EFFECT OF PARENTING STYLES AND PERSONALITY TRAITS ON INTERNET ADDICTION AMONG ADOLESCENTS

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By

Nimisha Shukla

Regd. No.- 15SAHS301001

DEPARTMENT OF HUMANITIES

SCHOOL OF LIBERAL EDUCATION

GALGOTIAS UNIVERSITY

CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in the thesis, entitled **"Effect of Parenting Styles and Personality Traits on Internet Addiction among Adolescents"** in fulfillment of the requirements for the award of the degree of Doctor of Philosophy in Faculty and submitted in Galgotias University, Greater Noida is an authentic record of my own work carried out during a period from February, 2016 to November, 2021 under the supervision of Dr. Shikha Srivastava.

The matter embodied in this thesis has not been submitted by me for the award of any other degree of this or any other University/Institute.

Nimisha Shukla

(Candidate's name)

This is to certify that the above statement made by the candidate is correct to the best of our knowledge.

Dr. Shikha Srivastava

Professor

(Supervisor)

Department of Humanities

The Ph.D. Viva-Voice examination of Miss Nimisha Shukla Research Scholar, has been held on

Sign.of Supervisor(s)   Sign. of External Examiner

ABSTRACT

Internet has become the most widespread and versatile technology in the world. People of all ages rely on the Internet to satisfy their different needs such as learning, entertaining, socializing, banking and shopping. With the advancement in the technology, the usage, speed, interactivity, and access to internet over the past decade have a tremendous increase. With this tremendous increase in the internet usage, the one specific age group that seem to be more prone towards developing a problem with the internet are the adolescents. The elevated usage of the internet by this age group may have exposed them to an unprecedented risk of Internet addiction which has harmful psychological and behavioral effects on the user. The concept of Internet addiction was first coined by Goldberg (1996) as "a pathology, a disorder, an overuse of this technology, including a wide range of behaviours and impulse-control". This study aimed to synthesize previous findings by investigating the effect of parenting styles and personality traits on Internet addiction among adolescents of urban Ghaziabad. A sample of 300 adolescents of urban Ghaziabad was collected wherein, 150 adolescents suffered from Internet addiction and 150 were Non-addicted. The sample included both male and female participants. The participants filled out three self-report questionnaires including the Internet Addiction Test (Young, 1998), the Parental Authority Questionnaire (Buri, 1991) and the Big Five Inventory (John, 1991). The data was analyzed using descriptive statistics – Mean, Standard of Deviation (SD) and Analysis of Variance (ANOVA).

As per the results of the study, we observed that the 5 hypotheses of the study were accepted while 3 hypotheses were rejected. Results indicated significant difference among the means of the two groups (Internet addicted and Non-addicted) in three the dimensions of personality – Extraversion, Neuroticism and Conscientiousness. Similarly, significant difference among the means of the two parenting styles – Permissive and Authoritarian was found in both the groups (Internet addicted and Non-addicted). No significant difference was found among the means of Openness and Agreeableness personality traits with respect to the two groups Internet addicted and Non-addicted. Also, no significant difference was found with respect to Authoritative parenting style among both the groups Internet Addicted and Non-Addicted.

Key Words: *Internet addiction, adolescents, personality traits, parenting styles*

DEDICATION

This thesis is dedicated to my beloved parents whose godly love, support and encouragement inspired me to pursue and complete this research. Thank you for all that you have done.

You're the best!

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LIST OF ABBREVIATIONS

Abbreviations	Explanation
IAT	Internet Addiction Test
PAQ	Parental Authority Questionnaire
BFI	Big Five Inventory
PIU	Problematic Internet Use
SNS	Social Networking Services
M	Mean
SD	Standard deviation
ANOVA	Analysis of variance

CHAPTER-1

INTRODUCTION

(1) INTRODUCTION

India stands second within the world with more than seven hundred million internet users today as per the Telecom Regulatory Authority of India (TRAI, 2021). The web or the internet is an arrangement of computer networks that are interconnected worldwide and has responded to numerous quick technological enhancements since its beginning in early 1960s, and today it gives a scope of wide range of services. Especially, with the introduction of the concept of westernization, globalization and liberalization, India has witnessed drastic changes in trends and lifestyle of its citizens pertaining to different spheres of life like education, booming of IT industries, increase in world trade etc. All of the above mentioned spheres require one thing in common: the internet. Improvements and upgrades in technology have expanded the accessibility and utility of internet among people of all ages. Internet can be accessed from different types of gadgets like mobile phones, laptop, computers, tablets, smart televisions and many other. People of different age groups use the internet for different purposes and needs such as learning, entertainment, socializing, shopping, leisure, online business, marketing etc. In order to fulfill this rising need, a lot of private companies have stepped in as internet service providers and offering the web service at affordable costs. This has elevated the accessibility and usage of internet among all age groups even more.

With this tremendous increase in the internet usage, the one specific age group that seem to be more prone towards developing a problem with the internet are the adolescents. Adolescents use the internet not only for their homework but also for socializing and gaming. In fact, according to a recent survey high school students are found to be the most engaging users for online gaming. Easy accessibility has increased the problem for the parents to keep a check on their child's online activities. Even the schools who are advancing technologically, expect students to be active on the school's student portal and do the school's projects by taking the help from the internet. This further makes the net a necessity for adolescents. Therefore, we cannot neglect the fact that the internet has become an integral part of an adolescent's life. During this day and age when computers and the Internet are essential for school, we must beware of the long-term effects of this electronic

phenomenon. Inspite of being an exceptional discovery in field of communication, the web is absolutely not liberated from its negative side as it very well may be utilized for online erotic entertainment, online computer games, excessive chatting, gambling, cyber bullying and cybercrimes.

(1.1) Meaning and definition of Internet

The term Internet is defined as "a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols" by Oxford dictionary (2006). According to this definition Internet is referred to global system of interconnected Internet protocol which is a means of connecting computers worldwide with the help of servers and routers. The users can send and receive any data in the form of videos, photos, exchange text message and voice messages, documents, mails etc when these computers are connected with the help of internet. The worldwide web is not only limited to exchanging photos and videos but we can also get any information at our finger tips just by putting the key words in the search bar. There is, in a way, no limit to what you can search and the information you can get online. It could be historical, latest, scientific, research based, entertainment anything and everything.

By and large, the beginnings of the Internet can be followed back to 1969, when the United States. Branch of Defense started financing the U.S. Progressed Research Project Agency in creating innovation for trading data through its different organizations. Notwithstanding, the electronic Internet as far as we might be concerned today, begun in 1983 utilizing the Transaction Control Protocol/Internet Protocol (TCP/IP). Later in the year 1992 with the appearance of WWW designs based programming, it has spread quickly (Gattiker, 2001).

The history of internet in began in the year 1986 with the launch of the Educational Research Network (ERNET). At the time, only educational and research communities had access to the network. Later Videsh Sanchar Nigam Limited (VSNL) launched the first publicly available internet service in India on 15 August 1995. During that time, private enterprises were not permitted entry into the sector

and therefore, VSNL had a monopoly over international communications in the country. Despite being the only provider, VSNL couldn't satisfy people with its service. It was plagued by several hardware and network issues. The modems that were used by the company were of poor quality.

In the year 2004, the government reformulated its broadband policy. From 2005 onward, the broadband sector in the country grew rapidly but still didn't perform as expected due to resource issues in wired-line technologies.

The real change occurred in 2010 when the public authority sold 3G range followed by a similarly high-profile sale of 4G range that set everything up for a cutthroat and stimulated remote broadband market. This was a game changer in the sector, making a big boom in the market. Today, web access in India is given by both public and privately owned businesses utilizing an assortment of advances at a wide scope of speed and expenses.

As a result, Internet has become super accessible and affordable to all the people in the country. With the continuous growing advancement in the area, the internet has in short order become an interesting new idea which carries a unique function and accommodation to our lives. There is no doubt that it has made our lives easier. With the Internet it in some cases gives the idea that anything may be conceivable. Consequently, the quantity of Internet clients has expanded quickly and continues to grow further with every passing day.

(1.2)Internet Addiction

Dr. Kimberly Young, the founder of "The Center for Internet Addiction" defined Internet addiction as "Any online-related, compulsive behaviour which interferes with normal living and causes severe stress on family, friends, loved ones, and one's work environment. Internet addiction has been called Internet dependency and Internet compulsivity. By any name, it is a compulsive behaviour that completely dominates the addict's life. Internet addicts make the Internet a priority more important than family, friends, and work. The Internet becomes the organizing principle of addicts' lives."

According to the above mentioned definition when for a person any online related activities from chatting to gaming to online shopping, becomes very much compulsive that these compulsive behaviour starts to hamper and influence in one's day to day social, physical, personal and work environment, then they will be considered as Internet Addicted. In such a scenario utilization of internet would become a primary part of an addicted's life. For example, in one extreme clinical case from 1997, jobless mother Sandra Hacker supposedly went through more than 12 hours daily disconnected from her three young and ignored kids while she surfed the web.

Internet addiction is called by different names like Compulsive Internet Use (CIU) and Problematic Internet Use (PIU).

Dr. Kimberly Young (1999) declares that Internet Addiction is an expansive term which can be decayed into a few subtypes of conduct and impulse control issues. In this way, inside the Internet Addiction peculiarity, five subtypes have been grouped, in light of the fact that individuals regularly become dependent on a specific application that goes about as a trigger for exorbitant Internet use. The subtypes are as follows –

1. Cybersexual Addiction: It includes compulsive use of adult websites for cybersex and cyberporn. Dependent individuals download, use and exchange cyberpornographic materials and they are likewise regularly engaged with adult chat rooms and online pornography.
2. Cyber-relationship Addiction: It includes over contribution in web based relationships. A compulsive use results in finding and keeping up with connections on the web, frequently neglecting and dismissing genuine loved ones. They can even be caught up in cyber adultery (Lavenia & Marcucci, 2005).
3. Net Compulsions: It includes compulsive internet usage for interactive online activities like gambling, online shopping, obsessive e-trading, online auctions etc. Over involvement in such activities can cause financial troubles and disruption in daily life duties.
4. Information Overload: The plenitude of data on the web makes a compulsive behaviour of web surfing or database searches. It includes an uncontrollable urge

to assemble and arrange information. Sometimes, it can be a manifestation of obsessive compulsive tendencies that are pre-existing.

5. Computer Addiction: It is also called computer gaming addiction. During the 80s, computer games, for example, Solitaire and Minesweeper were customized into computers and analysts observed that obsessive compulsive game playing became tricky in authoritative settings (Guerreschi, 2011). It is the most oldest type of web compulsion and still pervasive today

(1.2.1) Theoretical framework of Internet Addiction

The rapid growth of Internet encouraged researchers to study the theoretical perspective regarding the driving force behind Internet usage. The dynamic life like that of big cities has a great demand of internet as it provides instant gratification to the users. Because of this many people prefer to get maximum of their work done through the internet be it for shopping, ordering food, watching movie or information surfing. There are several researches that are trying to understand the need and motive behind the use of the Internet. Following are the theories-

The Self-Determination Theory: This theory formed by the psychologists Deci & Ryan (2000) recommends that individuals are inspired to grow and change by three inborn and universal psychological needs. These needs, when clubbed, give rise to three major types: relatedness, competence, and autonomy. Relatedness alludes to a desirable attachment to others including affection and care. Competence means fulfilling the feeling of mastery and autonomy on the other hand, alludes to acquiring satisfaction from one's own decisions and choices and their enactment in a manner that is coherent with one's integrated sense of self. The idea of intrinsic motivation or taking part in exercises for the innate rewards of the actual conduct, plays a significant part in self-determination theory. The three needs that are mentioned above are seen to be vital in the explanation of the factors motivational to individual behaviors in different settings such as psychotherapy, educational, medical care and sports. They are additionally fruitful in clarifying usage of the internet. For instance, commitment in internet based informal organizations or online media sites like Twitter and Facebook can furnish people with a sense of relatedness and independence by empowering them to have a controlled interface with others.(Wan

& Chiou, 2006; Sheldon et al., 2011; Nadkarn i& Hofmann, 2012). Taking part in internet gaming, then again, could fulfill each of the three kinds of need by means of an extraordinary cooperation with different users (relatedness) to finishing missions and accomplishing stages (skill), everything by one's own decision making (autonomy) and choices (Yee, 2006). By and large, the Internet has given peoples a prompt and effectively available means to look for fulfillment and engaged them to control the manner in which they introduce themselves paying little mind to their actual personality or actual attributes. It has therefore turned into a very supporting stimulus. Having the needs met through the internet can be addictive in the long run.

The Use and Gratification Theory: The Use and Gratification theory illustrates how media is used by the people for the gratification of their need. This theory explains that every user of the media have his or her own purpose of using media, due to which different users uses different media platform to gratify their needs (Severin & Taknard, 1997). Rubin, 1983 explained the psychological need of any user by their motivation and decision following a given media platform. In the same way, each person have his own needs (psychological and social) to use the media, such as use of media for the purpose of seeking information, communication, to be connected, to coordinate and so on. A lot of research studies have been done to explore, how internet use can be explained with the help of Use and Gratification theory (Kim &Haridakis, 2009; Leung, 2014; Larose & Eastin, 2004). The Use and Gratification theory studies have also been extended to understand the use and gratification of many different media namely text messaging, instant chatting apps, social networking sites, television, text messaging or chatting, web-blogs and the internet itself.

Literature review on motivation behind media use indicates the individual is cognitive and emotional by nature (Maslow, 1970) but the other suggests that the purpose of media use are specific to goals and driven by utility which is further explained in terms of use and gratification of specific media use for attaining the goal (Leung, 2014).

General Strain Theory: As per the General Strain Theory, various types of strain (for example, stress related to life and broken relationships) can make one experience

unpleasant and negative feelings. This accordingly prompts deviant practices or compulsion as a coping procedure or escaping from the negative feelings (Agnew & White, 1992). This theory declares that stressors or strains improve the probability of negative feelings like aggression and frustration. Such feelings further cause pressure to take actions of correction, and one possible response of that can be crime. Criminal activity may be a way to reduce strain (for example, money stealing), to seek revenge, or a way to escape negative emotions (for example, by using drugs). Originally this theory was developed for explanation of crime (Agnew, 1992). Now it has been used for several problematic behaviors, for example, Internet addiction (Jun & Choi, 2015), problematic consumption of alcohol (Swatt et al., 2007) and substance abuse (Özbay, 2014; Sharp et al., 2012). By definition, a strain is characterised as a critical factor that leads people to engage in problematic behaviors (Agnew, 1992). It has been found that a number of strains lead to conducts such as experiencing negative feelings, stress of academics, childhood negative experiences, violence with intimate partner, absence of social support, parental criminality and depression from motherhood (Agnew, 1992; Jang et al., 2014; Jun & Choi, 2015; Reid & Piquero, 2016; Zapolski et al., 2018).

Cognitive–Behavioural Model On Pathological or Problematic Internet Use: This model on pathological or problematic use of the internet was introduced by Davis in 2001. The model differentiates between a Specific Pathological Internet Use (SPIU) and the Generalized Pathological Internet Use (GPIU). According to Davis (2001) the Generalized Pathological Internet Use is developed when a person frequently uses internet application due to lack of real life social support, loneliness and feeling of isolation may contribute to the rise of generalized internet addiction behavior. The model places that obsessive Internet use is related to maladaptive cognitions and social issues like social disengagement or absence of social help. According to this model, the requirement for social contact and support received from online engagement expands the craving to stay inside the world of this virtual social circle and family. In a way it becomes a mean to get attention and acceptance which fulfills their need and desire. Such maladaptive perceptions persuade young people to think that through their web-based presence they can observe the support and social contact ailing in their disconnected lives. These maladaptive strategies of intense internet use may intensify and the users for every real life problem make use of

internet which may have negative consequences (Caplan, 2005). Whereas, SPIU is the use of specific internet sites such as social network site, gambling, pornograph etc. In SPIU the needs are very clear. Davis further argues that, GPIU is associated to the choices that the net itself provides, but SPIU is also possible outside the Internet and are every specific or particular to what they offer. GPIU has been found to be associated to social problems such as loneliness, lack of social support and inadequate social skills which further supports this model. (Ghassemzadeh, et al., 2008; Kim et al., 2006). Several researches have taken place to find a relationship between both. Such social hardships, in many researches, are essentially linked to the family setting and peer bunch, observing that these issues are both the causal factors and effects of Problematic Internet Use (Choo et al., 2015; Esen & Gündogdu, 2010; Kim et al., 2009).

