found going away from their moral values. Internet is working as curse for children's character. Rather than using Internet in productive manner, children use it as source of adult content.

### **Negative Impact on Writing Skills**

Writing is an art which every person must own. Technology has its negative effect on writing skills of children. Standard English is not used in the text messaging, chatting. While writing text messages, no one cares about the spelling, punctuation and grammar. This is resulting in poor writing skills of children.

### **Addiction to Technological Gadgets:**

According to Kimberly Young (1998), addiction to technology is a habitual compulsion to engage in using technology instead of using it to address life's problems. They use technology as a coping mechanism to avoid conflict. Long term compulsions can lead to psychological problems such as insomnia, irritability and depression. For example, compulsion to use technology in favour of rare and exciting life events such as parties or vacations might signify addiction.

Attitude changes in teens, sudden depression, loss of self-esteem, and problems in paying attention to study, are often symptoms of Internet addiction (Young, 1998). According to Young, teens are particularly vulnerable to technology addiction. Teens have poor coping mechanisms. Addiction to technology has a negative impact on mental health and it also affects the social behaviour of the individual by being the cause of change in his life style.

## **Tech-gadgets used by the Present Generation:**

**1.Mobile/cell phone:** Mobile phone or cell phone is a device that can make and receive telephone calls over a radio link while moving around a wide geographical area. Besides telephony it can also provide a variety of other services like text messaging, playing music, e-mail, internet access, infrared, Bluetooth, business applications, gaming and photography etc. It was first introduced in 1973 and in 1983 the first mobile phone was commercially available (Heeks, 2008). From 1990 to 2011, the number of world-wide mobile phone users grew from 12.4 million to over 6 billion, covering about 87% of the global population (Saylor, 2012).

**2.Computer/laptop:** Computer is a general purpose device that can be programmed to carry out a finite set of erythematic and logical operations. Computer can solve more than one kind of problem at a particular time as a sequence of operations can be readily changed. A laptop is a type of computer that can be folded and easily carried out due to its' small size and battery support for energy, required to run it. The first laptop was invented in 1979 by British Designer Bill Maggridge. The laptops are generally used for making programs, storing data, entertainment (music, videos), accessing net etc. Currently the number of computer users in the world is 900 million to 1 billion i.e. around 80% of the world population are using or having computers (Woyke, 2012).

**3.Smart Phone:** A smartphone, or smart phone, is a type of mobile phone built on a mobile operating system with more advanced computing capability and connectivity. They allow people to stay in touch, even over long distances, and they are relatively safe and reliable to use. There are devices that can communicate with plus at the other end of the planet and getting and keeping in touch with other people is very easy.

The disadvantages to this is that it means people no longer need to meet in person as much, and interpersonal relationships are suffering worldwide because people are communicating through a small handheld device. Lots of people have Smartphones and they use them almost semi-continuously, including in public settings when they could be making new friends,

finding new lovers, and talking/interacting with their current friends.

### **Services:**

**Internet:** The internet is a huge network that links computers together all over the world using a range of wires and wireless technologies. The World Wide Web is the collection of linked pages those are accessed using the internet and a web browser. The purposes of using internet are online shopping, social networking, games, news, travel information, business, advertising and much more. One of the best common ways of finding information on the web is through the search engines like Google, Bing.

The internet is a worldwide decentralized network of computers. It started as a part of the US army network and progressed to become an academic information network, and then today, as it is today a global, open-communication network that affects almost every aspects of people's lives (Bargh and McKenna, 2004). Initially the number of Internet users was small; however the number of users is continually expanding and is estimated at more than one billion people today.

A social networking service is a platform to build social networks or social relations among people who, for example, share interests, activities, backgrounds, or real-life connections. Social networking sites allow users to share ideas, pictures, posts, activities, events, and interests with people in their network (Boyd & Nicole, 2008). Some of the popular social networking sites used currently is such as Face book, Google+, Orkut, Twitter etc.

Face book was founded by Mark Zuckerberg in February 2004 (Carlson, 2010). As of September 2012, Face book has over one billion active users, of which 8.7% are fakes. May 2011 Consumer Reports survey reveals that, there are 7.5 million children under 13 with accounts and 5 million under 10, violating the site's terms of service (Thompson, 2012). Twitter was created in March 2006 by Jack Dorsey and by July, the social networking site was launched. The service rapidly gained worldwide popularity, with over 500 million registered users as of 2012. It is generating over 340 million tweets daily and handling over 1.6 billion



search queries per day. Twitter has become one of the ten most visited websites on the Internet after its launch (Twitter.com, march21, 2012).

Social media (sites like those mentioned above) is a resource or tool websites or applications) that allow registered users to share their lives through photos, audio, and text with other users. The sharing of information can be done through a user's profile, account, or even virtual bulletin board. Privacy settings can be set so that the user limits who can view his or her profile, in an attempt to keep social media sites safe for all involved.

Cyber bullying may be by far the most dangerous and tragic concept to emerge from the social media growth of today. Bullying, which used to occur at lunch and on the playground, has now made its way online and into the social media tools today's adolescences are using. While illegal, cyber bullying is a common occurrence and can take many forms. Personal photos and videos, spiteful rumors, verbal abuse, physical threats, and vengeful comments are just a few examples of how today's adolescences are using the internet and social media to bully their peers. Because social media profiles can be created with fake information, culprits are to pen down, and because most of this cyber bullying occurs outside of school, school systems have a difficult time punishing those involved.

Claire Mysko says: "Social media creates an environment where disordered thoughts and behaviors really thrive." According to a report by Common Sense Media, 75 percent of teenagers in America currently have profiles on social networking sites, of which 68 percent use Facebook as their main social networking tool.

While social networking undoubtedly plays a vital role in broadening social connections and learning technical skills, its risks cannot be overlooked. The lack or difficulty in self-regulation and susceptibility to peer pressure makes adolescents vulnerable to such evils as Facebook depression, sexting, and cyberbullying, which are realistic threats. Other problems such as social network-induced obesity, Internet addiction and sleep deprivation are issues that continue to be under intense scrutiny for the contradictory results that have been obtained in various studies.

The American Psychological Association defines bullying as aggressive behavior by an individual that causes discomfort to another. Cyber-bullying ranges from direct threatening and unpleasant emails to anonymous activities such as trolling. 32 percent of online teens admit to having experienced a range of menacing online advances from others. While direct unpleasant emails or messages are the most straightforward form of cyber-bullying, they are probably the least prevalent in that only 13 percent of surveyed youngsters admitted to receiving threatening or aggressive messages. Even forwarding a private note to a group without permission from the sender is often perceived as cyber-bullying.

**Mobile game.:** A **mobile game** is a video **game** played on a feature **phone**, smartphone, smartwatch, PDA, tablet computer, portable media player or calculator.

### **Positive Impacts of Technology:**

In fact the use of the tech-gadgets and services by the present generation has a positive impact on IT markets and therefore it is beneficial for the economy. Tech-devices and gaming may have positive effects on investigating skills, strategic thinking and creativity potential of the individuals. These tech devices and services are better sources for learning for the youth and these are the sources of fun and entertainment which help them distract from daily stresses of life. The digital behaviour of the youth makes them sit at one place for a long period of time and the eye, hand and mental coordination is maintained during that period. To cross the levels step by step in the games may improve the engineering skills among the youth and it may also help in building up good attitudes of moving ahead in life in spite of any obstacles.

Following studies support the positive effects of the tech-gadgets and services:

1. Internet continues to grow beyond our belief,
2. About 32.7% of the world's population has access to the social networking sites like Face book, Twitter, Linked-In, YouTube, Flickr, blogs, wikis, and many more which let people of all ages rapidly share their interests of the moment with others everywhere. So the

interconnectedness throughout the world is growing rapidly due to internet use (Tsitsika & Janikian, 2013).

3. Individuals who are engaged in high level of technical activities through the digital devices are better in performing cognitive tasks. The effective use of the gadgets may have positive impacts on cognitive thinking and also makes them master multitasking (Ophir, Nass & Wagner, 2009).

4. In the medical set up the use of digital devices may help to a great extent. Easy storage, searching and sharing of patient information through the computers and accessibility of knowledge regarding recent health related inventions through internet, have made the work of the medicos easier (Sellen & Harper, 2002).

#### **Negative Impacts of Technology:**

Due to the time spent on the devices the youth are refrained from some outdoor activities with friends and family. The indulgence in violent games may create more violence in their mind. The more they use the gadgets, the more they are crazy about it which may distract them from study. During the time of playing games when they can't achieve the set target, it may raise their anxious level higher. After all addiction to the devices may develop unhealthy lifestyle, poor time management and poor eating habits among the youth.

The present generation is psychologically addicted to the social Medias like face book, Twitter, Linked In etc. The addiction causes intra-psychic conflicts such as intolerance and relapse among the youth (Cabral, 2011)

The addictive internet use has negative impacts on mental health. There is a positive relationship between Internet addiction and psychiatric disorders like depression, bipolar disorder, obsessive-compulsive disorder, attention deficit disorder, etc. So the addictive internet use should need clinical help (Young, 1998).

Excessive internet use not only generates disorders but it can sometimes be distressing and disabling (Shapira et al., 2003). Excessive technology use may affect academic performance, relationships, as well as overall development among youth. Such baffling technology use has

been identified as technology addiction and has many negative impacts on health and social behaviour (Young, 2004).

Technology is an integral part of our everyday life as people are dependent on it from all over the world for communication, organization and employment etc. One cannot stay away from technology even for a day. Not even a single day goes without a cell phone in hand or without laptop and net surfing. Although technology being at its best there are basic problems that follow us everywhere and generally it has drawbacks in the areas of health, public safety and education (Saez, 2010).

Students should be encouraged to develop in a technological world. The necessity of social networking, computer games or digital habits of them should be understood by the elders.

Excessive texting and use of technological devices has recently become a habit for many people, especially teenagers. Everyday an average teenager spends up to 8 hours on electronic devices, which is more than 56 hour in one week (Schulten). Since teens are using technology devices everyday, they are beginning to isolate themselves from family and friends while limiting their communications skills.

Teens are becoming addicted to technology, making them isolated from the real world. Teens mostly communicate through texting, online chatting or Facebook. Teens have stopped picking up the phone to call a friend or family member. Teens argue that cell phones are a quick easy way to contact family and friends. However teens are becoming “glued” to their phones. 75% of teens own a cell phone and 87% of them send and receive text messages everyday (Reinburg). Teens are constantly receiving messages and texting back whether it is at a family dinner, a movie or while driving a vehicle. They just cannot put their phones down.

Not only are teens not paying attentions during class; they are also taking the “text language” into their real writing assignments. 38% of teens say that they have used text shortcuts in schoolwork such as “LOL” (which stands for “laugh out loud”)(Lenhart). Abbreviations and slang created for texting does not follow proper English grammar. Since teens are constantly texting, they subconsciously use this language in schoolwork. The teen texting language is limiting teen’s vocabulary and written communication skills.

### **Effects of technology on teens:**

Information technologies are having a profound impact on all aspects of life. Digital technologies have become an increasingly popular means of communication.

Communication technology is composed on many forms of electronic communication. Those associated with the internet, now accessible through both computers and mobile phones; include e-mail, instant messaging services, chat rooms, forums, social networking sites, blogs etc.

Information technology is having a profound impact on young people and the educational system today. A recent study shows that more than 45% teens have both, a computer and cellphone. Cellphone use has grown rapidly among teens in recent years; 71% of teens currently have a cellphone.

Overall nearly two-third of teens (64%) incorporate from informal styles from their text-based communications into their writing at schools. They also have a tendency to use text shortcuts, emoticons and informal writing styles in their school writing. Teenagers spend more time using technology than anything else during the day.

### **How much technology do the teenagers use (some facts and figures):**

1. Teens send and receive a total of over 5000 texts a month.
2. 75% have a profile on a social networking site like Facebook or Twitter.
3. 31% of teens have cell phone in class and send text messages.
4. 75% of all teens have a cell phone.

Teens all over the world are growing up in a world in which the internet, cell phones, text messages and other technology dominates their communication and are an integral part of everyday life. Today's Net Generation students live in a digital world. Recent studies reveal that students spend over ten hours a day using mobile phones, computer etc., with one and a half hours of time spending online using internet.

## **Use of technology in a Global Context:**

Technology helps us on one side while it also hinders our lives in many other ways. Technology has many positive effects, primarily helping them in education and study-based needs. Education has been simplified and made easier to teach and learn through technology. With all these new technological advancements, everyone has access to all kinds of answers and information in seconds. For teenagers, technology is to be used for furthering their knowledge.

In the words of Steve Jobs, "Technology is just a tool in terms of getting the kids working together and motivating them."

Eventhough technology seems to be helpful, it has huge negative impact on the teenage as well. Any tool not used for its right purpose can be dangerous in many ways.

In the words of Gertrude Stein "Everybody gets so much information all day long that they lose their common sense"

Technology has brought us new websites to connect socially. Cyber bullying has become a very common between teenagers. Technology has hurt the innocence of the teenagers.

"This is a generation that expects and wants to have applications".-says Gardner. Applications, more commonly known as apps are shortcuts designed for accomplishing specific tasks. They are ubiquitous, powerful and strongly structured.

A national survey reported teenagers spend on an average 8.08 hours a day using various forms of media. This includes television, radio video games, computers, cell phones and the Internet. Teenage media encompasses both consumption of media and creation of content from a variety of platforms.

## **CHAPTER THREE:**

### **METHODOLOGY**

#### **Statement of the problem:**

The study entitled 'a Sociological Study on the impact of technological gadgets on teenage in the Metropolitan city of Delhi' aims to find out the influence of technological gadgets on teenage, which is one of the major problems these days. The study focuses on the teenagers' addiction to technology and the influence of this addiction on their lifestyle.

**General objective:** To sociologically study the impact of technological gadgets on the teenage in the metropolitan city of Delhi.

#### **Specific objectives of the study:**

1. To study the socio-economic profile of the students.
2. To know the effects of electronic gadgets on the students.
3. To find out if the use of technological gadgets have strained the relationships (especially family interactions)

#### **Clarification of Concepts:**

##### **Impact**

According to British English Dictionary, impact refers to the force or action of one object hitting another. It is also a powerful effect that something, especially something new, has on a situation or person. It is also means to have an influence on something.

In this study, impact refers to the influence or the effects of technological gadgets on teenage.

##### **Electronic Gadgets**

Electronic gadgets are based on transistors and integrated circuits. The most common electronic gadgets include transistor radio, television, cell phones and so on. Electronic gadget is a device that has a purpose or function, that contains electronic devices in order to work.

In this study, electronic gadgets refer to those devices which have a non-vital and entertainment value. It seems electronic gadgets exist for every facet of life, from entertainment to education, from work to play. It includes mobile phones, smart phones, laptop, i-phones/i-pads, video games.

### **Teenage**

According to Merriam Webster's Dictionary, teenage refers to of, being or related to people in their teens. It refers to the people who are between 13 and 19 years old. Those who belong to this age group are called teenagers, because their age number ends with teen.

In this study, teenage refers to those who belong to the age group of 13 to 21 years of age, as the college going students are also added to this study.

**The dependent variable** in this study is **the impact of technological gadgets on teenage** and the **independent variables** used in this study are **age, sex, educational qualification, religion and locality** of the respondents. The **universe** of this study was the **teenagers living in the metropolitan city of Delhi**. The sample taken in this study was **100 respondents** including **50 males and 50 females**. The **sampling method** used in this study was **Snowball Sampling Method**. The **sampling tool** used in this study was **questionnaire**.

### **Pilot study:**

A pilot study of a few students was conducted. All of them were given questionnaires individually. From this, the researcher got an idea about the addiction gadgets on teenage and about their socio economic profile.

### **Pre-test:**

Pre-test is a trial test of a specific aspect of the study. Such a test includes methods of data collection instruments like questionnaire, interview schedule or measurement scale.

On the basis of information received, certain questions were omitted and some questions were added, introduced new questions which were suitable to the study. Based on the information gathered from the various sources a questionnaire was prepared.

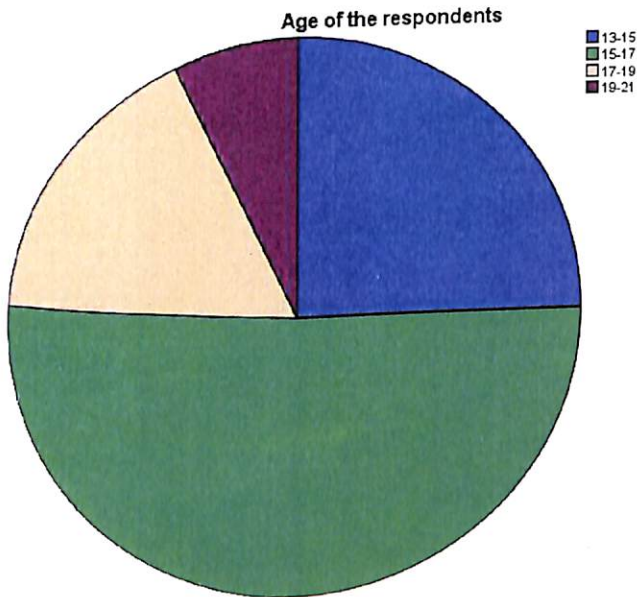


**Data collection:**

The researcher collected information from the respondents of some schools in the metropolitan city of Delhi. The data collection completed within 2 months. The staff and the students there were cooperative. The respondents understood the questions clearly and all the questions were answered.

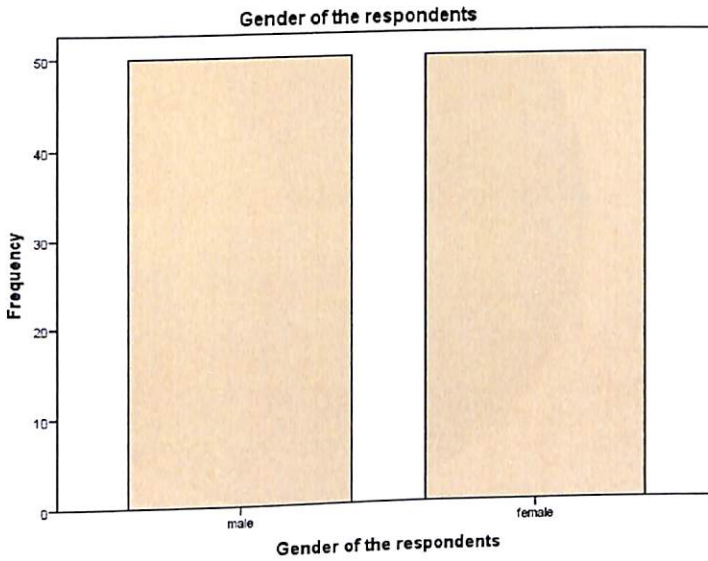
**CHAPTER FOUR**  
**DATA ANALYSIS AND INTERPRETATION**

**Fig. 4.1: Age of the respondents**



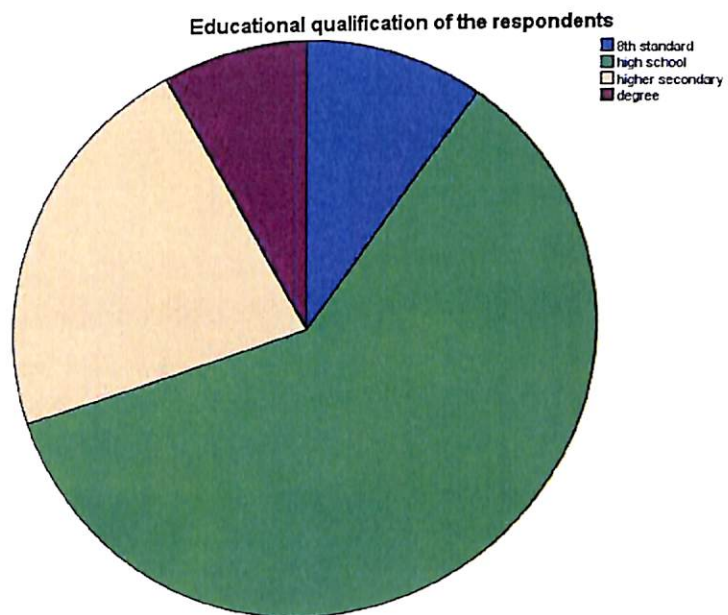
The majority (i.e 51%) of the respondents in the study come under the age group of 15-17 years, 25% of respondents come under the age group of 13-15years, 17% of respondents come under the age group of 17-19 years and 7% of respondents come under the age group of 19-21 years.

**Fig. 4.2: Gender of the respondents**



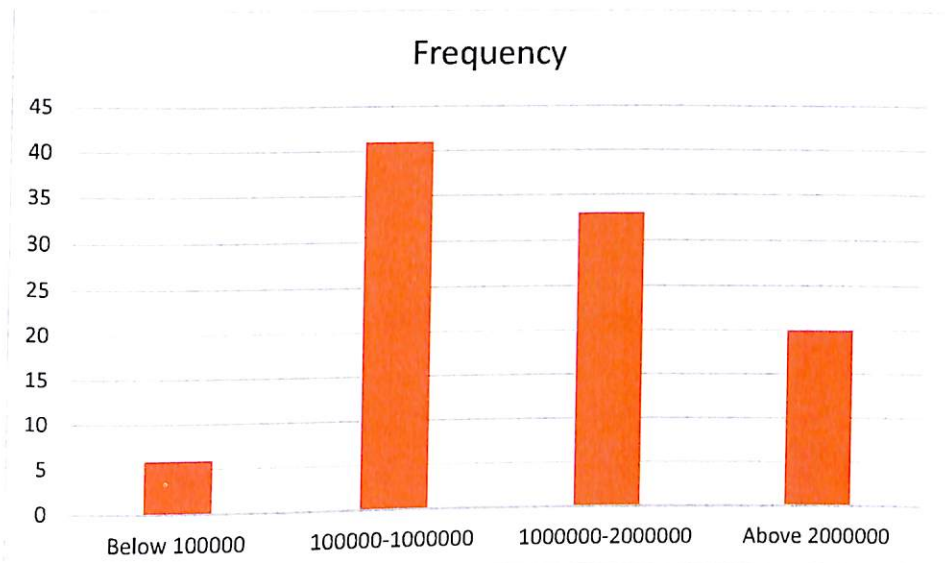
The total sample took for the survey was 100 respondents, out of which 50% are male respondents and 50% are female respondents.