Some Other Theories:

- In terms of Learning theory which signifies the role of positive reinforcement, indicates that use of internet has a reinforcing effects on its users, which includes pleasure while using internet, feeling of well-being, question of status among the peer group etc (Wallace, 1999).

- Esen & GündoÄŸdu (2010), Esen (2009), assert pressure for peer is a vital prediction factor behind addiction to the internet. Pressure induced by peer can result in addiction to internet. In order to comply with the norms of the peer circle, adolescents especially fall into the trap of addiction. The commitment could be related to gaming or maintaining social media image. Peer pressure and internet addiction are related to each other, wherein, with low level of peer pressure, the internet addiction also decreases.

- Shaffer (1996) opines that internet use is associated with sensation seeking behaviour, which is an important trait of impulsivity. Further he emphasizes that those who are impulsive by nature tend to use internet as a sensation seeking agent and prolong use leads to addiction.

- Lam et al., (2009) affirms that addiction to internet is a conduct manifestation of inward pressure and stress is a realized danger element of addiction. High stress can lead to higher level of internet addiction. Other than that, Esen & Gündoäÿdu (2010) expressed that internet addiction can be a result of adolescents trying to

escape the situations that they can't cope with. In this way, when they feel anxious because of some issue and they can't adapt to it, they will decide to escape from this present reality to get into the fictional universe of internet Since, the web access is easy, therefore, it proves to be even more useful.

- Shotton (1991) study implies that introverted, educated, technologically sophisticated males are more prone to develop internet addictive behavior. It is further argued that individuals with low self-esteem are more susceptible to pathological use of internet and become internet addicts, thus individual who are shy by nature use internet to overcome their social skills deficiencies, social relations and communication.

(1.2.2)Diagnosing Internet Addiction

There are three major models identified for diagnosing Internet Addiction are by Young (1998), Griffiths, Block and Tao. Following are the diagnostic criteria as laid by them.

Young (1998) proposed criteria patterned on the basis of the DSM-IV-TR criteria for pathological gambling. The criteria established for pathological gambling was taken by Young for the initial start. She defined Internet addiction as a failure of personal impulse control where no external substance is involved. As per this criteria, non-essential usage of the internet have been considered such as, using the internet not for business or academics. Internet addiction is considered to be present if in the last six months five or more of the eight criteria are present and mania is not the cause behind it. Following are the eight criteria:

1. A preoccupation with the Internet.
2. A need to increase the online usage time to achieve the same amount of satisfaction.
3. Unsuccessful efforts to stop using the Internet,
4. Fluctuation in mood when attempts are made to end or reduce Internet usage. Feeling irritable, depressed, or unstable mood when limit is placed on Internet usage.
5. Spending time online longer than the anticipated time.
6. Placing job or significant relationships at stake to use Internet.

7. Lying about the amount of time spent online to others.

8. Usage of the Internet as a way to escape from problem and/or regulating mood.

Young is considered the master of Internet Addiction related studies. Her ways are widely accepted along with the Internet Addiction Test, a valid and reliable tool for Internet addiction assessment.

In the year 2010, Tao et al., made an effort to develop Internet addiction's diagnostic criteria and further assess its reliability and validity in the general population. To accomplish this motive, survey method was used. As per the study, the diagnostic criteria explains seven clinical symptoms of Internet addiction disorder, which can be broadly classified under

1. Symptom criteria: Both preoccupation and withdrawal symptoms must be present.

2. One or more of the below mentioned criteria:
   (a) tolerance,
   (b) persistent desire, unable to control use even after several attempts,
   (c) losing interest in other activities which were liked previously,
   (d) continuous use in spite of having problems,
   (e) using web as an escape or for relieving uneasiness caused by negative emotions or mood

3. Clinically significant impairment criterion: Loss of a significant relationship, or career opportunities and reduction in working, social, academic capacity. Indicating impairments in functional and psychological aspects.

4. Course criterion: A minimum duration of past 3 months of addiction is required. Also, the usage of internet must be for non-essential purpose, where engagement is for more than 6 hours a day.

5. Exclusion criterion: Internet dependency that is caused due to psychotic disorder is not included.

Excessive Internet use has not been officially recorded as a disorder by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), International Classification of Diseases (ICD-11) or the World Health Organization. However, the

International Classification of Diseases (ICD-11) mentions the diagnosis of Gaming Disorder.

(1.2.3) Components of Internet addiction

Griffiths (2005) developed a model known as "components model" wherein he identified six important core components of internet addiction which are commonly seen among other types of addictions. According to the model, addictions related to substance and behavior, for example, Internet addiction, share a variety of characteristics and develop via similar biopsychosocial processes. It states that every addiction is comprised of six common and distinct components:

1. Salience- Salience here refers to any particular activity which becomes a primary activity for the person that is most important and there is an obsessive preoccupation with the activity along with compulsive behavior.

2. Mood modification - It occurs when the substance/behaviour is used by the person with an intention to improve depressed moods and get away from their real life. It is helpful in making them feel better and allows them to forget their problems.

3. Tolerance - Tolerance refers to the process of increased amount of addictive behaviour which is required to attain the earlier effect. Over time, in order to feel the same pleasurable effects, the person may require to elevate their online time or the frequency of online attendance.

4. Withdrawal symptoms - Withdrawal refers to the unpleasant state that occurs when the individual discontinues or decreases their behaviour. It affects both their physical health as well as mental health. Anxiety, sadness, irritability and/or psychosomatic problems, physical dysfunction are some examples of these symptoms.

5. Conflict – It indicates the interpersonal and intrapsychic issues that occures a result of the behaviour. The conflicts may include disruption of personal relationships, not performing well at work, losing control over their usage causing internal conflict etc.

6. Relapse– Relapse refers resurfacing of the addictive behaviour. It includes showing the same pattern of addictive behaviour, thus reappearance of addictive

behaviour even after controlling it for many year, making it an unsuccessful effort to quit.

(1.2.4) Signs and symptoms of Internet Addiction

The signs and symptoms associated with Internet addiction vary for different people. Early identification of overuse or excessive use can help in early intervention. Below mentioned are some general warning signs:

- Not being able to keep a track of time once you are on the internet.
- Constantly eating in front of the monitor, and even using mobile phones while eating.
- Not accepting the too much time spent on Internet related activities. Often turning defensive if confronted.
- Procrastinating or avoiding work and losing interest in everything else.
- Interpersonal and intrapersonal relationships are disturbed.
- Feeling anxious, agitated, aggressive, irritated or having mood swings very often.
- Avoiding or skipping social gatherings just to engage in internet related activities.
- Repeated and compulsively checking phone or online activities.
- Logging into internet despite of having a lot of work at job or home.
- Having no sense of time and staying in isolation for internet related activity.
- Engaging in one specific internet related activity way too much such as gaming, Instagram, Facebook etc.
- Assuming internet as a stress buster and seeing it as a very good coping strategy.
- Lack of sense of prioritization and maintaining schedules.
- Having a euphoric feeling when surfing the net or using the internet for some of the physical symptoms include:
- Poor nutrition caused due to failure of eating or excessively eating in order to avoid staying away from the computer.
- Personal hygiene being poor, for example, not taking bath in order to stay online.
- Carpel Tunnel Syndrome - complaining of numbness in hands with pain and burning sensation that can go up to the wrist, elbow and shoulders.
- Dry or red eyes or strained vision caused by excessive screen time.

- Neck ache or body ache.
- Insomnia or sleep disturbance.
- Noticeable increase or decrease in weight.

(1.2.5) Internet Addiction among adolescents

Adolescence indicates a time between puberty and adulthood. It usually lie in the middle of the ages eleven and eighteen years. It could be obviously characterized as "time of physical, mental and social development from childhood to adulthood for example the period stretching out from adolescence to the accomplishment of full regenerative development". With the rise in the amount of Internet users, it has been observed that addiction to internet is becoming a significant issue across the world, particularly for adolescents. During the time of adolescence, there is an expanded danger of emotional crises, regularly joined by mood changes and times of anxiety and depressive conduct. Attempts are made by the adolescents to deal and fight with these problems through withdrawing, avoiding social contact, aggression, and addictive behavior. It is during childhood or adolescence that most emotional or behavioral issues begin and subsequently have repercussion in daily life, for example, school participation, ability to learn, violent behavior, substance use and social relations. In the period of adolescence, adolescents are overly receptive and vulnerable. They get easily attracted towards the Internet for venting out and getting help. This tendency, over time, can cause addiction. In addition to this, they are drawn to the latest methods of socialization and communication. This opens a medium of interaction with others wherein the person can stay anonymous, get the feeling of belongingness to a group, and can accomplish social acceptance.

Adolescence is an age where adolescents are fascinated by technological gadgets and its supreme functions. Studies suggest that the adolescents are highly vulnerable to problematic internet use. Scherer (1997) found in his study that 73 percent of college going adolescents use internet at least one time in a day and the average time spent on the internet was 8.1 hours in a week. Online chatting, e-mailing, gaming and downloading of movies were seen as the main internet activities. Jones (2002) study reports that for the purpose of online chatting with friends and family members

adolescents prefer to communicate with online social network sites more than e-mail, and instant messages. Young (2004) in her studies has identified the factors that contribute to adolescent's internet abuse:

c. When adolescent students have large amount of time that is not planned and is unorganised,

b. When the adolescent students are provided with free internet connection by school and college authorities.

d. When these students are not monitored by their parents and teachers regarding their use of internet.

e. When the adolescents are exposed to new environment such as new school or college and wherein they find it difficult to find friends and seeks out for the companion through online mode.

f. When adolescent students are reinforced by their parents and college authorities for using internet applications for academic purpose.

g. When adolescents are equipped with newer knowledge of latest technology of internet and others.

h. When adolescent students experience academic work as stress and to avoid those stressors.

i. When adolescent student thinks that life at university is away from social projects and feeling of poor recreational activity from the college or school they tend to get into the world of internet.

A recent study highlighted various uses and advantages of Internet for students, for example, it can be used to access literature on a large level, for e-learning, and online courses. Online conferences and webinars are other uses. However, addiction and negative impact on students' health can be caused by frequently visiting to websites like social media platforms, online chat rooms, gaming etc. Children easily replace their pastime activities with online activities, which can cause delayed sleep or an absolute sleep loss. Life without the Internet is assumed to be boring by the adolescents, that can further cause a strong feeling of loneliness. Adolescents require time to solve and deal with the issue of crises of identity, set their attitudes, and further, form professional aims and social links. Adolescence is the time of confusion and the need to 'fit in' is high. Another review uncovered that college

going students showed differing levels of Internet dependence, mental distress, and depression as for age, sex, private status and year of study. During the time of adjustment, they are most open and prone to the addiction that the web offers. The impulsivity is high during this time. For coping with anxious feeling, negative stressors, emotional turbulence, frustration and unrealistic optimism, the adolescents are more at risk to deviant behaviors and can involve in practices that are addictive.

As the web has turned into an integral piece of standard life, some mental health experts have noticed that a section of individuals utilizing the web do so in a compulsive way.

(1.3) Parenting Style

Lately, parenting has been one of the major topics of research. In any individuals life parents are the most important figures who nurture, protect and teach them; facilitate them towards growth and development; and ultimately support them to become a healthy functioning individual.

Family is the most important setting for a child as they receivetheir primary social education from there. He/she gets to learnsnorms for socialization, builds assumptions related to the world and learns to be in the societal setting and therefore, family is helpful in forming the basis of socialization. As the child interacts with many people including those who are outside their family, he/she is able to establish various relationships which is key to socialisation. However, the parent-child relationship is the most vital relation that makes a big impact on the child's development.

(1.3.1) Parenting

The word "Parenting" is extracted from 'Parere', which is a Latin verb that means "To bring forth produce". As defined by Morrison (1978), parenting can be described as the process of creating and using the knowledge and skills which are apt to planning for, creating, giving birth to, raising and/or caring for offspring.

Parenting is a significant responsibility, wherein, the parents possess power to mold their children into a violent and careless child versus a decent and loving individual.

Parents take the responsibility of physical security, nurturing them emotionally and social interaction of their kids. Parenting can be considered as a very rewarding and satisfying work in an adult's life. Being able to raise a productive and happychild who is also loving, is considered to be a sense of accomplishment for parents. With every stage and age of the development of a child, comes a set a different responsibilities, certain goals and specific tasks. Just like infants require a need to eat, sleep, and have an exploration of their world while being protected by their parents. Similarly, in the case of adolescents, it is to explore their identity and become an individual with their own friend circle. The behavior adopted by parents marks a huge impact on different aspects of their children's lives: emotional, social, spiritual and psychological. Raising an adolescent is not an easy task in today's time.

Interestingly, a large portion of the current parents apply parenting practices to bring up their kids dependent on how they were raised by their own parents or guardians as that is the main reference point that they can take, given the way that they were presented to that specific kind of parenting conduct as they were growing up.

The quality of parenting is influenced by and dependent on several factors. Some of the factors include:

1. Level of maturity in parent: The mature personality of the parents will lead to a good quality parenting. The more sensible and responsible the parent is, the better they are in adjusting themselves according to the needs of the time. They also have a good way of tackling situations, especially when dealing with a teenager or adolescent.

2. The marital relationship: A stable and intimate marital relationship has a positive impact on the child. Parents, who are satisfied in their marriage, pay a healthy attention to their children. With a good mutual understanding between the partners, raising children positively becomes easier.

3. Cultural differences: Different cultures prefer different ways in upbringing their children. For example, the amount of freedom given in western culture is different from Indian culture. In India, difference in religion can also influence the quality of parenting.

4. Upbringing of Parents: Mostly, since there is no formal training provided to people in raising their children, parenting is largely influenced by self

experience, that is, how they were raised by their own parents. The same techniques that were used by their own parents are what they apply when they become parents themselves. However, on a significant note, with change in time, parenting too needs to cope up with modern trends.

5. Planned or unplanned pregnancy: The motivation of parents of having a child would influence the way they parent. Unplanned pregnancy can also create an issue as planned pregnancy indicate preparedness and willingness to be a parent.

6. Stress in family: Stressors such as financial difficulties, dispute within family, job stress, physical ailments, substance abuse etc can influence the quality of parenting often causing neglect towards their children.

7. The physical attributes and temperament of the child: A child having physical disability will make the parenting task more challenging as compared to a normal baby. Temperament of the child like negative emotions, aggression, and maladjustment can cause difficulty in caring for children. Parents of kids with difficult temperament also tend to experience greater stress of parenting and psychologically experience problems, such as loss of confidence and feeling hopeless about their parenting.

Allegorically depicted, parenting have been explained as a thrilling and compensating venture, giving a feeling of satisfaction that is supposed to be exceptional to most other critical achievements of life. But without a doubt, for either the parents or anyone else involved, the journey has its own ups and downs with challenges and certain stressors.

A critical role if played by the parents by educating and instructing their kids about various abilities that they can use to explore through the rollercoaster ride that is called life. Hence, nurturing a child is a very critical job that individuals take up during their lifetime. Parenting behavior that parents adopt leaves a huge effect on different areas of their children's lives: emotional, social, spiritual and psychological. With the developing headways and advancement in our society in the course of recent many years, ways of parenting and they view point of judging parenting without a doubt seen variations as per the evolving times. As discussed above, there are many elements that have an impact on the quality of parenting. This quality further determines the type of parenting style.

(1.3.2) Parenting Style and its types

Parenting stylec an be defined as a psychological construct addressing standard techniques that parents use in their child rearing. Parenting styles are blends of nurturing practices that happen in a wide scope of circumstances, establishing a stable child raising environment. It includes different techniques that is used by parents in raising their offspring. Parents tend to form their own style from a set of combining factors. Further, this style may grow and change with time as the child grow up, form their own unique personality and goes through different stages of.

Nurturing or parenting is a process that incorporates numerous particular practices that works independently and together to impact kid results. However, recording any specific behavior alone can be misleading. Various factors are involved in the process of parenting. Many researchers have observed that any particular parenting practice is not significant in foreseeing a child's wellness. It's the broader parenting pattern that matters and causes a difference

The formula of parenting style is utilized to catch typical variations in parents' attempts in socializing and controlling their child (Baumrind, 1991). Understanding this definition, there are two points to be noted. Firstly, the parenting style topology does not include deviant parenting, as that in the case of neglectful or abusive environments and homes. On the second note, as per the topology, assumption is that normal parenting centers around control as an issue. The basic role of all parents is assumed to influence teaching and control their kids, however, how they attempt to control or socialize their children and the degree to which they do as such may contrast. Based on two dimensional framework, there are two important factors of parenting style which are parental demandingness and parental responsiveness (Maccoby & Martin, 1983). Parental demandingness, which is like behavioural control, alludes to the expectations parents make on their child to become incorporated into the family entirely by their demands, management, disciplinary endeavors and ability to defy the kid who resists (Baumrind, 1991). Parental responsiveness additionally alluded to as parental warmth or supportiveness indicates the degree to which parents deliberately encourage distinction, self-

guideline and self-attestation by being adjusted, steady and passive to kids' unique necessities and requests.

A fascinating aspect regarding being a parent is that there is incredible variety by the way we bring up our kids. Simultaneously, there are numerous shared traits starting with one parent then onto the next. In light of these shared characteristics various sorts of parenting styles have been recognized.

Parental involvement is the meaningful conversations and being involved in the child's school activities, decision making or carrying out of other activities. Communication is the parent's frequent discussions with their children. Supervision comes as a sort of monitoring with their children. Expectations from parents and style of parenting are the way and degree to which parents speak with their kids.

According to Baumrind there are three types of parenting styles, namely, Authoritative parenting style, Authoritarian parenting style and Permissive parenting style. Later, Maccoby & Martin (1983) expanded this parenting model and added a fourth type of style of parenting called Uninvolved parenting style. It is also called Neglectful parenting style. Based on the two dimensional framework as discussed above, the four types of parenting styles are-
• Authoritative Parenting
• Authoritarian Parenting
• Permissive Parenting
• Uninvolved Parenting

(1.3.2.1) Authoritative Parenting Style - This type of parenting is characterized by high responsiveness and high demands. These parents respond to the child's emotional needs while also maintaining high standards. They believe in setting rigid limits and enforce consistent boundaries. Certain rules and guidelines are set which the child is relied upon to keep. This style of parenting is democratic in nature. While such parents may have elevated requirements for their kids, they likewise give their children the assets and backing they need to succeed. Parents with this style of parenting help their children learn to be responsible for themselves. The parents also guide them to ponder the outcome or consequences that their conduct would bring

out. In authoritarian parenting styles, they provide clear reasonable expectations for their children. In addition, they give explanations for why they expect their children to behave in a particular manner, as desired by them (Baumrind, 1991).

Authoritative parents adopt firm control with set rules to regulate the behavior of the child but at the same time take into consideration the child's point of view while applying certain disciplinary actions. As stated above, it is more democratic in nature. The child is given freedom to express his point of view. They address issues of misbehavior of the child through reasoning and open dialogue. Such parents do not believe in using harsh punitive punishments and provide the child with the freedom to maintain their autonomy. Because of freedom of expression, this parenting yields emotionally expressive and emotionally healthy children. Authoritative parents do not misuse their authority and do not believe in being the sole controller of the child's life; they recognize and accept the child's perspective and thought process while making decisions. As indicated by Diana Baumrind's investigations and many parenting studies suggest Authoritative parenting is the style of parenting that has been generally steady as far as being related with positive results for kids, boost of confidence, emotional maturity, great scholarly accomplishment, evolved social skills and great emotional control.

Following are the characteristics traits of Authoritative parenting style:
- Authoritative parents' method for discipline is confrontive. This means it is well reasoned, there is scope of negotiation, it focuses on outcome, and concerns with regulation of behaviours. They have a moderately malleable approach which is flexible, and rational control is practised. Rules are applicable but they are logical and sensible. They are open to smart negotiation as and when required depending on the need of the situation.
- Authoritative parents practice democracy and give relative freedom to choose. Independent thinking is encouraged and the parents are open to suggestions. However, typically the last say will always be that of the parents.
- Authoritative parents furnish their children with thinking and clarification for their actions. Clarifications permit kids to have a feeling of awareness and educate kids with values, ethics, and objectives.

- These parents are warm, attuned and nurturing. They are emotionally responsive. Listen to the children.

- These parent are demanding and responsive. At the point when this style is efficiently evolved, it develops to fit the depictions propagative nurturing and purposeful development.

- Frequent communication takes place and it is adequate to child's understanding level. Expectations are clearly communicated and the child is allowed to give his input.

- Authoritative parents always appreciate and encourage the positive deeds of the children.

Such kind of parenting style helps children to adapt to social norms in an effective way. Authoritative parents do not punish children for their mistakes rather explain with reasoning why their behavior is considered to be a mistake (Reitman et al., 2002). Authoritative parents put down certain boundaries and expect maturity. However, when a child is punished, the parent will give explanation and rationalize the motive and reason behind the punishment. In disciplinary matters, the child's perspective and views are acknowledge and considered. The child's activities are directed in a rational, issue oriented manner in context to the current code of conduct (Baumrind 1991; 1996; 2005).Authoritative parents understand the feelings of their child and they are taught how to regulate and direct their feelings. They regularly assist their kids with tracking down suitable outlets to solve their issues.

According to Steinberg et al.,(1991) the three highlighting traits of this type of parenting style - parental acceptance or warmth, psychological autonomy granting or democracy and behavioral supervision and strictness - contribute to healthy psychological development of adolescents. Schaefer (1965) suggested three central dimensions of parenting based on his work on parenting. First is supportive control that is same as warmth. Second, assertive control that is similar to supervision of behavior and strictness. Third, direct/conventional control which is same as antithe sis of psychological autonomy granting.

There are various effects of Baumrind's authoritative parenting style on adolescents. Is the highly suggested type of style of parenting. Authoritative parenting style is identified as the best style parenting by the child development experts. In an ameliorating manner kids whose parents are authoritative are mostly lively, self-controlled and confident, and oriented to accomplishments. They share cordial relations with peers, are helpful with grown-ups, and adapt well to pressure. This type of parenting style also yields children to have good self esteem. Since this type of parenting practices democracy, children are made to feel as 'important'. Because of this they get a greater sense of self which affects their self esteem. Kids with secure attachment are shielded from creating disguising issues. Babies who have responsive moms likewise foster better critical thinking abilities, intellectual skill and enthusiastic control.

As per Baumrind's research on parenting, children of authoritative parents have following qualities:

- Better social skills
- Self-confident
- Lower Delinquency
- Resolution
- More likely to follow rules
- Good social competence
- Happy and content
- Independent
- Higher academic performance
- Great self esteem
- Mental health is better
- Low violent tendencies

Parents will more often than not be more associated with their child's tutoring by chipping in or observing schoolwork. It has been displayed to usefully affect young adult scholarly accomplishment. Parental involvement in their child's day to day activities also builds a better relationship between the two. Taking interest in child's friends, academic work, needs and wants while providing them with a freedom of expression causes them to feel good about themselves. Social skills are seen to be

the best in such children. Social development is benefited as communication is invited, and so they are at ease with peers as well as in other social circumstances even more.

Building competence, independence and responsibility are connected with authoritative parenting style which results in high self-esteem, moral and social maturity throughout childhood and adolescence. Provided with the right degree of freedom, security and warmth leads to development of self confidence in children.

Children also develop a good sense of emotional regularity as they see their parents handling emotional situations well. The parents work as an exemplar, becoming a role model and display good emotional understanding and control which in turn allow children to figure out how to deal with their own feelings and figure out how to comprehend others too. Authoritative parenting is the most successful approach to child-rearing. Also known as 'Democratic Parenting Style', this parenting provides the right amount of warmth and control. Such parents are warm, mindful and touchy to their youngster's need. They set up a charming, sincerely satisfying parent child relationship that brings the two into close association. In any case, simultaneously, the parents practice firm sensible control of their child's conduct. It is considered to be the most ideal parenting to raise confident, independent, emotionally matured and happy children. Clearly, Diana Baumrind's favorite parenting style was authoritative parenting style and it stays the suggested style of parenting by most traditional and western parenting experts even in today's time.

(1.3.2.2) Authoritarian Parenting Style -Authoritarian parents are considered to be having high demands and direction but they are not responsive (Baumrind, 1991). They provide structured environments with clearly stated rules and expect that their children must follow these rules without questioning. In this way of parenting, youngsters are relied upon to observe the severe guidelines set up by the guardians. Inability to keep such guidelines for the most part brings about punishments. This parenting style is a prohibitive, punishment focused parenting style in which guardians cause their youngsters to follow their bearings with next to zero clarification or input and spotlight on the kid's and family's discernment and status. Tyrant guardians don't clarify the thinking behind these principles. Whenever

requested to clarify, the parent may just answer, "Because I said so."The parents microscopically focus more on the bad behavior of child than the good ones. The rules are strict with very low to no liberty. The child feels "trapped".

Authoritarian parents are low in accepting and involvement. They are high in coercive control but low in granting autonomy. The rules are fixed. Such parents appear cold and end rejecting. There is no room for explanation for the child. They might indulge in degrading their child by making fun of them or putting them down so control could be exerted. The parent is dominating and may appear to be a bully. They exercise control by yelling, commanding, criticizing and threatening.

The characteristics of Authoritative parenting style are as follows:

- These parents are infamous for saying, "Because I said so," the reason behind a rule is questioned by the child. The approach is "my way or highway" Their main priority is obedience and don't believe in negotiations.
- They have predictability and conservatism based value and belief system. The ways are fixed and no other behaviour is allowed.
- They have high expectations which can also be unrealistic.
- Strict discipline needs to be followed by child. Rules, order and punishments are practiced. There is no discussion among parents and the child.
- Suppression of emotions is encouraged while simultaneously showing aggression and being ill-tempered.
- Nonresponsive to their child's needs.
- Blind obedience is expected. They expect their child to comply without any questions or explanation.
- Harshness and insensitivity in social relationships. The parent is emotionally distant.

The parents scold or punish them for not following the rules and even constraints are imposed on them. They limit their children's independence, but demand a lot from them. Because of constant high expectations and being unresponsive to the child's needs, they have cold and narrow relationship with their own children. Their attitude

is cold and rejecting. They don't take part in discussions with their child and believe in putting strict orderliness or discipline over autonomous behaviour.

There are various effects of authoritarian parenting style. The most common outcome of this parenting style is that the child rarely learn to think on their own, and they feel pressurized to conform. Since obedience is expected under the guidance of an authoritarian parent, children brought up in such settings tend to follow guidelines or rules most of the time. But there are strong chances of them not having self discipline. Offsprings of authoritarian parents are at a greater risk of having self-esteem issues on the grounds that their perspectives aren't esteemed or valued.

Children raised in such an environment are not efficient enough to make their own decisions. They tend to rely on their parents' decisions for every little things. This could be due to the harshness imposed by the parents, leading to the weakening of the decision making skills in them (Koerner & Maki, 2004). The lack of social competence developed due to controlled parenting causes problems in social situations. The parent for the most part instructs the kid as opposed to permitting the youngster to pick by oneself. This makes the child look excelling for a short period, till the time the parental control is direct. But as opportunities and supervision for parental direct control declines, their performance gets affected. Since they never learned to make decisions on their own, when facing the world without parents, they don't know what to do. They often turn into people pleasers and seek constant validation from others. They display more aggressive behavior outside the home. Passive aggression is common in children raised by authoritative parents. Along with having lower self esteem, children are also insecure. By the time they reach adolescent age, they may start to be more rebellious out of frustration of constant supervision. Authoritarian parents are rejecting and psychologically controlling, coercive and domineering (Baumrind, 2013; Baumrind et al., 2010). These traits cause them to be more prone to developing mental illnesses like OCD and depression. They may show neurotic traits like anxiety as they are kept under constant pressure and stress.

(1.3.2.3) Permissive Parenting Style -Permissive parenting style is also referred to as indulgent parenting style. A permissive parent is responsive but not demanding. Permissive parents are very affectionate and introduce few rules and guidelines. This type of style of child raising carries two main traits:

- being warm and affectionate (which is good for kids), and
- being avoidant on imposing limits (which is a problem).

Such parents don't anticipate mature conduct from their children and frequently appear to be more similar to a companion or a friend than a parental figure. Irrespective of how their child behaves, they accept their child in a warm and loving way (Baumrind,1991). Permissive parents are of accepting nature, promotes psychological autonomy, and exhibit lax behavioural control (Baumrind, 2013; Baumrind et al., 2010). There are no rules and children are given flexibility or freedom. Parents avoid coercive or confronting practices as much as possible (Baumrind, 1989). In this style of parenting, parents are warm, yet remiss. They neglect to draw rigid lines to keep a close check on children's activities. They fail to set limits requiring appropriate and mature conduct from their children. They are easy, lenient and not considerably active in their parenting, and feel that the method for exhibiting their adoration to their child is by giving into their child's desires (Kopko K., 2007).Some permissive parents truly believe that this approach is the best. Many others simply lack confidence in their ability to influence their child's behavior. Other than Indulgent parenting, permissive parenting style is also known as -non-directive, lenient or libertarian type parenting style.

The characteristic features of permissive parenting style are as follows:
- This parenting is portrayed by undeniable degrees of responsiveness and low degrees of demandingness.
- Permissive parents don't play the parental roles. They focus and try to become "friends" with their child.
- The family hierarchy structure followed is flat which keeps both the parents and the child on the same level. Relative role equality is practised between parents and the child.
- There is low level of expectations from child and very little discipline.

- These parents are sustaining and warm, however, hesitant in imposing limits as far as possible. They reject the idea of monitoring their children.

- The parents are very sympathetic, forgiving and they have a demeanour of "kids will be kids". Likewise when they attempt to carry out ramifications for conduct, they may not adhere to those results. When they try to implement consequences for behaviour, they may not stick to those consequences.

- They don't introduce themselves as power figures or role models. They continue to satisfy the child and might utilize manipulation to get what they need.

- They are not in favour of controlling methods and punishments. Subtly, they may use bribery and praise as a manipulative control measures.

Permissive parents likewise will quite often give their youngsters anything they desire and hope that they are valued for their obliging style. Parents seek acceptance and love from their child in return. In some cases, a parent may adopt this type of parenting as a result of their own childhood experiences. If they were raised in an abusive or emotionally distant environment or a situation with no materialistic comfort, they may make up for what they missed as youngsters, and accordingly give their kids both the opportunity and materials that they needed in their adolescence.

As noted by Baumrind, parents who follow permissive parenting style share some aspects similar with those following authoritative parenting style. In both of the parenting, the parents are emotionally responsive and supportive to their child's needs or desires, making it a good point. On the other hand, children are included in the decision making process, which again can be a great initiative. However, permissive parents aren't demanding like authoritative parents. They do not expect much from their children. They do not delegate children with many responsibilities. The kids are not encouraged to meet behavior standards that are imposed by adults. On the contrary, they allow kids to regulate themselves as much as possible, which is not the case in authoritative parenting.