**Fig. 4.3: Educational qualification of the respondents**



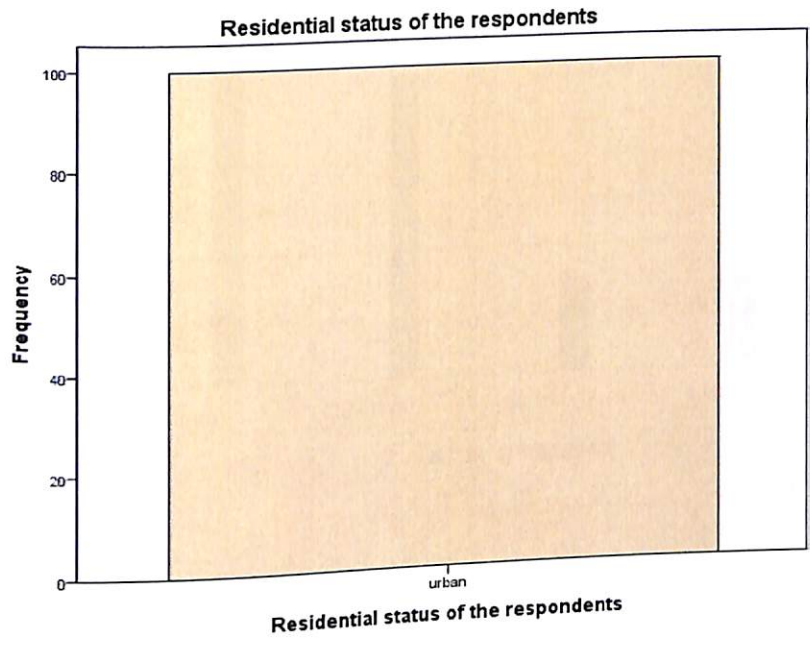
Majority (i.e. 60%) of the respondents belong to high school, 20% of the respondents belong to the higher secondary, 10% respondents belonged to 8th standard and 8% of the respondents belong to degree.

**Fig. 4.4: Family income of the respondents**



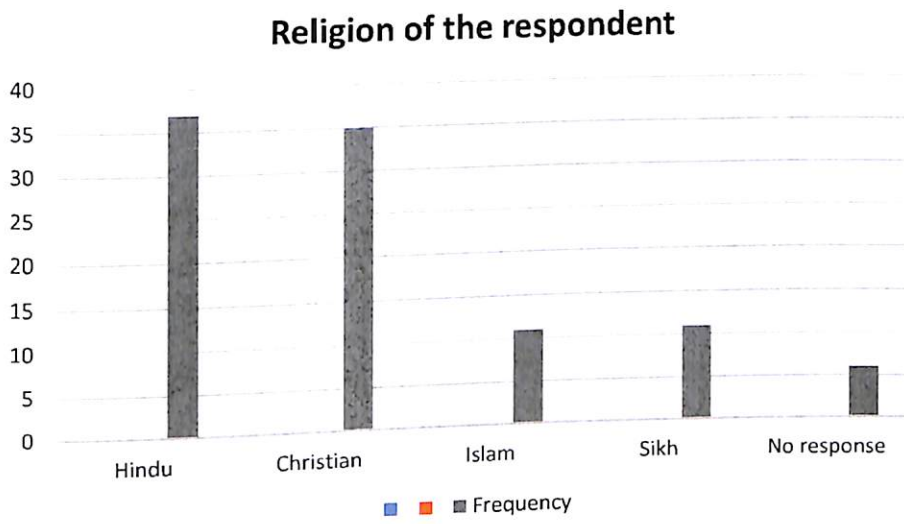
Majority (i.e.41%) of families earn 1 lakh to 10 lakh per annum, 33% of the respondents' families earn 1000000-2000000 per annum, and 20% of respondents earn above 2000000 per annum. Only 6% of families earn below 1 lakh.

**Fig. 4.5: Residential status of the respondents**



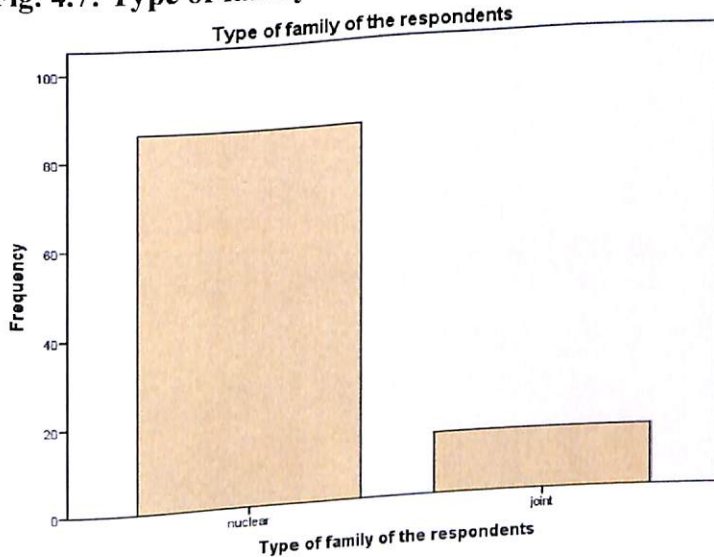
Majority of the respondents (i.e 100%) live in urban areas.

**Fig. 4.6: Religion of the respondents**



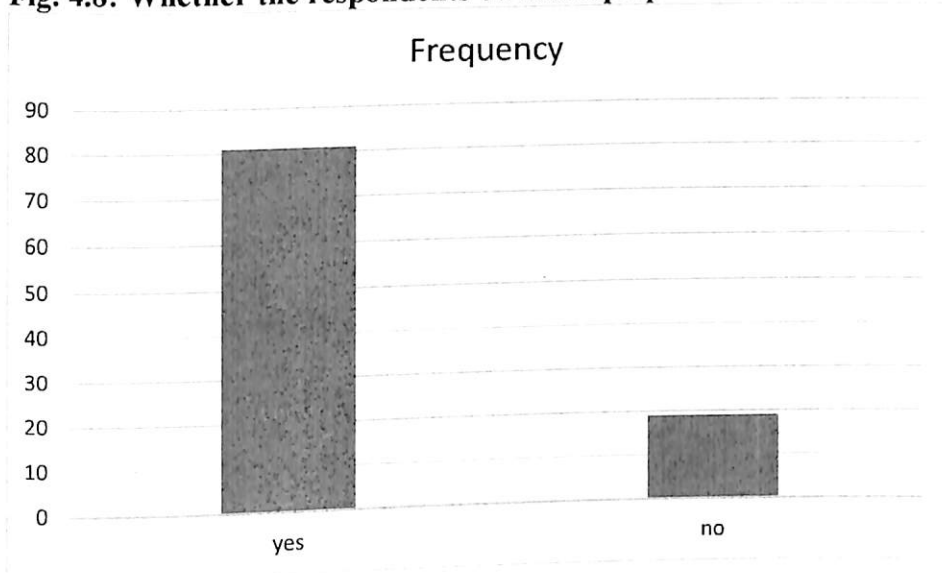
Majority (i.e. 37%) of the respondents belong to Hindu religion, 35% of respondents belong to Christian religion, 11% of respondents belong to Islam religion, 11% of respondents belong to Sikh religion. The very fact which shocked the researcher was that 6% of the respondents didn't respond, as they did not want to disclose their religion.

**Fig. 4.7: Type of family of the respondents**



Majority (i.e. 86%) of the respondents belong to nuclear families, while 14% of respondents belong to joint families.

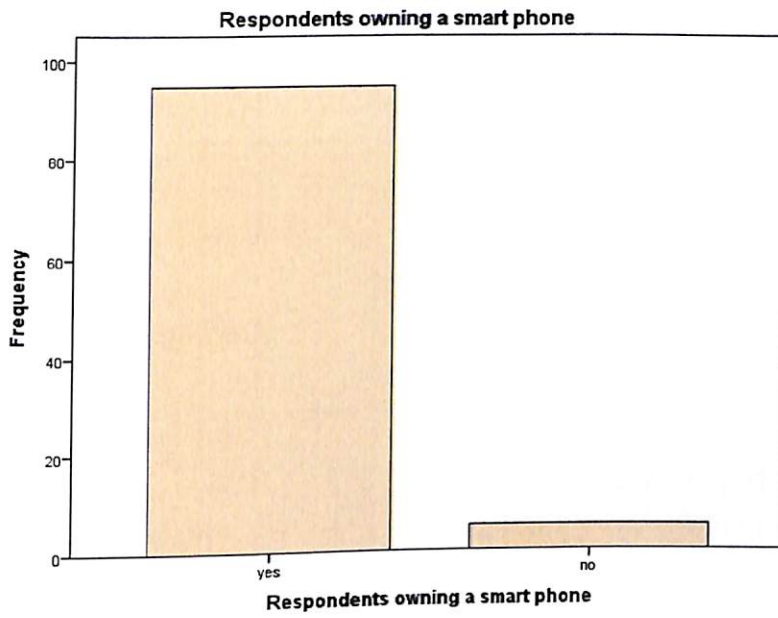
**Fig. 4.8: Whether the respondents owns a laptop**



Majority (i.e. 81%) of the respondents do own a laptop, while 19% of the respondents do not own a laptop.

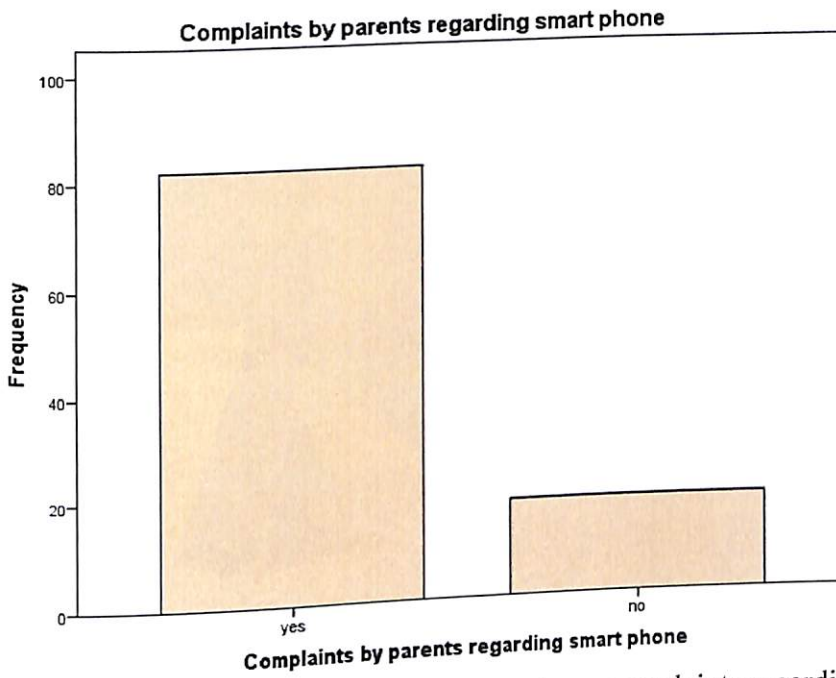


**Fig. 4.9: Whether the respondents own a smart phone**



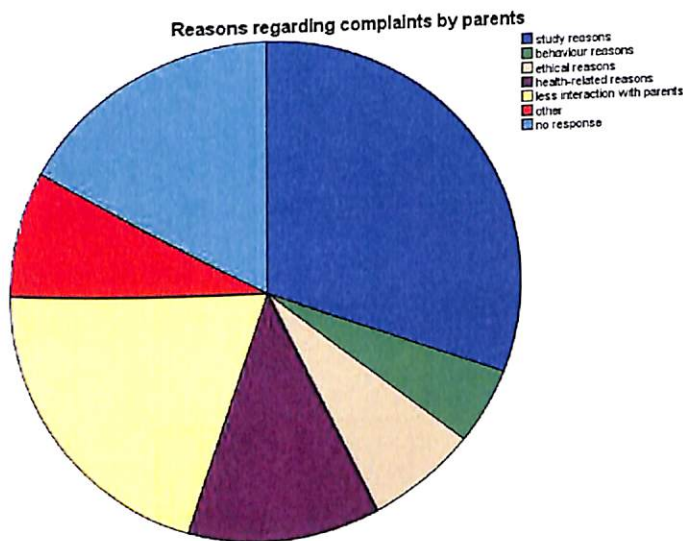
Majority of the respondents(i.e. 95% respondents) own a smartphone, while 5% of respondents do not own a smart phone.

**Fig. 4.10: Respondents' parents having complaints regarding the use of smart phones**



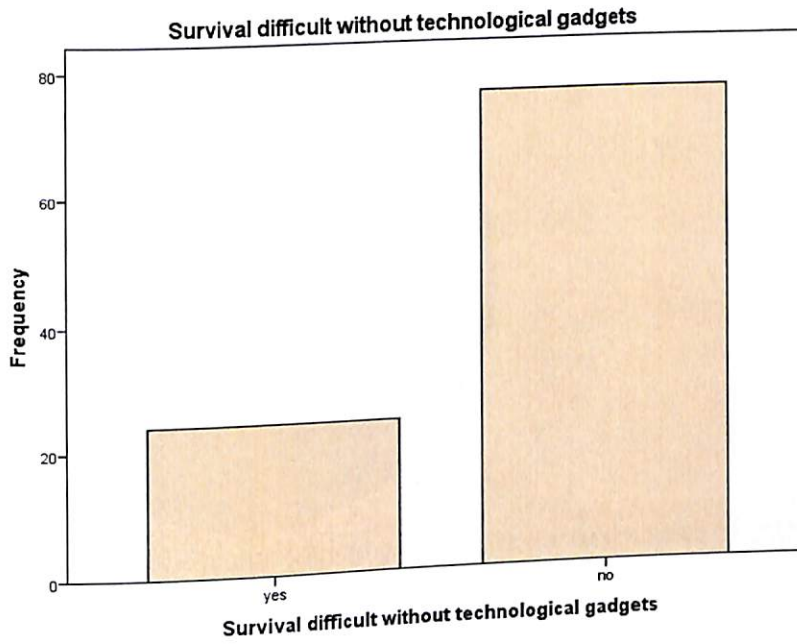
Majority(82%) of the respondents' parents have complaints regarding the use of smart phone, while 18% of the respondents' parents have no complaints regarding the use of smart phone.

**Fig. 4.11: Reasons regarding the complaints of parents while using technological gadgets by respondents**



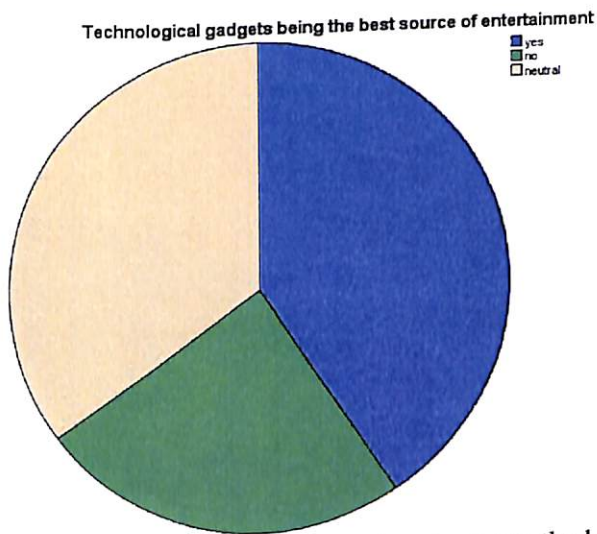
Majority (i.e.31%) of respondents' parents have complaints regarding the use of smart phone due to the lack of study time,while using the smart phone. Respondents simply waste their valuable time in such activities which can affect their studies and their performance in examinations. 5% of the respondents' parents do have complaints regarding the use of smart phone due to change in the respondents' behaviour after getting a smart phone. 7% of the respondents' parents do have complaints regarding the smart phones due to ethical reasons, as some of the parents think that using a smart phone is against the ethics of their families. 12% of respondents' parents have complaint regarding the use of smart phone due to health-related reasons, as the excessive use of smart phones may cause strain to eyes, even cause neck/shoulder pain. 20% of the respondents' parents complaint about the use of smart phones due to less interaction with parents. As soon as the respondents get smart phones, they are in their own world,not thinking about their parents. 8% respondents' parents have complaints regarding the use of smart phones due to other reasons.

**Fig. 4.12: Whether survival is difficult without technological gadgets for the respondents**



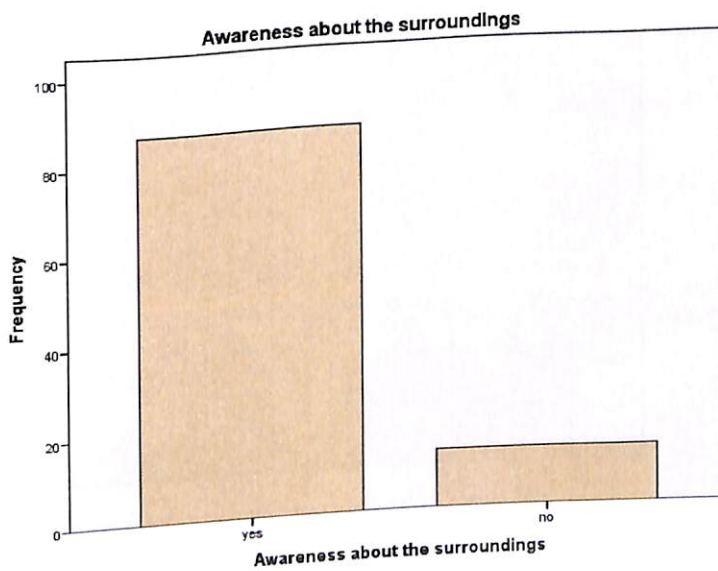
In this study, for the majority(76%) of the respondents, survival is not difficult without technological gadgets. But 24% of the respondents say that the survival is difficult without technological gadgets.

**Fig. 4.13: Whether the technological gadgets are the best source of entertainment**



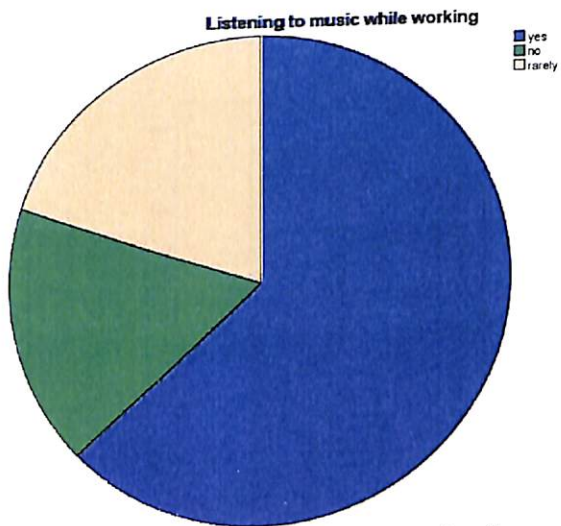
In this study, the technological gadgets are the best source of entertainment, for the majority (i.e. 41%) of the respondents. For 24% of the respondents they are not the best source of entertainment. 35% respondents do have neutral views too.

**Fig. 4.14: Whether the respondents are aware about the surroundings while using technological gadgets**



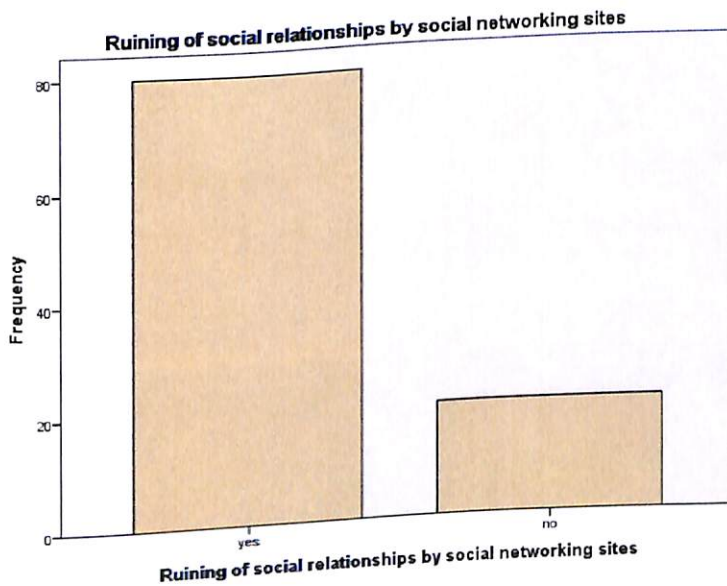
In this study, the majority of the respondents (i.e. 87% respondents) are aware about their surroundings while using technological gadgets, while 13% of respondents are not aware of their surroundings while using technological gadgets.

**Fig. 4.15: Whether the respondents listen to music while working**



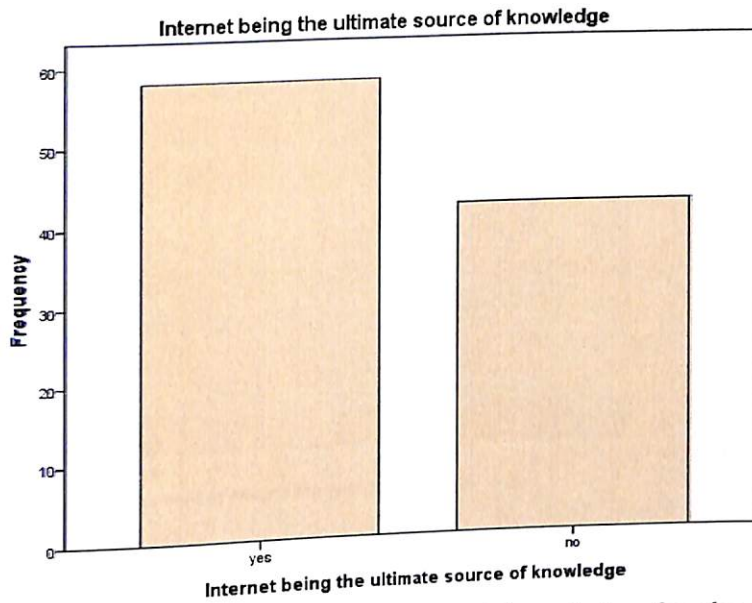
In this study, the majority (i.e. 63%) of respondents listen to music while working. 17% of the respondents listen to music while working, while 20% respondents do so rarely.