There various effects of Permissive parenting style. The possible impacts of this style of parenting are that children raised by such parents' struggle with self-discipline and

sometimes have deficit in social skills. Because they always had their ego satisfied by their parents, they grow up to be self-centered and demanding. They expect the world to treat them in the same way that their parents does. Due to lack of discipline and excessive freedom kids end up being the ruler of house. Further, they demonstrate the same behavior outside their house. As the parents trust that the method for exhibiting their affection is to yield to their child's desires. Thus, the child might become imprudent, disobedient, rebellious and defiant. Due to absence of boundaries and guidance they may feel insecure. Children of permissive parents may have a tendency to be more impulsive and as adolescents may engage more in misconduct such as use of drugs, alcohol consumption and technology overuse including mobiles and laptops. Since there are not many guidelines, assumptions, and expectations, kids raised by such parents will quite often battle with self-guiding and controlling themselves. These kids never learn limits because of the absence of structure and rules in the house. They often cross the line. This may result in watching television excessively, playing video games excessively and indulging in overeating. They often indulge in impulsive behavior without thinking much about the outcome it may yield. Children never figure out how to control their own conduct and consistently hope to get everything they might want. However, some studies say otherwise. Robert (2010) claims that because there is an extensive amount of friendly communication between the parent and child, children raised by these parents have better social skills and self-esteem, and their depression level is low. They are also observed to have positive social development. In even better scenarios, they are secured emotionally, are independent and have willingness accept failure and learn from it. Because they never received a forceful constant strict guidance, they are quick to mature and have the ability to live life without anyone's guidance.

(1.3.2.4) Uninvolved Parenting Style - Baumrind's theory on parenting style was limited to the above discussed three types: Authoritative, Authoritarian, and Permissive. Later, Maccoby & Martin (1983) broadened the typology and added another type of parenting style, namely, Uninvolved Parenting Style. This type of parenting style was later verified by several researchers. Uninvolved parenting style, a type of parenting described by an absence of responsiveness to a child's necessities is also known as neglectful parenting style. As the word "neglectful" suggests,

parents mostly neglect the child and his/her needs. There is lack of emotional involvement. Uninvolved guardians set not many to no expectations of their kids and they are regularly uninterested, pretentious, or even totally careless. The uninvolved parenting style joins low acknowledgment and inclusion with little control and general detachment to issues of independence. Such parents might be emotionally shut and discouraged, so overpowered by the burdens in their lives that they have no energy and time for their kids (Maccoby & Martin, 1983).Uninvolved parents have little knowledge about what their child is doing. Children may not receive parental guidance and nurturing. At the point when the parents are too restricted in managing the problems in their lives, for example, professional, emotional or social problems, then they may accidentally depend on uninvolved parenting .They might be too involved in taking care of their concerns and worried about their lives that they might have minimal interest in their child's life. Offspring of parents who are uninvolved get little supporting or direction from their parents. They basically have to raise themselves. There is no much communication between the parent and child. These kids get the worst among the four Baumrind's styles of parenting. The parent-child interaction is very low and most of the time these parents leave their children on their own (Sigelman, 1999; Koerner & Maki, 2004). They may react to the demands and request of the objects made by the children which are accessible or available.

The features of Uninvolved parenting style are as follows:

- The characteristic feature of this parenting style is that it practices low demandingness and low responsiveness.
- They meet the physical needs of child including food and shelter but neglect emotional needs.
- They are cold, uninvolved, indifferent towards their child.
- Inactive parents towards raising the child; it is same as the child having to raise one's own self.
- The interaction with their child is limited because they are too occupied with their own issues.

- Uninvolved parents aren't aware of their child's academic performance and whereabouts. They miss events of school even the ones where their presence is needed like parent teacher meeting.

While these guardians satisfy the kid's essential requirements, they are by and large withdrawn from their kid's life. They may ensure that their children are taken care of and have cover, yet offer hardly anything in the method of direction, construction, rules, or even help. In outrageous cases, these guardians might even reject or disregard the necessities of their child. This type of parenting can also be a result of problems on parent's part such as mental health issues or case of substance abuse. Uninvolved or neglectful attitude can stem from parents' addiction to alcohol, illegal drugs, or any other substance that is abusive. Another reason for parents to follow this type of parenting could be that this all they have known since their own childhood. If the rearing received by the parents was of a similar kind from their parents, then it is quite likely that they may follow a similar style as well..

The effects of Uninvolved parenting style are different from the other parenting styles. Uninvolved nurturing is the most exceedingly terrible way of nurturing among the four since research has observed that it can influence a child's wellbeing as a whole and results in harsh developmental impact. One significant weakness of uninvolved nurturing is that these kids do not foster an emotional association with their uninvolved parent. An absence of love and consideration at a young age can prompt low confidence or have emotional needs in different connections. The child might end up being emotionally frail and might not have meaningful connections in life. They may consistently search for friendship and love. Uninvolved guardians don't take part in designing or controlling their child's life and frequently there is an absence of closeness in the parent-child dyad; thusly, such adolescents often participate in serious externalizing conduct. They have often been recorded to have low confidence, are juvenile, and might be distanced from the family. In the case of adults, they might show examples of delinquency and truancy.

They may be aggressive for they feel they didn't get the love and attention they deserve. Their children may feel lost and directionless due to absence of direction. They may become disillusioned and may rely on others for making simple decisions

in life. Children reared in uninvolved environment are prone to developing depression and borderline personality disorder. In case if the child feels detached and rejected, he might float to substance abuse. The risk of this substance abuse is even higher if the parents are into it, too.

In the present study, focus was placed on Baumrind's three parenting styles and they had been studied with respect to the adolescent participants.

(1.3.3) Parenting styles, Internet addiction and Adolescents

Researches done over the past years suggests that the nature of the parent-adolescent relationship fundamentally influences adolescents' health including physical, mental and emotional with the development of risk behaviors. As discussed, different parenting style yields different result in child rearing. The style of parenting plays a significant role in a child's paradigm. A child's social competency, social maturity, confidence, self regulation, academic performance, sense of security differs with each parenting style.

Various studies conducted in the USA along with some other countries support the notion that the optimum youth outcomes are associated with authoritative parenting style. Whereas, child's poorest performance, school integration, psychological well-being, attributions drug use, self-enhancing adaptive achievement strategies, and accuracy in perceiving parental values is associated with neglectful parenting style.

Problematic behavior, anti social activities or Internet addiction among adolescents doesn't happen overnight. It is a result of a combination of factors and lifestyle at home is one of them. Since parents play a crucial part in an adolescent's life, factors like - the degree of freedom given, emotional reciprocation received, supervision done etc does play a role in influencing the child's behavior. Various researches on Problematic Internet Use have proved that problematic/pathological internet use or excessive or overuse of the internet or the internet addiction were found to a significant relationship with factors such as loneliness, low confidence, low self-esteem, low social support lack of discipline or self regulation, depression, the

symptoms of antisocial tendencies. Other psychological symptoms, shyness, social awkwardness, and pleasurable feeling with the internet are also included.

Since, the above mentioned factors go hand in hand with different types of parenting styles, it is evident to say that parenting style does play a role in a child's inclination towards the internet. This research, therefore, further aims to explore the type of parenting style that has an impact of internet addiction. Many researches confirm the influence of parenting style on internet addiction in adolescents. These researches are discussed in the next chapter.

(1.4) Personality

Personality, the word is derived from the Latin word persona. It refers to a theatrical mask that performers wear in theatres to either disguise their identities or project different roles.

An individual's personality is the combination of traits and patterns that influence their behavior, thought, motivation, and emotion. A person's personality is what makes them unique. The definition of personality states that it is "a dynamic organization inside the person, of psychophysical systems that create the person's characteristic patterns of behaviour, thoughts, and feelings" (Allport, 1961). Personality is continuously changing due to interaction with environment as it involves the integration of physical, emotional, intellectual, social and character make up of an individual, which is expressed in terms of behaviour, temperaments attitude, traits, conduct and movements. The pattern remains same across situations. Every individual has an idiosyncratic pattern of long-term and enduring characteristics, along with the way in which person associates with other people and the world. In totality it's the addition of all the biological innate dispositions, tendencies, appetites, instincts and impulses of an individual and the tendencies and dispositions acquired from experiences.

(1.4.1) Nature and Characteristics of Personality

Following are the characteristics of personality:

1. It is unique - The personality for anybody is unique. As a person's personality is the result of continuous interaction of hereditary potential and environmental challenges, it remains unique to each individual. It is not possible for two individuals to have an exact same personality.

2. It is persistent – The qualities that the personality is consistent of is persistent or permanent qualities. These qualities are exhibited in the shape of social behaviour and they try to adjust with the environment.

3. It is a product of environment and heredity- Personality is a product of heredity and environment. That means it is an amalgam of heredity qualities and environmental factors. It imbibes the qualities partly form ancestors in having hereditary potential and develops in its interaction with the surroundings.

4. It is influenced by social interactions – Personality has a biological base but is shaped by the environment. Social interactions plays a major influence in defining a person's personality.

5. It is consistent – The personality is consistent, meaning there is generally a systematic order and behaviour is consistent. This indicate that individuals tend to act in the same ways or similar ways in a variety of situations or across situations.

6. It is dynamic – Personality is dynamic in nature. It reflects the learning process. It occurs in the context of the environment. It changes, modifies and takes new forms on a continuum in the dynamic momentum of life.

7. Inner aspect and actions - Personality is an internal process that guides behaviour. Personality includes inner aspects like courage, shyness, bravery etc. which in turn affects your behaviour. There is coordination between the two.

8. Multiple expressions: Personality is expressed not only in behaviour but also through expression. There are multiple ways in which one's personality can be expressed and reflected. It can also be reflected in our feelings, thoughts, close relationships, and other social situations.

Going a bit deeper, personality is a person's enduring constant patterns of response across a variety of circumstances which consists of relatively stable patterns of action often referred to as traits, dispositional tendencies, motivations, attitudes and beliefs which are combined into a more or less integrated self structure (Harre et al., 1983). Personality traits are relatively stable characteristics that describe one's

perception and behaviour towards the environment (Caspi et al., 1994). It further decide those shared characteristics and contrasts in the psychological conduct (feelings, thoughts and actions) of individuals that have coherence on schedule and that might be effortlessly perceived as far as the social and natural tensions of the quick circumstance alone (Maddi, 1976).

(1.4.2) Determinants of Personality

Personality is a broad subject that touches on nearly every aspect of what makes people who they are. There are many ways to think about personality. It is the totality of an individual's feelings, thoughts, behaviours and responses to people and different situations. It is our personality that distinguishes and separates us from other people. We can understand about someone's actions and how they will feel and react in different situations based on their personality.. However, a person's personality is affected by several factors. Every person has a different personality and is unique. Several factors contribute to one's personality. These factors can be called determinants of personality. Some of the factors are as follows:

1. Environmental Factors: This factor covers what neighbourhood does the person live in, what school does he/she go to, his/her college, university, where he/she works, his/ her friend circle, parents, the people he spends time with, the society he lives in etc. They all play a significant part as the determinants of one's personality. Cultural environment also affects personality. Norms that are followed among our friends, family, and social groups exert a pressure on our personality, causing people to adapt to certain behaviour.

2. Heredity Factors: Heredity are those factors which were determined at conception. Heredity influences intelligence and mental traits. On the other hand, heredity factors causes some limitations to the personality of an individual. For example, a person's height, weight, colour, beauty are influence by heredity factors. A person's sex also determines their personality. Each and every human inherits the same general set of biological capacities and needs. Some of our similarities in personality can be explained by these common needs.

3. Physical Factors: The development of personality is influenced byphysiological structure of an individualto a large extent. It is in the mother's womb that the

foundation of this physical structure is laid. The development of the physiological structure is influenced by internal agency like heredity and outer agency like influence of social environment. These factors affect a person's behaviour in social organisation. A person's height, weight, complexion etc will influence the person's effect on others and subsequently, this will have an effect on the self-concept.

4. Situational Factors: The different situational demands bring out one's different aspects of personality. Therefore, patterns of personality cannot be looked at in isolation. How situational factors affects a person's personality can be seen by how person behaves differently and exhibits various traits across situations that are different.

5. Cultural Factors: An individual's culture includes norms, traditional practices, rituals, rules and regulations, precedents, values etc. Since these are predetermined, the individual doesn't have much choice other than to follow it blindly. The same is with religion. Individuals are raised with a fixed conditioning determining their personality.

6. Social Factors: One's social experiences play an important role in determining one's personality. The things that happen around an individual consistently decide how that individual structures comprehension of the world, act and see themselves. The process of socialization includes the interaction by which an individual procures, from the wide scope of possibilities of behaviour that are available to the person, those that are at lastly incorporated and consumed.

7. Family Factors: A person's development of personality is highly affected by their family or friend group. The way of life for the most part endorses and restricts what an individual can be taught. However, later it is the family and the social or friend group which selects, interprets and dispenses the culture. Along these lines, the family presumably fundamentally affects early character advancement. The environment created by the parents at home, in addition to their direct influence, is important to personality development of an individual. How a child is raised will definitely impact how he looks at the world, his perception, his consciences and his behavior. Because they were told to "act a certain way" is how they become. Factors such as the amount of freedom given to the child, the warmth received from parents, self regulation taught, impacts a person's personality.

8. Identification Process: It means when a person or child sees someone else as their role model and tries to become like them by imitating their qualities. The qualities taken up are not of their own but because they were inspired they try to become like them, not being their original self.

Therefore, we can say personality is a sum total of various factors. A person's personality is the collection of characteristic, feelings, thoughts and behaviors that are linked with that person. Within the personality there are certain personality traits. Personality is holistic and traits are segmented. Traits combined together forms a personality.

(1.4.3) Personality Traits

If one is asked to describe a close family member's personality, what all things would they include? To describe them, they might use descriptive terms, such as "shy", "active" "talkative", "quiet", "outgoing" and "reserved." These represent traits. So the question that arises is that what exactly is a "trait"? Trait refers to a distinguishing characteristic or quality, especially of one's character. Characteristic feelings and behaviors that are consistent and long lasting are called personality traits. A trait can be described as a characteristic which is relatively stable that causes people to behave in certain ways. If combined together, these traits differentiates one personality from another. It was Gordon Allport (1917) who was one of the first to describe personality in terms of traits and is widely recognized as the founder of academic personality psychology. According to Allport, the three main characteristics of traits are –

a. Traits are stable over time,

b. Traits vary among all people, and

c. Traits influence behaviour.

He further found that traits are also bipolar, wherein, they vary along a continuum between one two extremes (e.g. friendly versus unfriendly). The development of personality traits results from interaction between climate and heredity. It never exists in two individuals in the exact same way due to the novel heterogeneous association of characteristics.

(1.4.3.1) Trait Theory of Personality - There are various speculations concerning how personality is developed and various schools of thoughts from psychology have

impacted these theories and philosophies. Among the various major theories of personality, trait theories are the primary ones. As indicated by these theories, personality is comprised of various wide traits. A trait is a moderately steady trademark that makes an individual carry on in specific ways. It is basically the mental "outline" that illuminates personal conduct standards. The main focus of trait theory is to identify and measure the individual personality characteristics.

1. Gordon Allport's Trait Theory: Psychologist Gordon Allport was one of the first who described personality in context of individual traits. According to his dispositional perspective, he suggested that there are as many as 4,000 individual traits and they are of different kinds, namely, cardinal, central, and secondary (Friedman et al., 1976)

   - Cardinal Traits – These are the most active and dominant traits of one's personality. They are to the point and direct to such an extent that the individual is known for these traits, and by large their name becomes synonymous to their personality. It is a person's foundational trait. For example, Mahatma Gandhi is known for truth and non violence. Similarly, Mother Teresa is known for her charitable work.

   - Central Traits – The basic personality foundations are laid by these traits. These traits make up an individual's personality. These traits are frequently employed to describe one's personality. For example, "honest", "shy", "kind", "intelligent" etc.

   - Secondary Traits – These are variable traits which differ depending on the circumstances. Secondary traits are sometimes related to attitudes or preferences. Those traits that play quite a secondary role in the identification and description of one's personality. They may be situation specific. For example, "public speaking anxiety" or "impatient while waiting in line".