**Fig. 4.16: Whether the social relationships are ruined due to social networking sites**



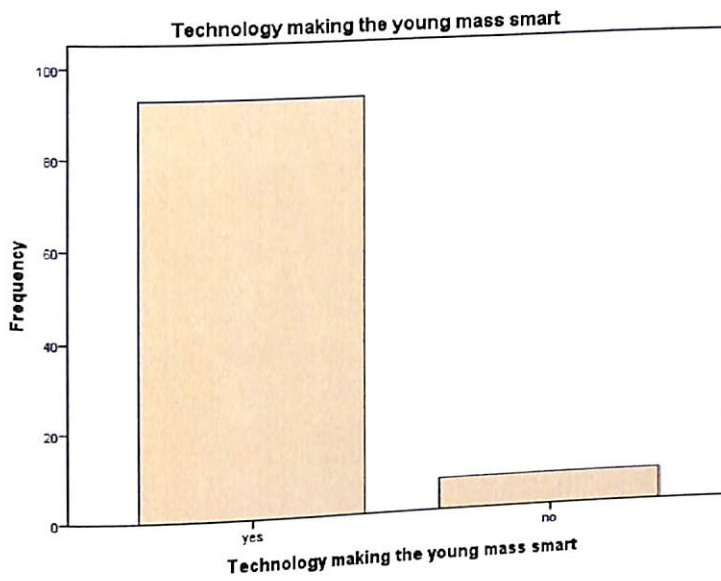
In this study, according the majority (i.e. 80%) of respondents, the social relationships are ruined by social networking websites. While 20% respondents say that social relationships are not ruined by social networking websites.

**Fig. 4.17: Whether internet is the ultimate source of knowledge**



In this study, internet is the best source of knowledge for the majority (i.e 58%) of the respondents. However 42% of the respondents say that internet is not the best source of knowledge.

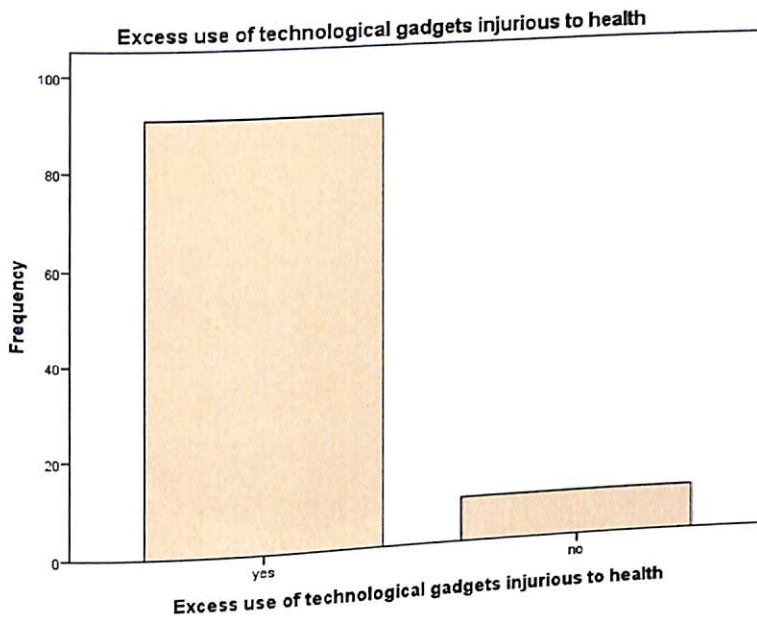
**Fig. 4.18: Whether technology makes the young mass smart**



In this study, for majority (i.e. 93%) of the respondents, technology makes the new generation smart, while 7% of the respondents say that technology does not make the new generation smart.

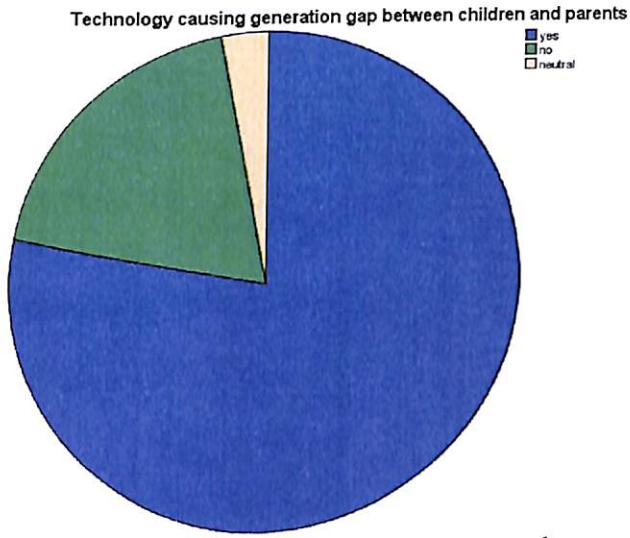


**Fig. 4.19: Whether the excess use of technological gadgets is injurious to health**



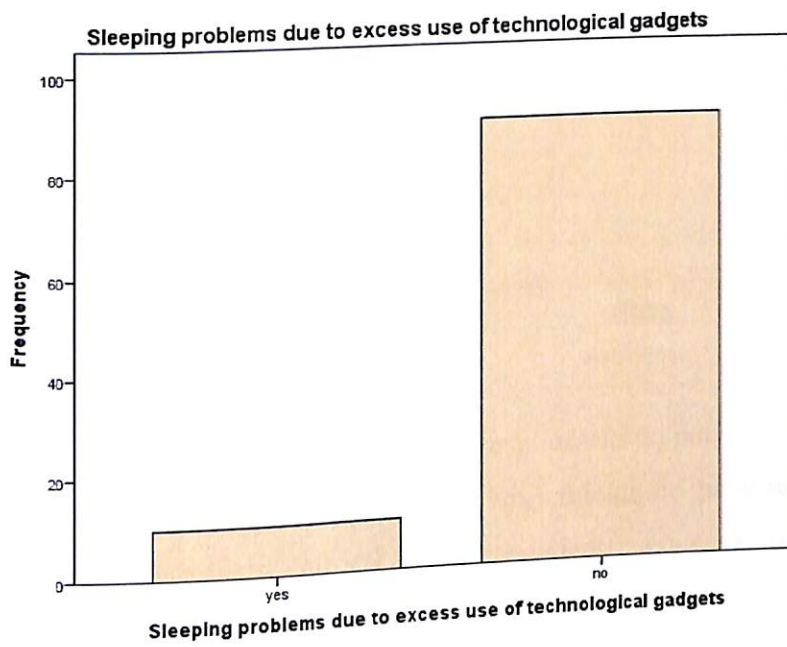
In this study, the majority (i.e. 91%) of the respondents say that excess use of technological gadgets is injurious to health, while 9% of the respondents say that excess use of technological gadgets is not injurious to health.

**Fig.4.20: Whether technology causes generation gap between parents and children**



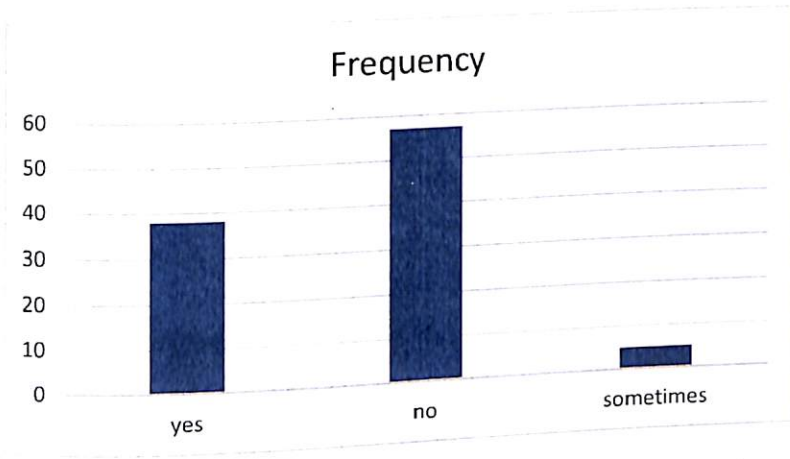
In this study, the majority (i.e. 78%) of respondents say that technology causes generation gap between parents and children. 19% of the respondents say that technology does not cause a generation gap between the parents and children, while 3% of the respondents have neutral views regarding this.

**Fig.4.21: Whether the respondents have sleeping problems while using technological gadgets**



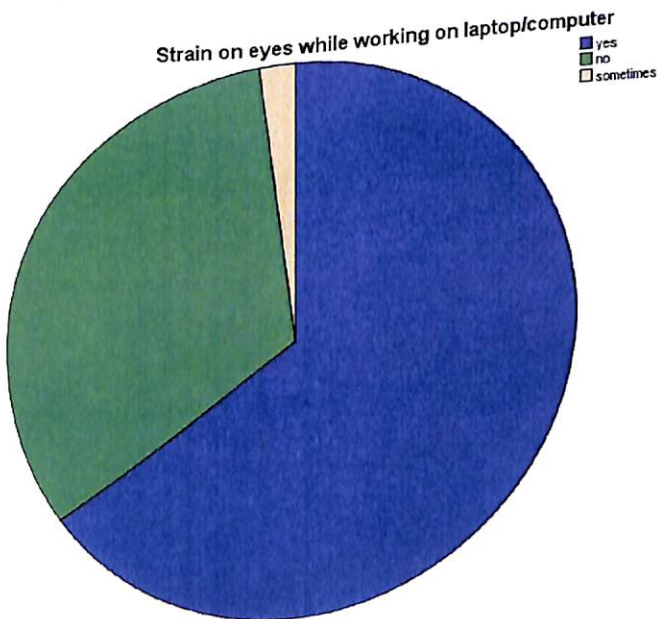
In this study, the majority (i.e. 90%) of respondents do not have sleeping problems due to the use of technological gadgets. Only 10% respondents do have sleeping problems due to the excess use of technological gadgets.

**Fig. 4.22: Whether the respondents have neck/shoulder pain while using technological gadgets**



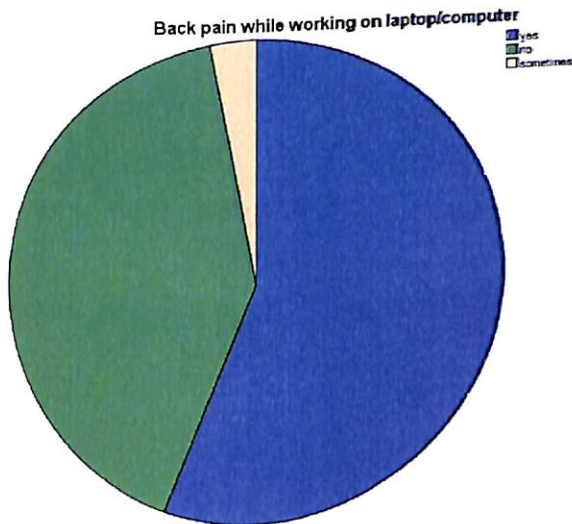
In this study, the majority (i.e. 57%) of respondents do not have neck/shoulder pain while using technological gadgets. However 38% respondents do have neck/shoulder pain while using technological gadgets, and 5% of the respondents have neck/shoulder pains sometimes.

**Fig. 4.23: Whether the respondents have strain on eyes while working on laptop or computer**



In this study, the majority (i.e. 65%) of respondents do have strain on their eyes while working on laptop/computer. 33% of the respondents do not have strain on eyes while working on laptop/computer, while 2% respondents have strain on their eyes sometimes.

**Fig. 4.24: Whether the respondents have back-pain while working on laptop/computer**



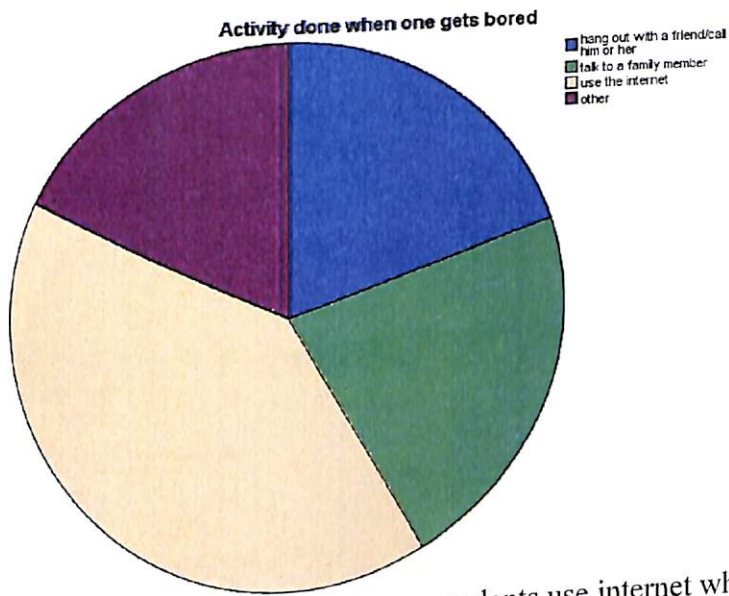
In this study, the majority (i.e. 56%) of respondents have back-pain while working on laptop/computer. However, 41% of respondents do not have a back pain while working on computer and 3% of respondents do have back pain sometimes.

**Table 4.1: The most common activities done by the respondents while using a PC**

ACTIVITIES	PERCENTAGE
PLAYING GAMES	40
SURFING INTERNET	2
WORD PROCESSING	8
USING E-MAIL	2
CHAT ROOMS	38
SOCIAL NETWORKING	100
TOTAL	

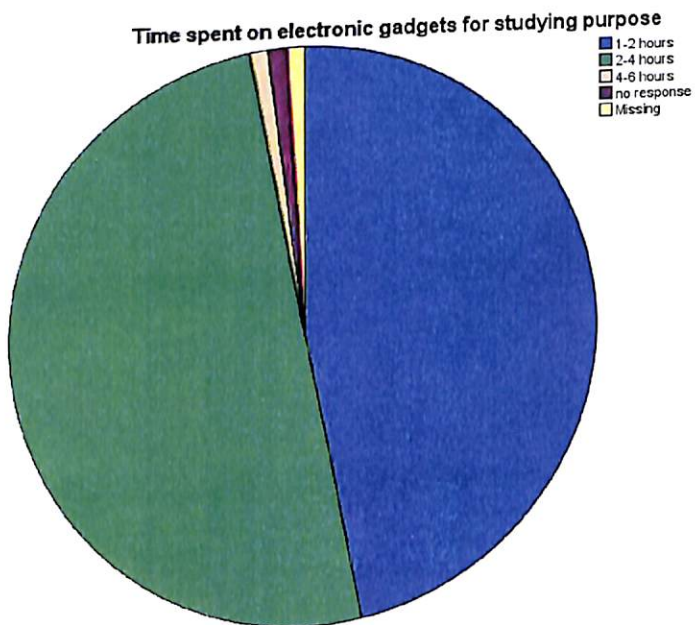
The majority (40%) of the respondents surf on the internet. While 38% respondents do social networking on PC. 10% respondents play games on PC. 2% respondents do word processing on PC. 8% respondents use e-mail and 2% respondents use chat rooms on PC.

Fig. 4.25: Activity done when one gets bored



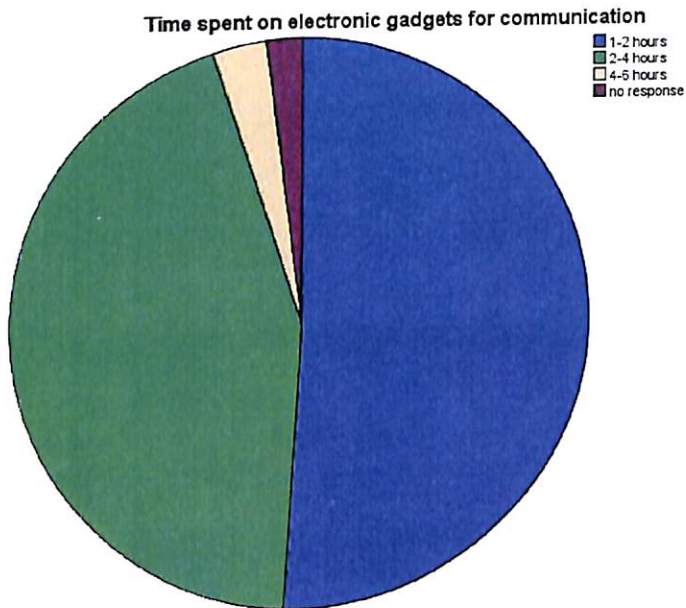
The majority (i.e. 40%) of the respondents use internet when get bored, 20% of the respondents hang out with their friends, 22% of the respondents talk to a family member, and 18% of the respondents do other activities when they get bored.

**Fig. 4.26: Time spent by the respondents on the technological gadgets for studying purpose**



In this study, the majority (i.e. 50%) of the respondents spend 2-4 hours on the technological gadgets for studying purpose. 47% respondents spend 1-2 hours on electronic gadgets for studying purpose, and 1% respondents spend 4-6 hours on the technological gadgets for the study purpose

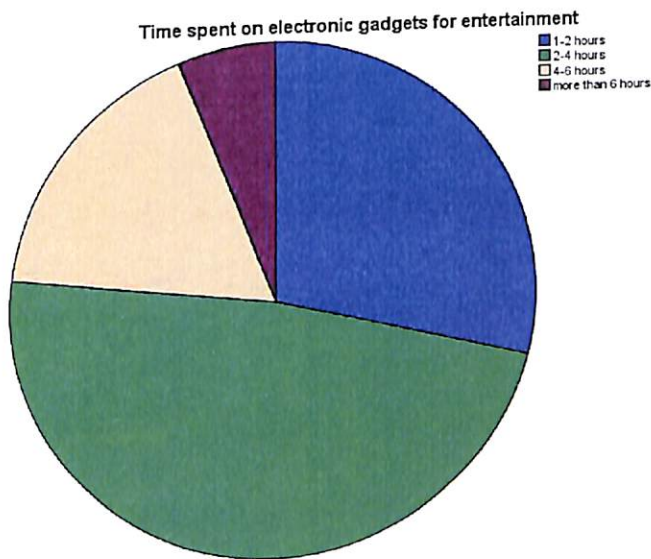
**Fig.4.27: Time spent by the respondents on electronic gadgets for communication**



In this study, majority(i.e. 51%) of respondents spend 1-2 hours on electronic gadgets for communication. However 44% of the respondents spent 2-4 hours on the electronic gadgets for communication and 3% of the respondents spend 4-6 hours on the electronic gadgets for communication.

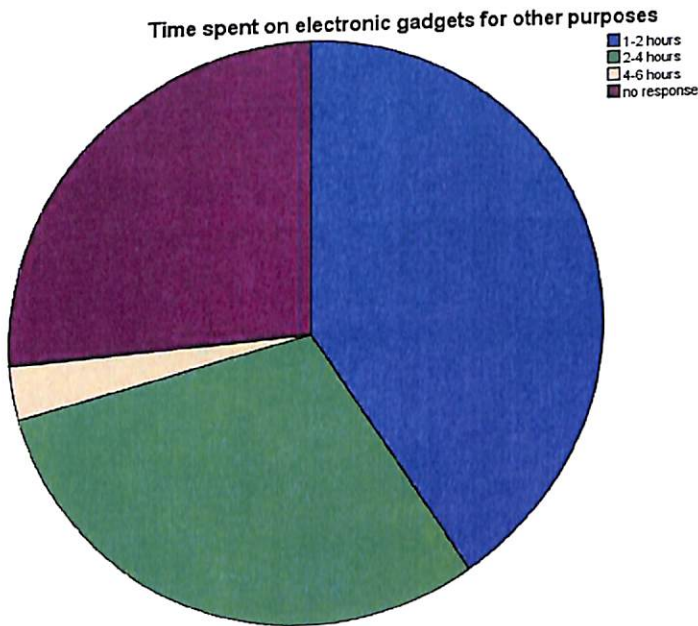


**Fig. 4.28: Time spent by the respondents on technological gadgets for entertainment**



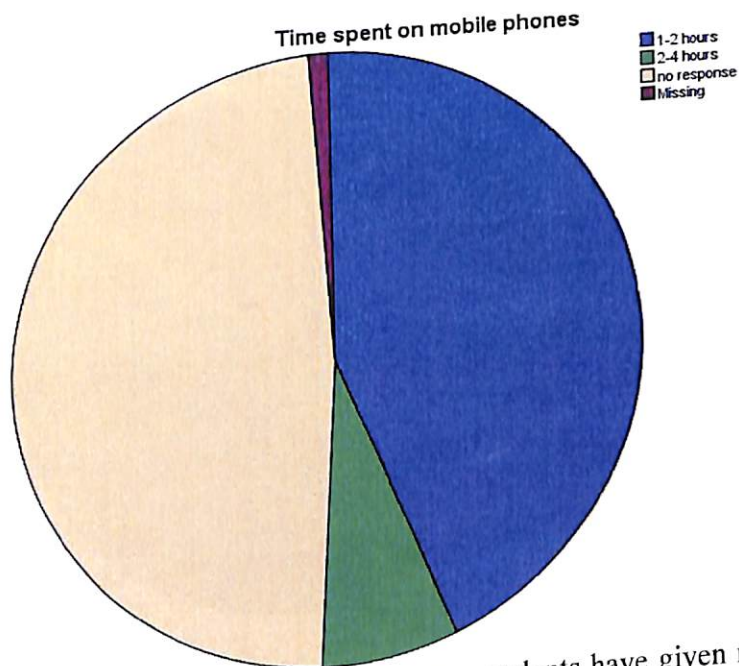
In this study, majority (i.e. 48%) of the respondents spend 2-4 hours on technological gadgets for entertainment. 29% of respondents who spend 1-2 hours on technological gadgets, while 17% of respondents spend 4-6 hours on technological gadgets for entertainment.