2. Cattell's 16 Personality Factors: According to Raymond Cattell, personality is considered to be a pattern of traits that provides the key to understand and predict a person's behaviour. A taxonomy of 16 different personality traits were created by him, that could be utilized to explain and describe the individual differences between people's personalities. Allport's list was analyzed by Cattell and after scrutinising he reduced the list to 171 characteristics by discarding terms which

were uncommon or redundant. Subsequently, Factor Analysis was used to identify traits which were interrelated. With this process of refining, he settled the list with sixteen major personality factors. Cattell felt that the traits exist on a continuum and every individual possesses each trait in different degrees. The 16 personality factor dimensions are as given below:

1. Liveliness: Restrained versus Fun loving
2. Abstractedness: Regular versus Imaginative
3. Openness to change: Conservative versus Experimenting
4. Dominance: Humble versus Controlling
5. Emotional stability: Irritable versus Calm
6. Apprehension: Self assured versus Worried
7. Privateness: Private versus open
8. Rule-consciousness: Rebellious versus Conformity
9. Self-reliance: Self-sufficient versus dependent
10. Tension: Relaxed versus Stressed
11. Perfectionism: Disorganised versus Orderly
12. Reasoning: Instinctive versus Analytical
13. Warmth: Reserved versus Outgoing
14. Sensitivity: Soft-hearted versus tough-mindedness
15. Social boldness: Shy versus Bold
16. Vigilance: Trusting versus Suspicious

3. Eysenck's 3 Dimensions of Personality: Hans Eysenck focused on temperaments, which he believed were largely controlled by genetic influences. Further, the list of traits were narrowed implying that neuroticism, extroversion, and psychoticism are the only three dimensions.

- Introversion/extraversion: Individuals high on introversion might be reserved and quiet. People high on extroversion might be socialising and talkative.

- Neuroticism/emotional stability: A person high in neuroticism might be anxious. Their sympathetic nervous system might be overactive. While an individual high in emotional stability might be more calm and emotionally stable.

- Psychoticism/socialisation:A person who scores high on psychotism tend to experience difficultiesin dealing with reality. They may hostile and have

antisocial tendencies. They can be manipulative and lack empathy. While scoring high on socialization indicates altruism, empathetic, cooperativeness etc.

4. The 5 Factor Theory of Personality:

The theory by Cattell was believed to be too complicated and Eysenck's theory was seen to be limited in scope. This called for the need of a new theory. As a result, the five factor theory emerged that described the traits that were essential to serve as the building blocks of personality. Lewis Goldberg, in particular, majorly supported the five primary factors of personality (Ackerman, 2017). Using factor analysis the factors of personality were boiled down to 5 different dimensions. The five core traits that intersect to create human personality are represented in five-factor model of personality. In today's time, the "Big Five" theory is considered as the most widely accepted trait theory of personality which is popular in the field. The theory suggests that the personality comprises of five broad personality dimensions: Agreeableness, Conscientiousness, Extraversion, Neuroticism and Openness.

- Agreeableness: Agreeableness includes how people tend to form and treat relationships with others. The key attributes of this personality dimension includes trustworthiness, altruism, affections, kindness and other prosocial behaviour. Scoring high on agreeableness indicates the person is trustworthy, modest, empathetic, forgiving etc. Such people are liked by others and they work well in team as well. On the other hand, scoring low on agreeableness indicates that the person little interest in others and doesn't care about others' feelings. They may be indulge in belittling others and be stubborn. They are sceptics and don't care about others.

- Conscientiousness: Conscientiousness includes an individual's ability to regulate their impulse control so that they can engage in behaviours that are goal directed. This dimension includes attributes like high level of thoughtfulness, good impulse control, and mindfulness. Scoring high on conscientiousness indicates the person feels a sense of responsibility towards others and is dutiful. They are well organized and punctual. They may be ambitious and stay focused on their goals. They prioritize important things and enjoy having a schedule. Scoring low on this dimension indicates they are not well organized. They may be procrastinators.

Low score also point towards carelessness and indiscipline. They may engage in impulsive behaviour and have a messy schedule.

- Extraversion: Extraversion shows the tendency and intensity to which someone looks out to interact with their environment, especially, socially. Some characteristics include excitability, socializing, interactive, assertiveness and huge amount of expressiveness that is emotional and verbal. Scoring high on extraversion indicates the person is sociable, outgoing, excitement seeking and active. They enjoy being the center of attention. Scoring low on this dimension indicates introversion. They are reserved, enjoy solitude and are reflective. They may enjoy listening more than speaking.

- Neuroticism: Neuroticism describes the overall emotional stability of an individual on the basis of how the world is perceived by them. It is characterized by sadness, moodiness and emotion instability. Scoring high on neuroticism indicates vulnerability, anxiousness, self consciousness. Such people experience stress easily and are worried all the time. They may have a negative outlook towards life. They are over thinkers and get angry easily. Low score on this dimension indicates emotional stability. Such people worry less and stay calm in difficult situations. They are confident and resilient.

- Openness to experience: It indicates one's willingness and inclination towards new experiences as well as engaging in activities that are imaginative and intellectual. High scorers on this dimension are curious about the world and eager to learn new things. They focus on tackling new challenges. They are creative and unconventional. They value independence. They seek adventure. On the other hand scoring low on this dimension is indicative of disliking change. Such people like predictability. They resist new ideas and are not open to change.

The Big Five theory postulates that each of the above mentioned trait exists as a broad continuum and not sort people into binary groups like other theories. Since the spectrum is broad, each individual will fall somewhere on each of these traits. For that reason, people are marked on a scale between the two extreme poles. For example, one might be high in neuroticism and agreeableness but might lie somewhere in between for extraversion. Emphasis is placed on checking the level of inclination than fitting them into a box. OCEAN is the popular acronym for the Big Five which comprises of all the five traits. With this discussion it is clear why the

big five theory is the most beloved theory of traits for its simplicity and clarity. Subsequently, for assessing personality under this theory, a standardised tool called the Big Five Inventory (BFI) was developed.

(1.4.4) Personality Traits, Internet Addiction and Adolescents

Personality with stable social attributes and behavioral traits emerges in the adolescent age or young adult years. Specifically, formative changes or developmental changes happening during this maturation process issignificant for rise in the differences of personality. The maturation includes physical, mental and emotional.Children and adolescents, just like in the case of adults, can be described with respect to personality traits. These personality traits can be described as thecharacteristic patterns of thinking, feeling, and behaving.

One's behavior can be predicted by personality traits. Internet addiction's association with personality traits has been found consistently among population and cultures across the world and various studies continue to explore the topic.

CHAPTER-2

REVIEW OF LITERATURE

(2) REVIEW OF LITERATURE

This chapter was aimed to critically analyse the theoretical knowledge and ideas to date that were related to the variables included in this study, namely, parenting styles, personality traits, and internet addiction among people all over the world, especially, adolescents.

(2.1) Internet addiction: prevalence and effects

Developments in the fields of communication and information, especially the web, have prompted intense social changes. As discussed in previous chapter, the Internet was born and blossomed during the Cold War, in the 60s of last century, under the USA Department of Defense. Between 1982 and 1987 the world witnessed a phenomena which brought a huge change to people's lives. Web has been in extraordinary interest for everybody as it is easily accessible for the youthful and old age. Since, with time, internet became too easily accessible, falling into the trap of Internet Addiction has become easier. Studies on Internet addiction have reported something similar.

The word adolescence comes from the Latin verb 'adolescere' which means "to grow up". This period is identified with dramatic changes in the body along with developments in a person's psychological and academic career. Adolescence represents the culmination of childhood and culmination of the adulthood who is to be. This is the time when adolescents look out to explore the outside world. Internet is one such tool for exploration.

The prevalence studies across the world report different levels of addiction of Internet that depends on the diagnostic criteria and the tools used for assessment. In 2010, the Korean government conducted a survey covering the age group 9-39 years. The Internet Addiction was found to be 8% in elementary school students. 13.7% was found to be in middle schoolers whereas 10% was found in high schoolers. On the other hand, for adults who were in their 20s, it was found to be 8.0% and 4.0% in those who were in 30s (Tutgun et al., 2011).

In another research held in 2010 in Hong Kong, Fu et al., (2010) inspected the prevalence of addiction of internet in adolescents. A survey was conducted with 208 adolescents aging 15-19 years in a two-wave panel household survey. With five or more indications of addiction of internet, 6.7% was an estimated prevalence rate. Kwon et al., (2013) reported a survey of smart phone addiction completed by the National Information Society Agency of Korea in 2012. Its result indicated that 8.4% of population had smart phone addiction and be higher than the Internet addiction of 7.7%.

In another research of prevalence, Wölfling et al., (2014) reported prevalence estimation range up to 6.7% in Southeast Asia for Internet Addiction in young adults and adolescents. 0.6% was found to be in the United States, and in European countries it was between 1 and 2.1%.

Studying students for Internet addiction have been a common practice among many researchers. Li et al., (2014) aimed at checking the prevalence of addiction of Internet among Chinese elementary and middle school students. Further, attempts were made to assess addiction of Internet based on different usages among Internet users. As per the criteria of Young's Diagnostic Questionnaire (YDQ), the prevalence of addiction of Internet among Internet users was found to be 11.7%. Also, the females Internet users (7.0%) were found to score lower on Internet addiction as compared to the males (14.8%).

In another attempt to check the prevalence among students for addiction of Internet, Mali et al., (2015) conducted a study which was cross-sectional in nature at a Junior College, in Nerul, Mumbai. The study was aimed at classifying the extent of addition of Internet and assessing the prevalence of addiction of Internet among junior college adolescent students. A sample of 150 students were selected in the age group of 15 to 17 years. The level of internet addiction was assessed by Internet Addiction Test (IAT). 61.33% was the prevalence of addiction of Internet found among college going students. Out of 150, 58 students (38.67%) were found to be normal users with no addiction. Out of the remaining 92 students, 62 (41.33%) had mild level of addiction, 27 (18%) had moderate level of addiction and 2% (3 students) had high

severity level for addition of Internet. 1.34 hours spent each day on Internet was calculated as the mean time. The students used Internet for pornography (1.33%), academic purpose (4.66%), internet TV (5.33%), downloading music (14.66%), Gaming (16%) and social networking (52%).

A study was conducted in adolescent Kerala Students by Kumar et.al., (2015) on Internet and substance Use Disorders. Young's Internet Addiction Test (2008) was conducted on adolescents from different schools in Kerala from northern region. Out of 803 students, 97 (13.4%) showed severe level of addiction with total positives of 1.2% in IAT test. 32.9% of students showed moderate addiction levels. 65.9% were having mild level of addiction. Addiction of Internet was found less common among females than in males. Prevalence of higher level of problematic web use was found in rural regions in present study while alongside lacking social aid, morbidity of mental health and neurotic tendencies were earlier found associated with this disorder.

Kuss & Lopez (2016) assessed that 0.8% of youngsters in Italy and 8.8% of adolescents in China are affected by addiction of Internet. The higher prevalence levels in China shows the seriousness of addiction of Internet in that country.

Rebisz & Sikora (2016)intended to explore the degree of addiction of Internet among students in Poland. 505 high schoolers who were adolescents were selected randomly from 3 schools for the purpose of the study. The tool used to assess Internet Addiction was the 'Problematic Use of the Internet' (PUI). It is the Kimberly Young's Internet Addiction Test (IAT) Polish adaptation. Results showed that the level of addiction of Internet among the adolescents was not very high. However, above average addiction levels were shown in two third of the respondent adolescents.It was found that approximately 11%, that is, every ninth participant had high Internet addiction. Also, male adolescents were more addicted (15.6%) than their female counterparts (8.3%).

Madhuri & Vedpal (2016) studied the impact of addiction of Internet on the mental health of adolescents of Rohtak, Haryana. The study was done on 100 students, wherein, 50 were male and 50 were female students. Out of 50 males, 25 males

belong to rural area and 25 males were belonging to urban areas. Similarly, out of 50 females, 25 belong to rural areas and the other 25 females were from urban areas. The Internet Addiction Test by Dr. Kimberly Young (1998) was used for the assessment of Addiction of Internet. Mental Health Inventory by Dr. Jagdish & Dr. A.K. Srivastava was used for assessing mental health among adolescents.

The analysis done on the basis of statistics using Pearson's Product Movement Correlation and t test. Results showed a negative correlation between mental health and internet addiction among adolescents. In other words, if addiction of Internet is decreased the mental health is increased. High and low internet user college students had significant differences in their mental health. The mental health of low web users was found to be better than the mental health of high web users. Further, low web boy users had better mental health than that of low web girl users. However, in terms of urban and rural area students, significant difference was not found in the mental health of high web users of both the areas.

A meta-analysis by Davey et al., (2016) involving nine Indian studies evaluating the prevalence of addiction of Internet among adolescents of India reported 21.6% of pooled prevalence across the studies, with a wide scope of prevalence between 0.2% and 66%.It was concluded that internet addiction in India is appearing as an emerging adolescent health problem.

Jhala & Sharma (2017) checked the adolescents of Vadodara, Gujarat for the prevalence and Internet usage nature among them. A survey research was conducted on 1657 adolescents. The researchers used a version which was modified of the European School Survey Project on Alcohol and Other Drugs (ESPAD) questionnaire. The questionnaire was modified according to the need of the study. The other tool used for internet addiction was Young's Internet Addiction test. 44.8% school going children were average users, that is, not addicted to internet. Whereas 14.6% were internet addicted. The study also revealed that adolescents used the web majorly for connecting socially. The most commonly used sites on the web were the social networking sites.
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Goel et al., (2018) conducted a study on 987 students out of which 681 were males and 603 were females. The purpose of this cross sectional review was to actually

look at the prevalence of addiction of Internet among adolescents of Mumbai and related existing psychopathology in them. To accomplish this aim The Internet Addiction Test by Young (1998) and a semi structured Performa which was specially constructed was used. For comparison, students were categorized into moderate subjects, possible addicted subjects and addicted subjects. Dukes Health Profile (DHP) was used to study physical and psychosocial quality of life of students. 16.82 years was the mean age of adolescents. The results indicated 74.5% of students fell in the moderate user category. 24.8% were seen as possible addicts and 0.7% students were found to be addicts. Those who came under addicted part of spectrum reportedly had high anxiety and depression.

Sowndarya & Pattar (2018) conducted a cross sectional study in the urban and rural field practice area of a medical college hospital in Mangalore. The purpose of the study was to evaluate the Internet Addiction (IA) prevalence and factors linked with web use among Urban schoolers and Rural schoolers. Young's Internet Addiction Test evaluated the Addiction of Internet. The output were as followed: 83.3% was the prevalence of addiction of internet among urban schoolers, whereas 78% was found in rural schoolers. It was found that male gender was more addicted than females in both the groups. Mild Internet Addiction was seen in both urban and rural students.

Ali et al., (2019) studied the degree of addiction of Internet among higher secondary schoolers and inspected the connections between addiction of Internet, anxiety, depression, and stress. The 300 higher secondary schoolers were the participants from Tezpur, Assam. To select the sample Purposive sampling technique was used. The 3 tools were administered after receiving the consent to be a part of the study. The tools are: The Internet Addiction Test by Young (2008), Online Cognition Scales (OCS) and Depression Anxiety Stress Scale (DASS). Apart from descriptive statistics, Pearson correlation was applied to check the relationship between problematic web use and depression, anxiety, and stress. As per the output, 34% (severe internet addiction) prevalence of addiction of Internet was found among higher secondary school students. Further, the depression was present as reported by the study with 11.3% of students under mild level. 4.6 % was found under moderate level. 6.5 % of students suffered from mild level of anxiety, whereas 4.6 % had

moderate level of anxiety. Stress was also present in students wherein, 20% had mild level of stress and 6.6% had moderate level of stress. Positive relationship was seen with Online cognition score with depression, anxiety and stress.

Arthanari et al., (2020) conducted a research on the students of Aligarh to check the prevalence of addiction of Internet. School going students were selected for the same. For this purpose, through a multi-stage sampling technique proportional to the number of students in each class, 1020 participants were selected. For collecting data the 20 item Young's Internet Addiction Test (IAT) was used. Output indicated that the percentage of students who had addiction of Internet was 35.6%. Males(40.6%)were noticeably more addicted to the internet than females (30.6%).

(2.2) Effects of Internet addiction on adolescents

Adolescents have a high probability of indulging in obscene materials or games on the internet, as they tend to have more curiosity than self-control (Leung, 2007; Yen et al., 2007; Xiuqin et al., 2010). Therefore, the effects of Internet addiction can be adverse especially for this age group.