**Fig. 4.29: Time spent on electronic gadgets for other purposes**



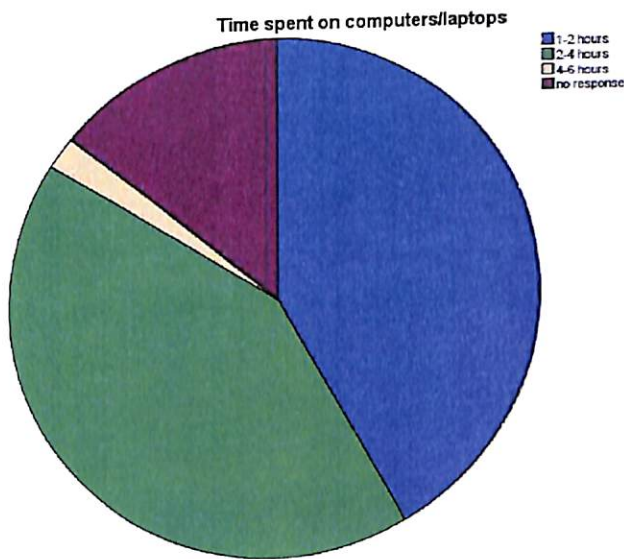
In this study, majority (i.e. 41%) of respondents spend 1-2 hours on electronic gadgets for other purposes. 30% of respondents spend 2-4 hours on technological gadgets for other purposes. 3% of respondents spend 4-6 hours on technological gadgets for other purposes. 26% of the respondents have given no response regarding the time spent by them on electronic gadgets for other purposes.

**Fig.4.30: Time spent by the respondents on mobile phones**



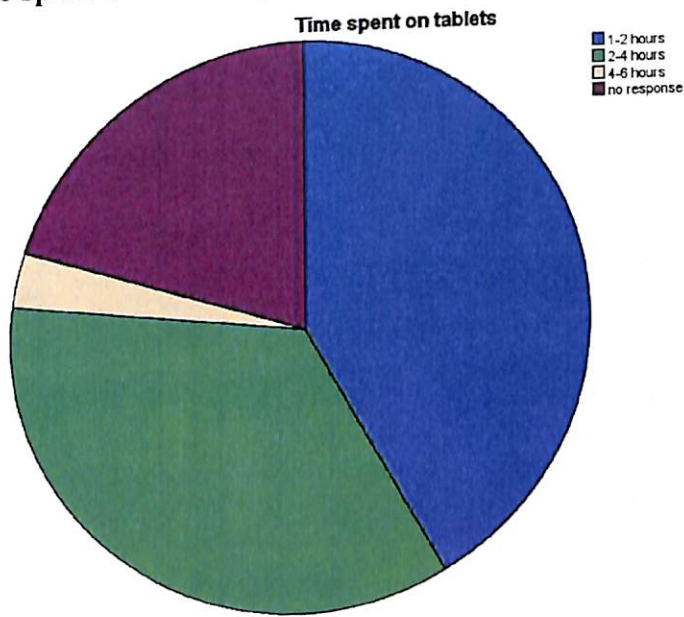
In this study, the majority (i.e. 48%) of the respondents have given no response regarding the time spent on mobile phones by the respondents. This is because, majority of them do not have mobile phones. Their parents have given them smart phones. However 44% of the respondents use mobile phones for 1-2 hours, and 7% respondents spend 2-4 hours on mobile phones.

**Fig. 4.31: Time spent on computers/laptops by the respondents**



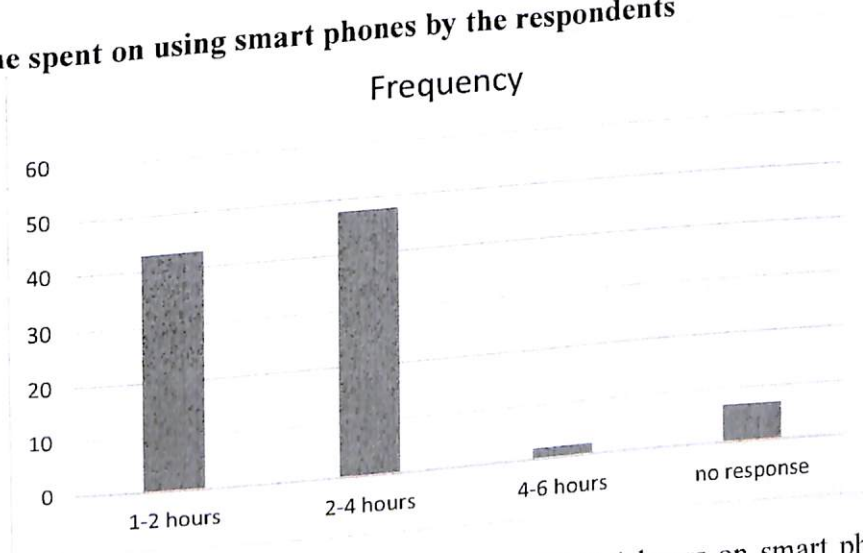
In this study, the 42% of respondents spend 1-2 hours on computers or laptops. 42% of the respondents spend 2-4hours on computers or laptops. 2% of the respondents spend 4-6 hours on computers or laptops and 14% respondents have given no response.

**Fig. 4.32: Time spent on tablets by the respondents**



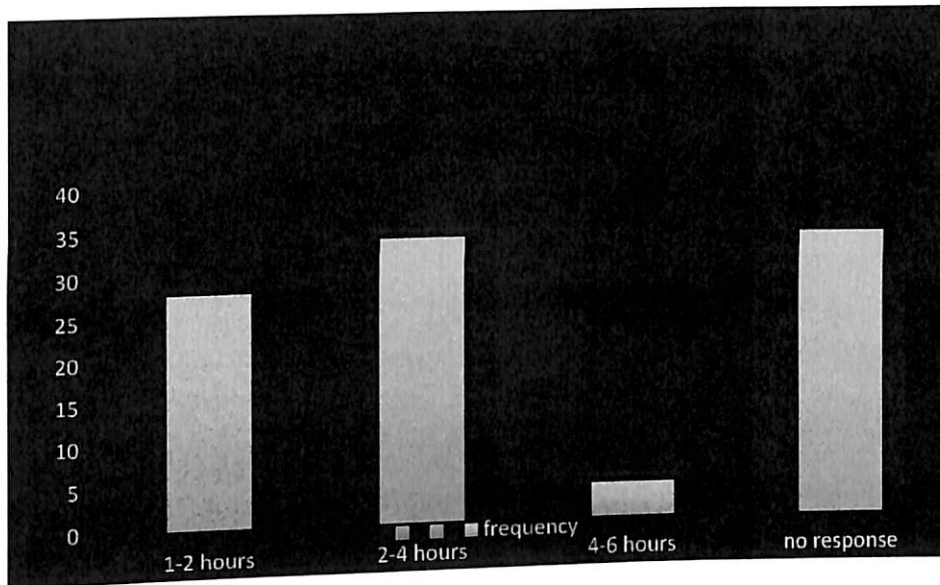
In this study, majority (i.e. 42%) of the respondents spend 1-2 hours on tablets. 35% of the respondents spend 2-4 hours on tablets, 3% of the respondents spend 4-6 hours on computer or laptop and 20% of the respondents have given no response.

**Fig. 4.33: Time spent on using smart phones by the respondents**



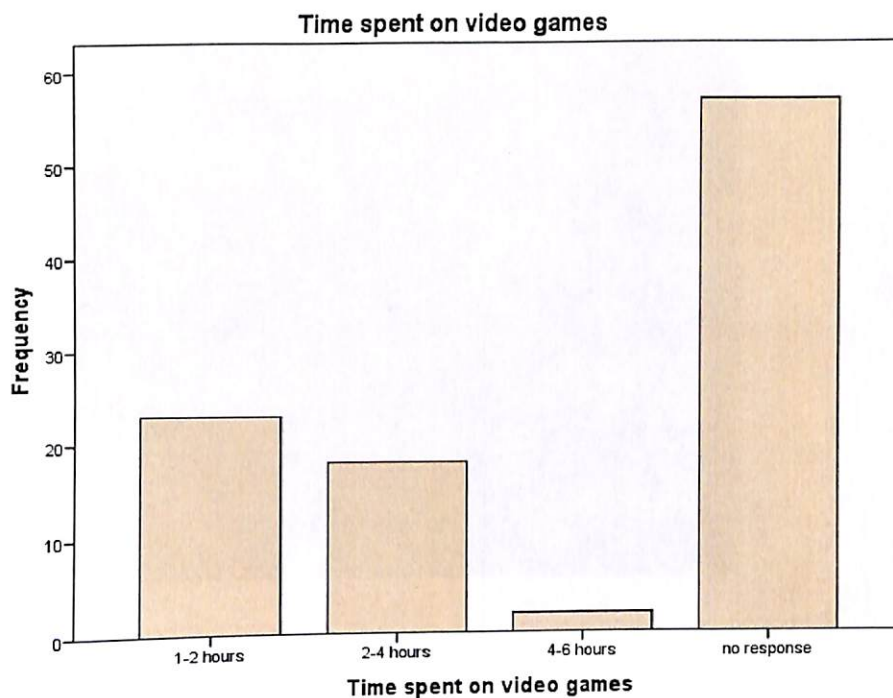
In this study, the majority (i.e. 48%) of respondents spend 2-4 hours on smart phones. 43% respondents spend 1-2 hours on smart phones. 2% of the respondents spend 4-6 hours on smart phones, while 7% of the respondents have given no response.

**Fig.4.34: Time spent on i-phones/i-pads by the respondents**



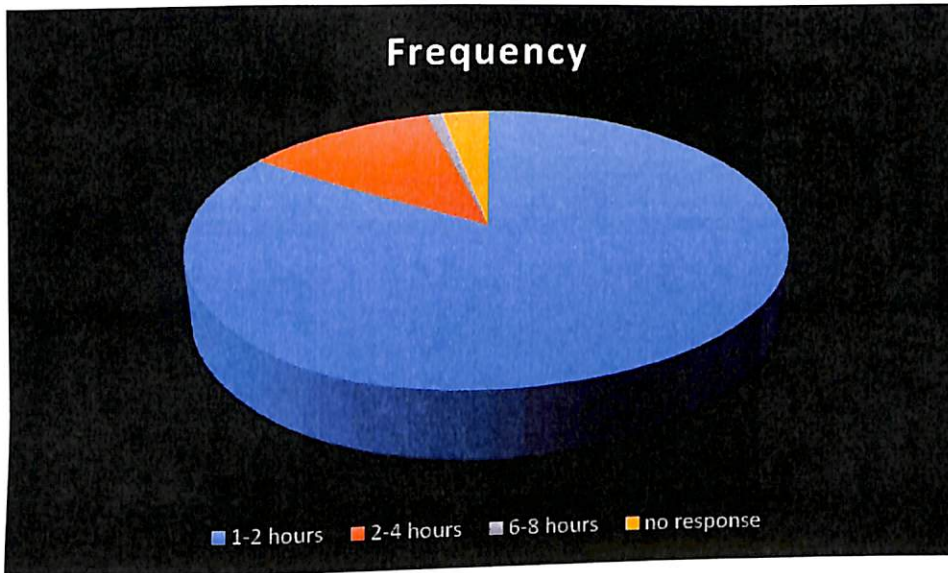
In this study, 34% of the respondents spend 2-4 hours on i-phones/i-pads. 34% of the respondents have given no response because most of the respondents belong to middle class family and therefore parents do not give i-pods/i-pads, knowing that the respondents do not need such gadgets at teenage. 28% of the respondents spend 1-2 hours on i-phones or i-pads.

**Fig. 4.35: Time spent by the respondents on playing on video games**



In this study, majority(i.e.57%) of the respondents have not responded when asked about the time they spend on video games. However, 23% respondents spent 1-2 hours on playing video games. This is because of the emerging trend of internet, smart phones, and android phones on which games have been installed, and the teens play on them.18% of the respondents spend 2-4 hours on playing video games.