Long & Chen (2007) conducted a study that examined the impact of Internet usage on the self-identity development in 10 students between the ages of 12 and 18. Using Erickson's Ego Identity Theory, the computer mediated communication (CMC) practices of students from private and public schools are evaluated through in-depth interviews. All students are frequent users of instant relay chat (IRC) and have a minimum of one year of experience with Instant Messenger. Identity development is examined using questions generated from a modified form of the Objective Measure of Ego Identity Status. The four dimensions of Identity Development examined were avoidance decision-making, identity formation, self-reflection and ego strength or fidelity. Results indicated Internet usage negatively impacts each of these dimensions in the adolescents studied.

Seo et al., (2009) conducted a study to examine the levels of Internet addiction and interpersonal problems, and identify the relevant factors of Internet addiction in

Korean middle school students. The study consisted of 676 middle school students. Results indicated that these students had low self esteem and were not performing well academically. The Internet addicted students were found to be restless and struggled in maintaining good relationships.

A study by Alavi et al., (2011) aimed to investigate how psychiatric symptoms associate with Internet addiction. The research began with the hypotheses that high levels of Internet addiction was associated with psychiatric symptoms and are specially correlated with obsessive-compulsive disorder symptoms. For the study, 250 students from Isfahan's university were randomly selected. The tools used were - the Young Diagnostic Questionnaire (YDQ) and the Symptom Checklist-90-Revision (SCL-90-R). The results indicated an association between Internet addiction and psychiatric symptoms such as somatization, sensitivity, depression, anxiety, aggression, and psychosis with exception of paranoia.

Yoo et al., (2014) in their research studied 74,980 Korean middle and high school students who completed the 2010 Korea Youth Risk Behavior Web-Based Survey, with an aim to examine the factors impacting level of internet addiction and mental health. As per the results, the prevalence rates of potential internet addiction was found to be 14.8% and the ones with internet addiction were found to be 3%. Both boys and girls were found to be high in the potential zone. Upon investigating, they also reported suicidal ideation, depressive mood, moderate or higher subjective stress. Adolescents who were at a high risk for internet addiction were also found to have poor mental health outcomes.

In another study on students, Kawabe et al., (2016) examined the prevalence of Internet addiction among junior high school students. The study explained the relation between Internet addiction and mental states. It determined the factors associated with Internet addiction in adolescents of Masaki, Japan. To accomplish the above mentioned aim, participants were assessed using Young's Internet Addiction Test (IAT), and General Health Questionnaire (GHQ) Japanese version. The sample age was 12 to15 years where sample size was 853. Descriptive statistics, One way ANOVA and multiple regression were employed for data analysis. Results indicated, out of the total 853 participants 2.0% were categorized as having addiction

to internet and 21.7% were classified as possibly addicted. All subscale scores of the GHQ differed significantly between the three groups - no addiction, possible addiction and addiction. Scores on General Illness, Somatic Symptoms, Sleep Disturbance, Social Dysfunction, and Anxiety and Dysphoria differed significantly between the non-addicted and possibly addicted; and between the non-addicted and addicted groups. The addicted and possibly addicted groups showed more disturbed mental states than the non-addicted group in all subscales of the GHQ. Findings revealed that higher the addicted scores, the higher the scores of mental states.

Kumar & Mondal (2018) carried out a study to explore the Internet use and its relation to psychopathology and self-esteem among college students. A total of 200 college students were selected from different colleges of Kolkata through random sampling. After selection of the sample, Young's Internet Addiction Scale, Symptom Checklist-90-Revised, and Rosenberg Self-Esteem Scale were used to assess the Internet usage, psychopathology, and self-esteem of the college students. Depression, anxiety, and interpersonal sensitivity were found to be correlated with Internet addiction. The results indicated that severe internet users showed higher psychopathological symptoms as compared to moderate users of Internet in four dimensions The four dimension included obsessive-compulsive, interpersonal sensitivity and depression, anxiety, and global severity index. Along with that, low self-esteem has been found in students to be associated with possible users of Internet. Internet usage has been found to have a very strong impact on college students, especially in the areas of anxiety and depression, and at times it affected their social life and their relationship with their family.

(2.3) Internet addiction and personality traits

Personality traits and Internet addiction have been studied by many researches across different countries. Different studies yielded different results pertaining to personality traits being responsible for internet addiction among people. However, some of the personality traits have been repeatedly found having significant influence on addiction. Serin (2011) found that certain predictor variables like

neuroticism, extraversion, psychoticism, life satisfaction can meaningfully predict problematic Internet use.

Eysenck (1971) states that individuals with higher psychoticism trait tend to be solitary, insensitive, egocentric, impersonal, impulsive and opposing to accepted social norms. On the other hand, individuals with low scores are more empathetic, less on adventure and bold. Internet addiction is associated with compulsive use of the internet. Failure in regulation is characterized by the inclination to act impulsively or the propensity to respond to situation without adequate thought about future outcomes.

According to Gerry (2009), 310 adolescents of Singapore were studied for internet addiction and its relationship with shame and lie. The results indicated addicted adolescents scored high on shame and lie scale.

Kumar & Sayadevi (2009) found positive relationship between neuroticism and internet addiction and negative relationship between extroversion, agreeableness and conscientiousness with internet addiction in Indian students.

Van der Aa et al., (2009) explored the effect of personality traits on compulsive internet use on 7888 Dutch students. Results indicated daily internet use was found to be more strongly related to compulsive internet use in introverted, low-agreeable, and emotionally less-stable adolescents. Whereas, compulsive internet use was more strongly linked to loneliness in introverted, emotionally less-stable adolescents, and less agreeable adolescents.

Zamani et al., (2010) conducted a descriptive correlational study with 538 students of high school. The aim of this study was to predict the Internet addiction in high school students of Kerman, Iran, on the basis of the personality traits. The data was collected using the Five-Factor Revised NEO Personality Inventory and the Internet Dependency Questionnaire. Analysis of Variance and multivariable regression analysis was used to analyze the data. The findings indicated that emotional stability, extroversion, and loyalty were the best predictors of Internet addiction in the students, both male and female. Students with low emotional stability, low

extroversion (high introversion) and were less loyal had higher level of internet addiction. The students who had higher emotional stability, achieved higher scores of extroversion, and were more loyal had less addiction to the Internet. Individuals with higher level of introversion were seen to be reserved and independent instead of socially active. Moreover, they are even-paced and not slow when it comes to their pace of work

Wilson et al., (2010) showed that personality characteristics such as extroversion and conscientiousness and self esteem predicted both time spent on social networking sites use and addictive tendencies toward social networking sites.

In the context of Internet applications being used addictively, a research by Ehrenberg et al., (2010) implied individuals who were neurotics reported higher addictive tendencies for mobile phones. A study by Mehroof & Griffiths (2010) found neuroticism to be associated with addiction to online gaming.

Kunimura & Thomas (2011) assessed 113 students at Loyola Marymount University and found a significant positive relation between neurosis and Internet addiction as well as a significant negative relation between extroversion and Internet addiction.

Dong et al., (2012) conducted a longitudinal study with an aim to examine the potential personality predictors of Internet addicts. For the purpose of the study, right after they entered the university, the Eysenck Personality Questionnaire was administered to 868 students. After two years, forty nine students were discovered to be Internet addicted with high scores on Internet addiction test. In order to explore their relationship, means were compared and logistic regression analysis was used. The results indicated students addicted to the Internet scored high on neuroticism and psychoticism trait. On the other hand, before their addiction, they scored lower on Lie than their normal peers. As per the results of regression Internet addiction was found accounted by neuroticism/stability, psychoticism/socialization, and lie.

As per Beard & Wolf (2001) Internet addiction may cause individuals to lie to others because of their over-involvement with the Internet, and they also use Internet as a

means to escape from problems or to settle one's unpleasant emotion such as helplessness, anxiety, guilt, or shame.

In another study, Mark & Ganzach (2014) analyzed personality and internet usage and the results revealed that extraversion, neuroticism and conscientiousness are completely associated with overall internet use. On the whole results indicated that extraversion and neuroticism are the strongest predictors of internet use.

Another study by Floros & Siomos (2014) confirmed that participants who scored high on the measure of excessive internet usage also scored high on the personality traits psychoticism, neuroticism and sensation / excitement seeking. For the traits extraversion, conscientiousness, agreeableness and self-directedness lower score was achieved.

Ozturk et al.,(2015)studied adolescents from Aegean region of Turkey. The sample size was of 328 adolescents selected from two high schools. It was a cross-sectional, descriptive study which aimed to analyze the association between addiction to internet and personality traits. The data was collected from students using the Internet Addiction Scale and the Adjective Based Personality Scale. The result indicated positive association between adolescents' level of extraversion and openness to experience and their risk of internet addiction.

Saini et al., (2016) examined the association between internet addiction and personality traits among students of Bikaner, Rajasthan. The average age of sample was 20 years. The two tools used were Internet Addiction Test by Young and Big Five Personality Inventory. Correlation was applied between the two variables. Results revealed that internet addiction was found significantly correlated with extroversion and neuroticism. Linear regression analysis revealed that higher neuroticism and low extroversion had associations with addiction.

Richards et al., (2010) asserted neuroticism is the main trait that compels individual to move towards internet usage as they use it as a medium for escaping anxiety. He further asserted individuals who are high on extroversion prefer more one on one interaction and therefore, have fewer tendencies to move towards the internet.

Hostovecky & Prokop (2018) aimed to investigate the symptoms of Internet addiction in students of Slovak secondary school. The study checked significant differences between addiction and personality traits, and some other factors like age, place of residence etc. The sample age was between 15 to 21 years. As per the results students who scored high on extroversion scored low on internet addiction in comparison to students who scored low on extroversion. Further, students who scored high on neuroticism scored higher on addiction than those who scored low on neuroticism.

Personality traits plays significant role in addiction to internet. Research has shown big five personality dimensions are significantly related to Internet addiction. With the advances in research, past examinations set up a solid association between personality traits and Internet addiction (Chang & Law, 2008; Landers & Lounsbury, 2006; Rice & Markey, 2009).

Internet use is associated with better outcomes for extroverts than for introverts. In particular, extraverts who used the Internet more reported decreased levels of loneliness (Kraut et al., 2001).Cao & Su (2007) found introverts to be more addicted than extroverts in their research with a sample size of 220 adolescents of Netherland.

A non-experimental study was conducted among adolescents who were internet users and non users. The sample size was 100 where the age of adolescents was between 15-17 years. Young's Internet Addiction Test was administered along with Big Five Inventory for personality traits. Results indicated that the personality traits agreeableness, extraversion, openness and conscientiousness were negatively correlated with internet addiction level. On the other hand, neuroticism was found positively correlated with internet addiction (Julka & Upadhyay, 2020).

Extraversion has been shown to be associated with problematic use of social media; high levels are associated with social enhancement, whereas low levels with social compensation (Kuss & Griffiths, 2011).In relation to addiction to social networking, one study found that excessive social networks use was positively associated with extroversion and negatively associated with conscientiousness (Wilson et al., 2010). However, another study of Facebook addiction found it to be positively related to

neuroticism and extroversion, and negatively related to conscientiousness (Andreassenet al., 2012).Extraversion and Facebook usage as well as introversion and Facebook usage were found to be associated with each other in other studies as well (respectively: Hamburger & Vinitzky, 2010; Kuss & Griffiths, 2011). It is argued in studies that extrovert individuals more often feel the need to communicate with others when compared to introverted individuals and thus they more often use the internet for interactive purposes. Impulsivity is usually closely associated with extraversion (Zuckerman, 1979), and there thus appear to be some paradoxical features to a conceptualization of Internet addiction.

High level of scoring on openness to experience indicate people that are sophisticated, proficient, imaginative, artistic in nature, inquisitive, critical and by large more liberal (Maltby et al., 2010). Correa et al., (2010) have reported that low openness to experience is related to internet dependency. People who have been addictive behaviors, begun to social neglect their work and social life, to lose their self control and to substitute the real world with the online space and believe that their life outside the net is empty and joyless. Kuss & Graffith (2013) demonstrated in their study that the risk of getting internet addicted increases when it is coupled with high scores on 'openness to experience' personality trait. It was found that high neuroticism, low agreeableness, low conscientiousness, and high openness to experience were positively associated with addiction to internet, whereas extraversion was not related to internet addiction.

Tuten & Bosnjak (2001) found openness to experience and neuroticism from the Big Five Inventory were the two traits that were related to the use of internet. A negative relationship was traced between general internet usage and neuroticism and a positive relationship was traced with the personality trait openness to experience. In a contrasting study Zamani et al., (2011) found that low extraversion, high neuroticism, and low conscientiousness are risk factors of Internet addiction, whereas agreeableness and openness to experience were not associated with Internet addiction. It is supported by Bansal (2015) in a study where openness to experience was not found related to internet addiction and conscientiousness was seen having a negative relationship with addiction among adolescents of Raipur. One explanation of this could be that conscientiousness is related to dutifulness, competence, order and discipline (McCrae et al., 2003). People who compulsively use internet don't

have self discipline and lack in self regulation leading to excessive use of the internet. Fidge & Ray (2018), found adolescents who scored low on the dimension of conscientiousness were involved in addiction of substance such as drug and alcohol.

Similarly, Landers & Lounsbury (2006) in a study on the relationship between the remaining factors of the Big Five Inventory and the usage of the Internet for 117 undergraduate students found connections between these variables. Results showed that three of the Big Five traits such as agreeableness, conscientiousness, and extraversion were negatively related to total Internet usage.

The body of literature shows that there are some other personality characteristics related to Internet addiction, such as shyness (Chak & Leung, 2004), external locus of control (Hamburger & Ben-Artzi, 2000), low self-esteem (Yang & Tung, 2007), or loneliness (Morahan & Schumacher, 2000; Niemz et al., 2005). Many researches support it.

Chak & Leung (2004) studied whether locus of control and shyness predicts Internet usage and Internet addiction. For this study they collected sampling of 722 Internet users between the ages of 12 and 26year old. Results suggested that addiction of internet had relationship with shyness, external locus of control.

Hollingsworth et al., (2005) aimed to find relationship between internet addiction and shyness. The sample consisted of 212 students out of which fifty three were middle school students and 169 were post secondary students. Results validated that there is relation between shyness and internet addiction in students. Some studies suggests that Internet communication may be especially advantageous for shy, socially anxious, or marginalized youth, enabling them to practice social skills without the risks associated with face-to-face interactions (Visser et al., 2013).

Martin (1999) maintains that the Internet is custom tailored for the lonely and it represents a safe, low-risk social environment for lonely people.

Prezza et al., (2004) found a positive relation between loneliness and the use of Internet especially in females with less peer-group contact. Kubey et al., (2001) surveyed 576 students in Rutgers University with the mean age of 20 years. Internet dependents were found to be significantly more lonely than other students.

Kim et al., (2008) conducted a study with an objective of exploring the relationship between online game addiction and aggression, self-control, and narcissistic personality traits. For the study 1471 online game users were selected out of which 82.7% were males and 17.3% were females. The tools used for this were the Online game addiction scale, the Buss–Perry aggression questionnaire, Self-control scale and the narcissistic personality disorder scale. The results highlighted that aggression and narcissistic personality traits were found positively correlating with online game addiction. Whereas, 'self control' trait negatively correlated with online game addiction. The result suggested that psychological characteristics such as aggression, self-control, and narcissistic personality traits may make individuals susceptible to become addicted to online gaming.

(2.4) Internet addiction and parenting styles

Many concerns in adolescence, such as substance use, dysfunctional risky behavior, and Internet addiction have been associated with lower levels of parenting monitoring, lack of discipline in the family, family violence, and/or ineffective parenting style (Park et al., 2008).

As reported by Entertainment Software Association (ESA), 25 percent of the computer and video game players are below 18 years of age, and 60 percent of them are male. On examining further, reports showed 25 percent of parents didn't impose time restriction on their child's usage of the internet. On the other hand, 17 percent of parents didn't practice restriction on computer and video game playing time limits (ESA, 2010). Such statistics suggest the low parental control over their child's internet use.

Lin (2009) studied how parental monitoring and leisure boredom had an effect on Internet addiction. The findings revealed that parental monitoring, family and outdoor activities had noticable negative effects on Internet addiction. Low to no parental control is a characteristic trait of permissive and neglectful parenting style.

Rammazi, et al., (2015) aimed to investigate the relationship between parenting styles, and students' internet addiction in Kerman University of Medical Sciences, Iran. Descriptive correlational type of research was conducted with 375 students who had internet addiction. Young's Internet Addiction Test and Parenting Style Questionnaire was administered and scored. Findings revealed a positive significant correlation between permissive parenting style and internet addiction, while there was a negative significant correlation between authoritative parenting style and internet addiction.

Kraer & Akdemir (2019) investigated the parenting styles and social support in adolescents with Internet addiction. The study was conducted in Turkey. The age range of the sample was 12 to 17 years. Young's Internet Addiction Test (IAT), the Social Support Appraisals Scale for Children (SSAS-C) and the Parenting Style Scale were used. As per the findings it was highlighted that the parents of adolescents with internet addiction were more frequently inadequate in acceptance/involvement, supervision/monitoring. Also, they were less emotionally available. Lower parental strictness/supervision was found to be significant predictors of internet addiction. In terms of social support, the adolescents with addiction had less perceived social support.

Permissive parents use inconsistent discipline, do not emphasize mature behavior, and let their children self-regulate. Uninvolved parents are not warm and do not place any demands on their children. They do not monitor or provide support to their children and may neglect child rearing responsibilities altogether (Baumrind, 1991). This type of child rearing gives children a fair chance to use the internet excessively. When children are getting used to play online game without restriction, children may suffer from online gaming addiction which is indicated by their tendency to continue playing and ignore their social interaction and reality (Clark &Scott, 2009).

Valcke et al., (2010) found that the highest level of Internet usage among children is associated with a permissive parenting style, while the lowest level of usage is associated with an authoritarian parenting style. Similar researches suggest that permissive style of parenting is related with delinquency and internet addiction (Jacobson & Crockett, 2000).

Tur-Porcar (2017) examined the links between Internet use and the parenting styles that shape parent–child interactions. As per the results the neglecting or uninvolved parenting style was found to have the strongest relationship with addictive Internet among adolescent girls and boys. Findings revealed that neglecting parenting energizes unpredictable Internet use. During their free time, adolescents use the Internet so much that it takes away majority of their time.

In the developmental phase of adolescence, parental supervision can play a significant role in the avoidance of internet addiction by looking after the adolescents' leisure activities. Parents play an important part in a child's life. Parents can alter maladaptive behaviors of adolescents; monitoring can play a vital role in management of family (Lin et al., 2009). The key trait of authoritative and authoritarian style of parenting is control.

Baumrind (1967) suggests that the adolescent children of authoritative parents (who exercise their power, but respond to their children's opinions and reasonable requests) tend to be more responsible, and more cooperative.

Dwairy et al., (2006) studied the influence of parenting style on the adolescent's mental health in 2,893 Arab adolescents.The mental health of adolescents raised in either controlling or flexible parenting patter is found to be better than those raised through inconsistent parenting pattern. The study revealed that authoritative parenting style had a significant positive correlation with mental health of adolescents.

Rothrauff et al., (2009) found authoritative parenting style is associated positively with children and adolescents in terms of the outcomes it yields..

Lohaus et al., (2009) stated that the most positive health behavior is possessed by the children of Authoritative parents.

Moazedian et al. (2014) conducted a study to find out how parenting style affects problematic internet use on three hundred seventy nine university students. The findings indicated that authoritative parenting style had the lowest effect on problematic internet use. Authoritarian style had the most effect on problematic internet use.

While some researches indicate negative relationship between internet addiction and authoritative parenting style, there are also researches which highlight a positive relationship between internet addiction and authoritative parenting style (Dogan et al., 2015; Xiuqin et al., 2010; Tes, 2018).One of the reasons for authoritative parenting found to be identified with impulsive Internet use is when parents target controlling how much time the child uses the internet and force unreasonable limitations (Xiuqin et al., 2010).

Authoritarian parents practice high control and maintain strict environment. Several studies support authoritarian parenting styles increase levels of rejection sensitivity in offspring (Baumrind, 1991; Downey & Feldman, 1996; Erozkan, 2009; Erozkan, 2012; Cardak et al., 2012; Rudolph & Gembeck, 2013).This behavior of the strictness with low emotional support from parent's side frequently cause the child to feel disliked and dismissed, leading to development of emotional issues(McPherson, 2004).

Shek et al., (2018) studied how parent's behavioral control and parent-child relationship qualities affected the internet addiction level among junior high school adolescents of Hong Kong. The sample size was of 3,328 students. The results showed negative relationship between the level of internet addiction with parents' behavioral control. Also, a negative association was found between the quality of parent-child and internet addiction which means poor relationship will give rise to internet addiction among adolescents. These findings support the argument that positive parenting leads to better child outcomes (Barber et al., 2005; Shek, 2010).

Children of authoritarian parents are found to be anxious, socially withdrawn, unhappy, antisocial, poor relationship with peers, rebellious, frustrated and have low self esteem (Baumrind, 1967, 1982, 1991; Buri, 1989; Decovik, 1992; Chidiebere, 2016).

It is supported by Wu et al., (2013) where the parental relationship scores and Internet addiction scores among Chinese adolescents were studied. The findings revealed that the students who didn't spend time with their parents, didn't feel their parents were understanding, and were not sharing problems with them, were at a greater risk of developing internet addiction.

Having not received the warmth and acceptance from their parents, children tend to move towards social media and/or online friendship formation to get the acceptance they desire (Richard, 2019).

Santrock (2007) in his study on parenting style and adolescent's behaviour showed that authoritarian parents who forcefully pushed upon the child more demands makes their child rebel or run away. When parenting is dysfunctional, internalization and continuity of parenting values become problematic; and risks of severe psychopathology increase (Ryan & Lynch, 1989).

Dogan et al., (2015) found that pathological Internet addicts adolescents have perceived their parents more demanding and authoritarian compared to non-addictive adolescents.

Compulsive use of internet is found positively associated to neglecting and authoritarian style of parenting (Chou & Lee, 2017; Eastin et al., 2006; Huang et al., 2010).

Behavioral control by parents can be regarded as a protective factor for adolescent by inhibiting their deviant behaviors such as problematic Internet use and facilitating adolescents to engage in other meaningful activities (Barber et al., 2005). Likewise, good parent-child relationships characterized by positive interaction (e.g., high-quality communication) are also beneficial to adolescents as the positive

relationships lay a solid emotional foundation, which drives adolescents to behave in a desirable manner and thus prevents them from getting addicted to the Internet (Shek, 2010; Floros & Siomos, 2013).

All in all, this chapter highlighted literature on the recent Internet usage convention reports and Internet addiction. Literature was also reviewed on the interaction of Internet addiction and personality traits, and the interaction of Internet addiction and parenting styles. It discussed the prevalence of internet addiction over the years in different parts of the world and the effects that net addiction has caused. Although internet has revolutionized the human experience, excessive use of the internet has created its own problems. Researches revolving Internet addiction and the different types of personality characteristics (such as shyness, self esteem) were discussed. Personality traits including the big five factors (Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism) and their effects on internet addiction were studied. All the five personality traits were observed to be related to internet addiction in some way or the other//All the five personality traits were observed to be negatively or positively related to internet addiction. Parenting Styles and its relation with internet addiction was studied with several researches. The studies revealed different relationships between parenting styles and level of internet addiction.

CHAPTER-3

METHODOLOGY

(3)METHODOLOGY

Before commencing with the research it is important to form a framework of the research. This predetermined framework ensures that the researcher is in the right track and the research is well planned and is scientific in nature. Research methods are the various procedures, tools, schemes and algorithms used in the research. It includes a set of procedures for collecting and analyzing the data. Research methodology is the systematic application of the research methods. In the present chapter, the methodological aspects, such as, operational definitions of the variables, hypotheses, sample, tools, procedure of data collection and statistical analyses of the data are described.

(3.1) Rationale of the study

In today's time as the availability of the internet is becoming more common, it is necessary to keep a check on children and their online activity. As the literature shows, children who excessively use the internet are more aggressive and have a rebellious attitude towards their parents. Also, there are several theories suggesting that personality differences play an important role on the development and maintenance of addictive use of different online applications. Individuals with different personality traits have different use motives and these differences in personality and motivations may lead to use of different types of addiction or different motivations within a specific addiction.

Parents play an important part in a child's life. The kind of an atmosphere that children are raised in must be important in determining a child's behaviour pattern.

Therefore, it is essential to understand what parenting pattern has a positive or negative impact on the addiction level of a child.

However, as per the researcher's knowledge, to date, no study has investigated the interactions between personality traits, parenting style and the level of Internet addiction amongst adolescents of Ghaziabad, Uttar Pradesh, India. Despite the

increasing importance of Internet Addiction, research into the addiction in relation to personality traits remains in its early stages. Assessing the interactions between these variables may allow discerning both risk as well as protective factors for Internet addiction in adolescents who use the Internet frequently. Specifically, the early identification of characteristics or traits that demarcate frequent users who develop addiction symptoms from the users who do not, may prove beneficial with regards to prevention and treatment.

(3.2) Problem statement

To study the "Effect of Parenting Styles and Personality Traits on Internet Addiction among adolescents."

(3.3) Aim and the Objective of the study

The present research has been carried out to investigate the effect of Parenting Styles and Personality Traits on Internet Addiction among adolescents of urban Ghaziabad. The study aimed to increase knowledge in the internet addiction area by systematically investigating the effect that different parenting style plays. Also, the extent to which different types of personality traits of adolescents can have an effect on the level of addiction among adolescents.

To address the above mentioned aim, some specific objectives were set forth so that empirically verifiable hypothesis may be formulated. Following are the research objectives :

1. To study the extent of internet addiction among adolescents.
2. To understand the role of parenting styles in Internet Addiction and Non Addiction among adolescents.
3. To understand the role of personality traits in Internet Addiction and Non Addiction among adolescents.

(3.4) Hypotheses

1. There will be significant difference between Internet addicted and Non-addicted groups on Authoritarian parenting style.

2. There will be significant difference between Internet addicted and Non-addicted groups on Permissive parenting style.

3. There will be significant difference between Internet addicted and Non-addicted groups on Authoritative parenting style.

4. There will be significant difference between Internet addicted and Non-addicted groups on Neuroticism personality trait.

5. There will be significant difference between Internet addicted and Non-addicted groups on Extraversion personality trait.

6. There will be significant difference between Internet addicted and Non-addicted groups on Openness personality trait.

7. There will be significant difference between Internet addicted and Non-addicted groups on Agreeableness personality trait.

8. There will be significant difference between Internet addicted and Non-addicted groups on Conscientiousness personality trait.

(3.5) Variables

Variables are defined as characteristics of persons, objects, groups or events to which qualitative and quantitative values can be assigned. These values can also be categorical (Mason and Bramble, 1989).

(3.5.1) Types of Variables

Dependent Variable is the variable that is being measured or tested in an experiment. In a simpler language, it is the variable that is under study.

Independent Variables are the variables that are manipulated in order to have an impact on the Dependent variables.

A control variable is a variable that is held constant to prevent it from influencing the outcome of the study.

For the present study, following variables were selected:

Sr. No	Name of Variables	Nature of Variables	Levels of Variables	Level Name of Variables
1.	Parenting Styles	Independent Variable	3	Authoritarian Authoritative Permissive
2.	Personality Traits	Independent Variable	5	Openness Conscientiousness Extraversion Agreeableness Neuroticism
3.	Addiction Group	Dependent Variable	2	Internet Addicts Non Addicts

Control Variables:

- The subjects lying in the age range of 13 to 17 years of age were only included in the same.
- The sample size was limited to 300 only.
- The study was restricted to the city of Ghaziabad.
- Researcher was trained before the actual study was conducted.
- Rapport was established with every subject, so that honest and frank responses could be received from them.
- Confidentiality was ensured to the subjects by the researcher for the information given by them.
- Proper care was taken to see all the 300 subjects answered to all the Psychological tests.

(3.5.2) Operational Definition of the variables

1. Parenting Style: A psychological construct representing standard strategies that parents use in their child rearing.

- **Authoritarian Parenting Style:** A type of parenting style which is characterised by high levels of parental control and low levels of emotional responsiveness to the child's needs.

- **Authoritative Parenting Style:** A style of parenting wherein, the parents have high expectations for achievement and maturity from their child, but they are also warm and responsive.

- **Permissive Parenting Style:** A type of parenting style which is characterised by low levels of parental control and high levels of emotional responsiveness to the child's needs.

2. Personality Trait: It is a relatively stable, consistent, and enduring internal characteristic that is inferred from a pattern of behaviors, attitudes, feelings, and habits in the individual.

- **Extraversion:** A personality trait that includes the tendency to be talkative, friendly, sociable, active, assertive and excitement seeking.

- **Agreeableness:** Agreeableness is a personality trait that includes the tendency to be altruistic, compliant, trusting, cooperative and modest.

- **Conscientiousness:** A personality trait that includes tendency to be competent, orderly, dutiful, self-disciplined, and achievement striking.

- **Neuroticism:** A personality trait that is characterised by anxiety, self-consciousness, vulnerability, depression, and worry.

- **Openness to Experience:** A personality trait that is characterised by imagination, liberalism, intellectual, adventurousness, and artistic interests.

3. Internet Addiction: Internet addiction is characterized by excessive or poorly controlled preoccupations, urges or behaviours regarding computer use and internet access that lead to impairment or distress.

(3.6) Research Design

One of the most vital steps in the research process involves selecting a research design. A research design is a framework that has been created to find answers to

research questions. It includes the specific method a researcher uses to collect, analyze, and interpret data.

In this study the research design employed is a comparative group design wherein, comparison was made between Internet Addicts (Group 1) and Non Addicts (Group 2). The relationship between Internet addition and Parenting Style has been studied, along with the relationship between Personality Traits and Internet addiction. It is a comparative study that seeks to compare the variables.
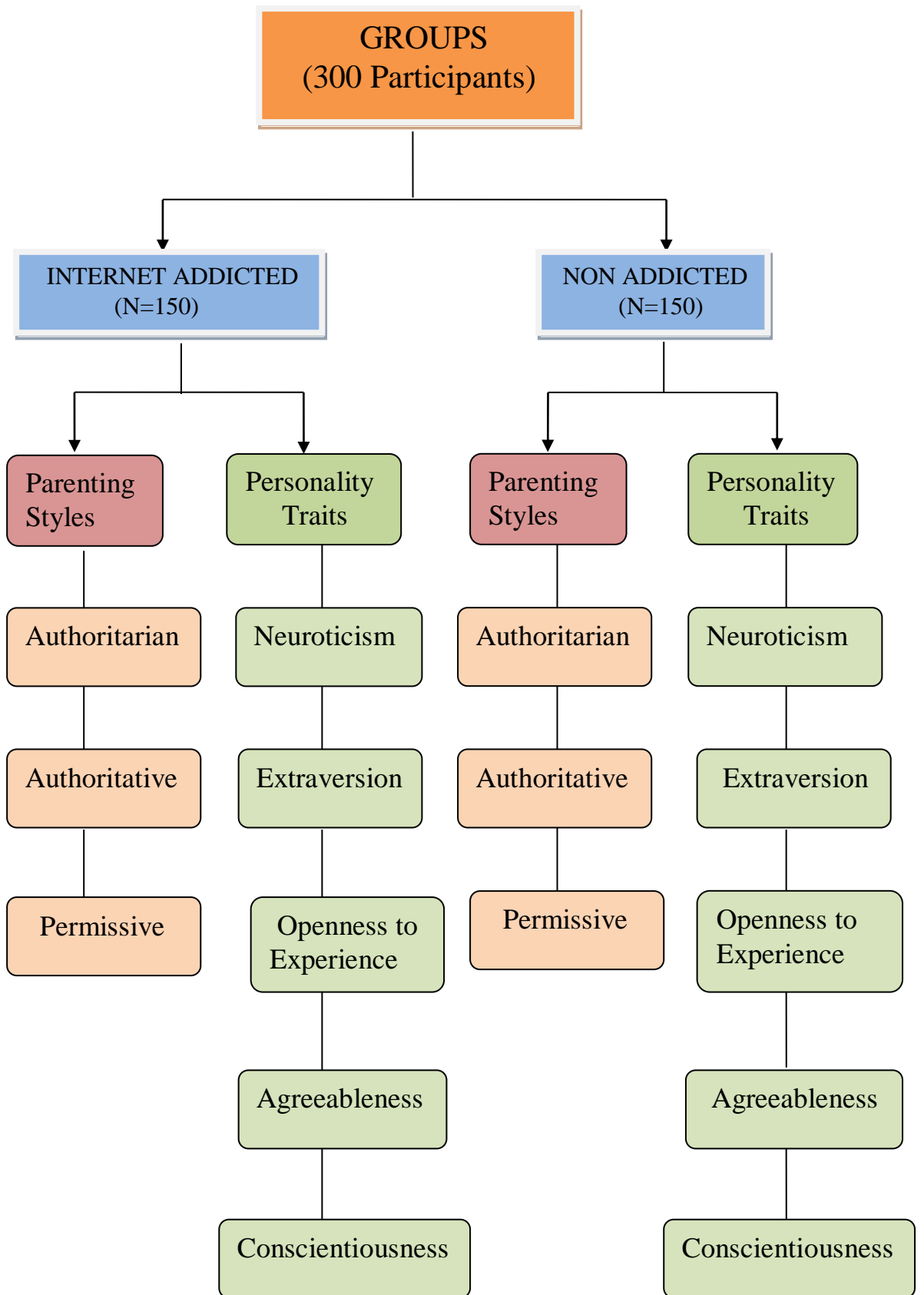
(3.7) Participants

(3.7.1)Selection of Locale

The data collection for present study was carried out in Uttar Pradesh at Ghaziabad district. Ghaziabad city was purposively selected as locale as it was convenient to the researcher and need of the study.