**Fig.4.36: Time spent by the respondents on earphones/headsets**



In this study, majority(i.e. 84%) of the respondents spend 1-2 hours on earphones/headsets. 12% of the respondents spend 2-4 hours on using earphones/headsets. 1% of respondents spend 6-8 hours on earphones or headsets.



## CHAPTER FIVE

### FINDINGS AND CONCLUSIONS

The first objective of the study is to find out the socio-economic profile of the respondents. The total sample took for the survey was 100 respondents, out of which 50% are male respondents and 50% are female respondents. The majority (i.e 51%) of the respondents in the study come under the age group of 15-17, 25% of respondents come under the age group of 13-15, 17% of respondents come under the age group of 17-19 and 7% of respondents come under the age group of 19-21. Majority(i.e. 60%) of the respondents belong to high school, 20% of the respondents belong to the higher secondary, 10% respondents belonged to 8th standard and 8% of the respondents belong to degree. Majority (i.e.41%) of families earn 1 lakh to 10 lakh per annum, 33% of the respondents' families earn 1000000-2000000 per annum, and 20% of respondents earn above 2000000 per annum. Only 6% of families earn below 1 lakh. Majority of the respondents (i.e 100%) live in urban areas. Majority (i.e. 37%) of the respondents belong to Hindu religion, 35% of respondents belong to Christian religion, 11% of respondents belong to Islam religion, 11% of respondents belong to Sikh religion. The very fact which shocked the researcher was that 6% of the respondents didn't respond, as they did not want to disclose their religion. Majority(i.e. 86%) of the respondents belong to nuclear families , while 14% of respondents belong to joint families.

The second objective of the study is to know the effects of electronic gadgets on teenage. Majority(i.e. 81%) of the respondents do own a laptop, while 19% of the respondents do not own a laptop. Majority of the respondents(i.e. 95% respondents) own a smartphone, while 5% of respondents do not own a smart phone. Majority (82%) of the respondents' parents have complaints regarding the use of smart phone, while 18% of the respondents' parents have no complaints regarding the use of smart phone. Majority (i.e.31%) of respondents' parents have complaints regarding the use of smart phone due to the lack of study time, while using the smart phone. Respondents simply waste their valuable time in such activities which can affect their studies and their performance in examinations. 5% of the respondents' parents do have complaints regarding the use of smart phone due to change in the respondents' behaviour after

getting a smart phone. 7% of the respondents' parents do have complaints regarding the smart phones due to ethical reasons, as some of the parents think that using a smart phone is against the ethics of their families. 12% of respondents' parents have complaint regarding the use of smart phone due to health-related reasons, as the excessive use of smart phones may cause strain to eyes, even cause neck/shoulder pain. 20% of the respondents' parents complaint about the use of smart phones due to less interaction with parents. As soon as the respondents get smart phones, they are in their own world,not thinking about their parents. 8% respondents' parents have complaints regarding the use of smart phones due to other reasons. For the majority(76%) of the respondents, survival is not difficult without technological gadgets. But 24% of the respondents say that the survival is difficult without technological gadgets. The technological gadgets are the best source of entertainment, for the majority(i.e. 41%) of the respondents. For 24% of the respondents they are not the best source of entertainment. 35% respondents do have neutral views too. The majority of the respondents(i.e. 87% respondents) are aware about their surroundings while using technological gadgets, while 13% of respondents are not aware of their surroundings while using technological gadgets. The majority(i.e. 63%) of respondents listen to music while working. 17% of the respondents listen to music while working, while 20% respondents do so rarely. According the majority(i.e. 80%) of respondents, the social relationships are ruined by social networking websites, while 20% respondents say that social relationships are not ruined by social networking websites. Internet is the best source of knowledge for the majority(i.e 58%) of the respondents, while 42% of the respondents say that internet is not the best source of knowledge. For majority(i.e.93%) of the respondents, technology makes the new generation smart, while 7% of the respondents say that technology does not make the young mass smart. The majority(i.e.91%) of the respondents say that excess use of technological gadgets is injurious to health, while 9% of the respondents say that excess use of technological gadgets is not injurious to health. The majority(i.e. 90%) of respondents do not have sleeping problems due to the use of technological gadgets. Only 10% respondents do have sleeping problems due to the excess use of technological gadgets. The majority(i.e. 57%) of respondents do not have neck/shoulder pain while using technological gadgets. However 38% respondents do have neck/shoulder pain while using technological gadgets, and 5% of the respondents have neck/shoulder pains sometimes. The majority(i.e.

65%) of respondents do have strain on their eyes while working on laptop/computer. 33% of the respondents do not have strain on eyes while working on laptop/computer, while 2% respondents have strain on their eyes sometimes. The majority(i.e.56%) of respondents have back-pain while working on laptop/computer. However, 41% of respondents do not have a back pain while working on computer and 3% of respondents do have back pain sometimes. The majority (40%) of the respondents surf on the internet. While 38% respondents do social networking on PC. 10% respondents play games on PC. 2% respondents do word processing on PC. 8% respondents use e-mail and 2% respondents use chat rooms on PC. The majority(i.e. 40%) of the respondents use internet when get bored,20% of the respondents hang out with their friends,22% of the respondents talk to a family member, and 18% of the respondents do other activities when they get bored. The majority(i.e. 50%) of the respondents spend 2-4 hours on the technological gadgets for studying purpose. 47% respondents spend 1-2 hours on electronic gadgets for studying purpose, and 1% respondents spend 4-6 hours on the technological gadgets for the study purpose. The majority(i.e. 51%) of respondents spend 1-2 hours on electronic gadgets for communication. However 44% of the respondents spent 2-4 hours on the electronic gadgets for communication and 3% of the respondents spend 4-6 hours on the electronic gadgets for communication. The majority(i.e. 48%) of the respondents spend 2-4 hours on technological gadgets for entertainment. 29% of respondents who spend 1-2 hours on technological gadgets, while 17% of respondents spend 4-6 hours on technological gadgets for entertainment. Majority(i.e.41%) of respondents spend 1-2 hours on electronic gadgets for other purposes. 30% of respondents spend 2-4 hours on technological gadgets for other purposes. 3% of respondents spend 4-6 hours on technological gadgets for other purposes. 26% of the respondents have given no response regarding the time spend by them on electronic gadgets for other purposes.The majority(i.e.48%) of the respondents have given no response regarding the time spend on mobile phones by the respondents. This is because, majority of them do not have mobile phones. Their parents have given them smart phones. However 44% of the respondents use mobile phones for 1-2 hours , and 7% respondents spend 2-4 hours on mobile phones. Majority(i.e.42%) of respondents spend 1-2 hours on computers or laptops. 42% of the respondents spend 2-4hours on computers or laptops. 2% of the respondents spend 4-6 hours on computers or laptops and 14% respondents have given no response. Majority (i.e.42%) of the respondents spend 1-2 hours on tablets. 35% of the respondents spend 2-4

hours on tablets, 3% of the respondents spend 4-6 hours on computer or laptop and 20% of the respondents have given no response. In this study, the majority(i.e.48%) of respondents spend 2-4 hours on smart phones. 43% respondents spend 1-2 hours on smart phones. 2% of the respondents spend 4-6 hours on smart phones, while 7% of the respondents have given no response. 34%of the respondents spend

2-4 hours on i-phones/i-pads. 34% of the respondents have given no response because most of the respondents belong to middle class family and therefore parents do not give i-pods/i-pads, knowing that the respondents do not need such gadgets at teenage. 28% of the respondents spend 1-2 hours on i-phones or i-pads. In this study, majority(i.e.57%) of the respondents have not responded when asked about the time they spend on video games. However, 23% respondents spent 1-2 hours on playing video games. This is because of the emerging trend of internet, smart phones, and android phones on which games have been installed, and the teens play on them.18% of the respondents spend 2-4 hours on playing video games. Majority(i.e. 84%) of the respondents spend 1-2 hours on earphones/headsets. 12% of the respondents spend 2-4 hours on using earphones/headsets. 1% of respondents spend 6-8 hours on earphones or headsets.

The third objective of this study is to find out if the use of technological gadgets have strained the relationships, especially the parent-child interactions. 20% of the respondents' parents complaint about the use of smart phones due to less interaction with parents. As soon as the respondents get smart phones, they are in their own world, not thinking about their parents. In this study, the majority (i.e. 78%) of respondents say that technology causes generation gap between parents and children. 19% of the respondents say that technology does not cause a generation gap between the parents and children, while 3% of the respondents have neutral views regarding this. According the majority(i.e. 80%) of respondents, the social relationships are ruined by social networking websites, while 20% respondents say that social relationships are not ruined by social networking websites.

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## APPENDIX

### QUESTIONNAIRE

#### **A Sociological Study on the Impact of technological gadgets on teenage in the metropolitan city of Delhi**

1. Name: \_\_\_\_\_
2. Gender: \_\_\_\_\_
3. Age: \_\_\_\_\_
4. Sex: \_\_\_\_\_
5. Educational Qualification: \_\_\_\_\_
6. Parental income: \_\_\_\_\_
7. Residential Status: \_\_\_\_\_
8. Religion: \_\_\_\_\_
9. Type of family: \_\_\_\_\_
10. Do you have a personal laptop? Yes \_\_\_ No \_\_\_
11. Do you have a smart phone? Yes \_\_\_ No \_\_\_
12. Do your parents complain about your use of smart phone? Yes \_\_\_ No \_\_\_

If Yes, What are the reasons? (Choose only one)

- Studying reasons
- Behaviour reasons
- Ethical reasons
- Health related reasons
- Less interaction with your parents
- Other

13. In your view, is survival difficult without technological gadgets even for one day?
14. Is technology the best source of entertainment?
15. Are you aware about the surrounding while busy with your gadgets?
16. Do you listen to music while working?
17. Do you think that social relationship is ruined by social networking sites?

18. Is Internet the ultimate source of knowledge?

19. Does technology make the young mass smart?

20. In your opinion is the excess use of technological gadgets injurious to health?

21. Does technology cause generation gap between children and parents?

22. Do you have any problem in falling asleep or staying asleep? Yes \_\_\_ No \_\_\_

23. Do you often feel pain in your neck and shoulder muscles? Yes \_\_\_ No \_\_\_

24. Do your eyes get strain while working on laptop/computer? Yes \_\_\_ No \_\_\_

25. Do you have back-pain while working on laptop/computer/tablets? Yes \_\_\_

No \_\_\_

26. Choose the most common activities when using a PC? (you can choose more than one)

- Playing games
- Surfing the internet
- Word processing
- Using your e-mail
- Chat rooms
- Social network (Facebook, Twitter, MySpace, Google+,... etc)

27. When you are bored, you prefer to (choose one only)

- Hang out with a friend or call him/her
- Talk to a family member
- Use the internet
- Other,(please state .....



28. For what purpose do you use electronic gadgets and how much time?

	1-2 hours	2-4 hours	4-6 hours	More than 6 hours
Study				
Communication				
Entertainment				
Others(if any, please specify)				

29. In a day how much time do you spend on the following devices and services?

Technological Gadgets	1-2 hours	2-4 hours	4-6 hours	6-8 hours
Mobiles				
Computers/laptops				
Tablets				
Smart phones				
I phones/I pads				
Video games				
Earphones/Headsets				