Fig. 3.1: Map of Uttar Pradesh showing district of research

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                    UTTAR PRADESH

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                          ▼

                      75 Districts

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                          ▼

Purposive Sampling        Ghaziabad

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                    Urban Ghaziabad
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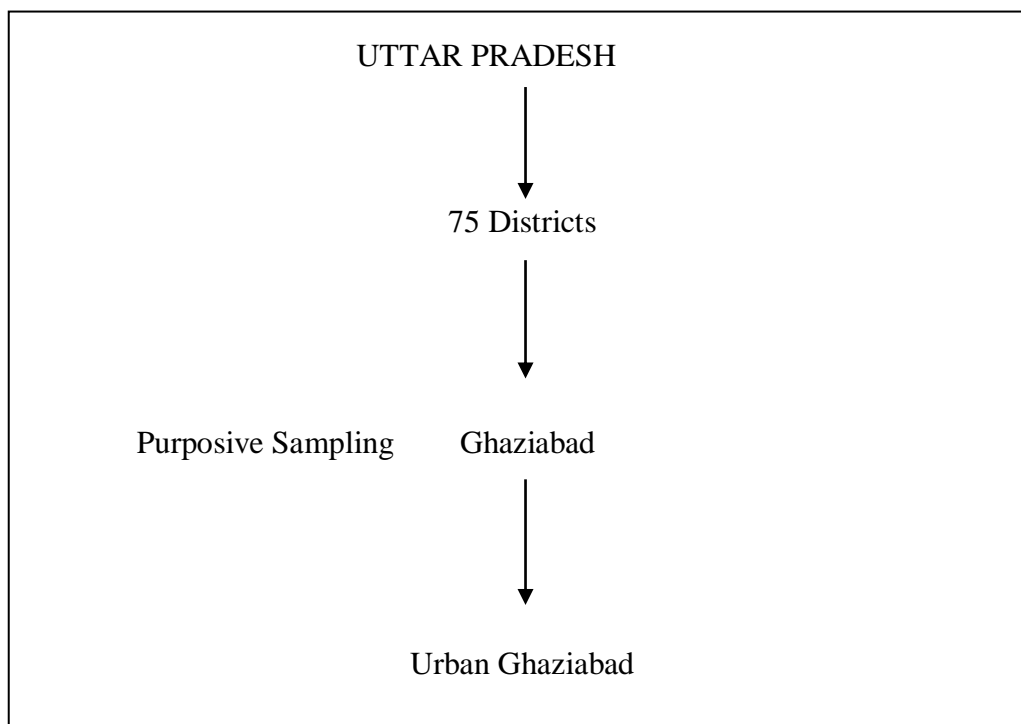
Fig. 3.2: Representation of selection of locale

(3.7.2) Sample and Sampling

The sample for study consisted of 300 Internet users adolescent from age group 13 to 17 years residing in the urban areas of Ghaziabad. The sampling process adopted for the present study was Purposive and Random Sampling technique.

Five Urban schools out of the total of 84 were randomly selected from Ghaziabad city. Out of 300 respondents, 150 Internet addicted adolescents and 150 Non-addicted adolescent were purposively taken as the sample for the present study. The sample included both male and female adolescent students of urban Ghaziabad. The sample consisted of 87 male and 63 female Internet addicted adolescents. And 79 male and 71 female Non-addicted adolescents were included. Only those adolescents were considered a part of the sample that successfully met the inclusion criteria and filled out all the measuring tools.
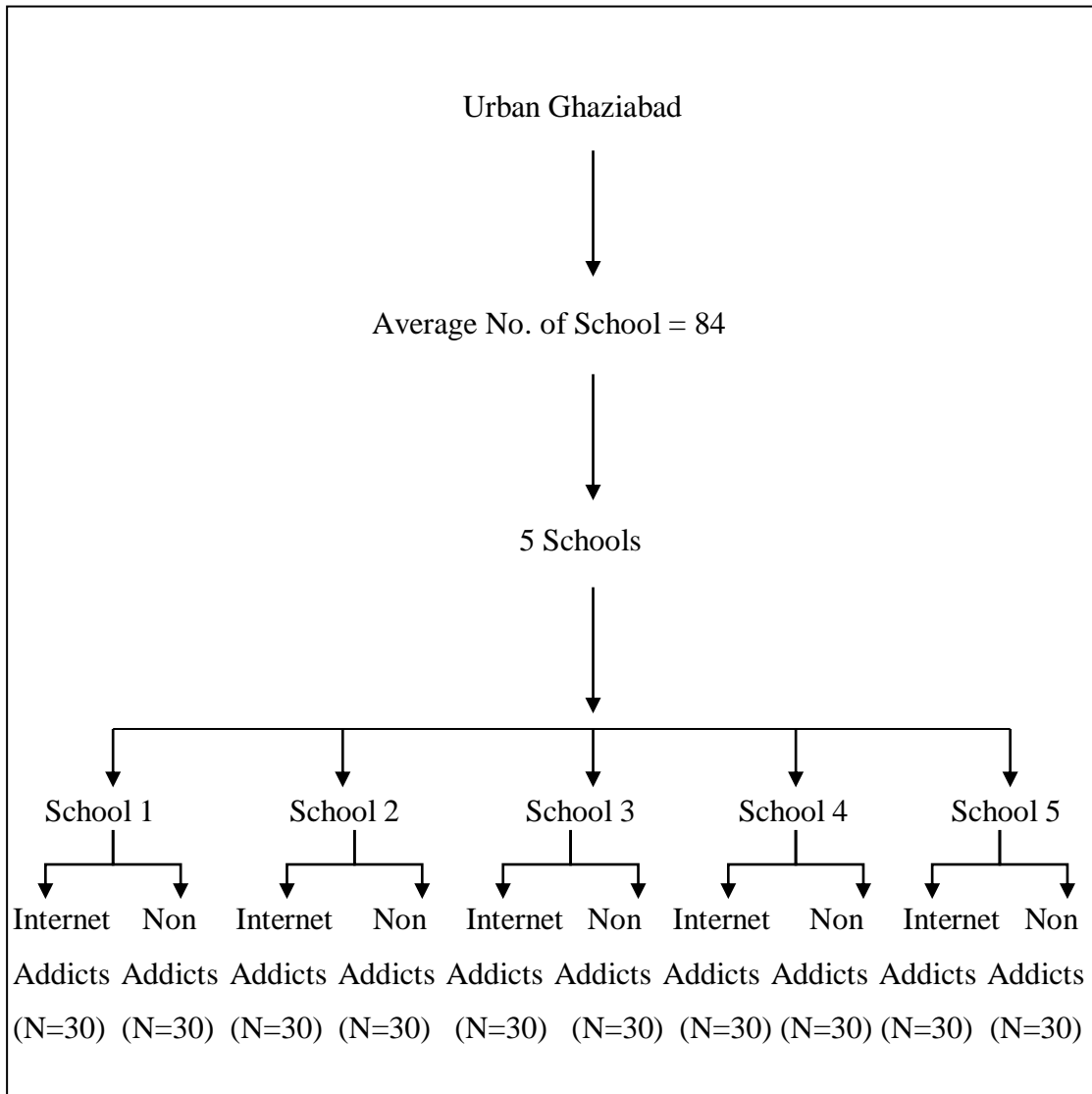
Fig. 3.3: Representation of selection of samples

(3.8) Inclusion Criteria

1. Participants who gave consent to be a part of the study were included.
2. Participant's age was between 13 to 17.
3. Both male and female participants were included.
4. Geographical boundary was limited to urban Ghaziabad.
5. Participants resided with their parents.

(3.9) Exclusion Criteria

1. Adolescents who did not give consent were not included in the study.
2. Adolescents not living with their parents were excluded.
3. Adolescents raised in an orphan or by some guardian other than biological parents were not included.

(3.10) Tools

As per the requirement of the study, the following tools were employed for data collection:

- Demographic Information Sheet/ Information Schedule/ Personal Datasheet
- Internet Addiction Test (IAT) - Dr. Kimberley Young (1998)
- Big Five Inventory (BFI) - John, Donahue, and Kentle (1991)
- Parental Authority Questionnaire (PAQ) - Buri (1991)

For the present study the researcher used three standardized tests and one personal data sheet. Description of the demographic information sheet and the three standardized tools is as follows:

(3.10.1) Demographic Information sheet

This sheet was developed to elicit the detailed demographical information of the participant such as their name, date of birth, age at the time of testing, sex, class, phone number, address, nature of family (joint or nuclear), name of school, socioeconomic status etc. It also includes parents' name, and their occupation. This personal data sheet was required to be filled by students before completing the other 3 standardized tools: Internet Addiction Test, Big Five Inventory and Parental Authority Questionnaire.

(3.10.2) Internet Addiction Test (IAT)

Internet addiction test was developed by Dr. Kimberly Young (1998) of St. Bonaventure University and Director of the centre for Internet addiction recovery. The IAT measures the severity of self reported compulsive use of the internet for

adults and adolescents. It consists of 20 questions to evaluate the respondents' "level of internet addiction". It covers the degree to which internet use affect daily routine, social life, productivity, sleeping pattern, and feeling. It is the first valid and reliable measurement of internet addiction. The test was applied as a screening tool, to qualify for the extent of Internet addiction – no addiction to mild addiction to moderate level of addiction to severe level of addiction. It is a self report measure of five point rating with options namely- "not applicable", "rarely", "occasionally", "frequently", "often" and "always" weighted on 0,1,2,3,4,5 on the scale points. Items of the scale are in the form of questions demanding the participant to choose the option that best represents how they are most of the time. The choice options are 0 (as "not applicable"), 1 (as "rarely"), 2 (as "occasionally"), 3 (as "frequently"), 4 (as "often"), and 5 (as "always"). The test considers six factors in its analysis with regards to addiction: (1) salience, (2) excessive Internet use, (3) neglecting work, (4) anticipation, (5) lack of control, and (6) neglecting social life. This test is having moderate to good internal consistency i.e. alpha coefficient ranges from 0.54 to 0.82. The test retest reliability of the scale was 0.82. The content and convergent validity and internal consistency of the IAT was 0.88 and bisection 0.72. The final score was obtained by summing the scores of all questions. The highest the score on the scale indicates the greater the degree of Internet addiction and vice-versa. The highest score i.e the maximum score that can be obtained on the IAT is 100 points and the lowest can be 20 points. The score obtained determines the level of addiction. It is ultimately concluded that the IAT is both reliable and worthwhile as a tool for assessing subjects' level of Internet addiction.

Level of Internet Addiction	Score
No Addiction	0-30
Mild level	31-49
Moderate level	50-79
Severe level	80-100

The reliability of the tool on Cronbach's alpha is 0.84.

(3.10.3) Big Five Inventory (BFI):

The 'Big Five Inventory' was developed and placed in the public domain by Oliver P. John, Ph.D. It is a self-report inventory designed to measure the Big Five dimensions of personality. It is quite brief for a multidimensional personality inventory (44 items total), and consists of short phrases with accessible vocabulary. The inventory consists of 44 brief personality descriptors to which the participant responds with the degree of agreement or disagreement on a 5-point Likert scale. The Big-Five framework is a hierarchical model of personality traits with five broad factors, which represent personality at the broadest level of abstraction. It is constituted of five trait dimensions of personality extraversion (8 items), agreeableness (9 items), conscientiousness (9 items), neuroticism (8 items) and openness (10 items). The 44 items reflect a different number of characteristics indicating different personality type. The participant is asked to rate the statements from 1-5 to indicate the extent to which they agree or disagree with that statement. The inventory uses a 5-point Likert scale for rating the items.

The Big Five Personality factors which are assessed in BFI are given below:

1. Extraversion (8 items): The broad dimension of Extraversion includes much more specific traits as talkative, socialising, and assertive. Extroverts get their energy from socialising and chatting with others. On the other hand, introverts get their energy by being by themselves.

2. Agreeableness (9 items): This trait includes friendliness, cooperativeness and compassion. Individuals who score low on agreeableness may be more distant. Agreeableness includes kindness, affection, and sympathy.

3. Conscientiousness (9 items): Conscientiousness traits include being organized, methodical and thorough. Individuals with a high degree of conscientiousness are reliable and prompt.

4. Neuroticism (8 items): This trait is related to one's emotional stability and degree of negative emotions. Moodiness, anxiety, irritability and getting tensed easily are some of the traits. Individuals with high scores on neuroticism often experience emotional instability and negative emotions.

5. Openness to Experience (10 items): It includes traits like insightfulness and being imaginative. Such people have various interests. People who score high on openness usually like to learn new things and enjoy new experiences.

Each bipolar factor summarizes several more specific facets, which, in turn, include a large number of even more specific traits like talkative, outgoing etc. Each of the factors is then further divided into personality facets.

For scoring, the responses are scored from a scale of 1 to 5. For positively stated items the response categories were 5, 4, 3, 2, and 1 which indicate Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree, respectively. For negatively stated items the response categories were just the reverse of that of positive items i.e. 1, 2, 3, 4 and 5 which indicate Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree, respectively. Therefore, on choosing 'Strongly Agree' response for a positively stated item, a score of '5' is given. But for the same response, a score of '1' is given if the statement is negatively stated. Each personality trait is assessed through summation of individual items of that category. So, five different summative scores will be achieved by the respondent for five personality traits.

Personality Traits	Item
Extraversion	1, 6R, 11, 16, 21R, 26, 31R, 36
Agreeableness	2R, 7, 12R, 17, 22, 27R, 32, 37R, 42
Conscientiousness	3, 8R, 13, 18R, 23R, 28, 33, 38, 43R
Neuroticism	4R, 9, 14R, 19R, 24, 29R, 34, 39R
Openness to Experience	5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44

The Cronbach's alpha reliability of the BFI scale is 0.80.

(3.10.3) Parental Authority Questionnaire PAQ

The Parental Authority Questionnaire (PAQ; Buri, 1991) is used to measure Baumrind's (1966) permissive, authoritarian, and authoritative parenting styles. PAQ is developed to measure parental authority as recalled by the child, adolescent, or young adult (Buri, 1991). The three parenting styles are as follows:

1. **Authoritarian (10 items):** Authoritarian parents tend to have high demands from their children, but they are not emotionally responsive and accepting

towards their children and do not provide any assistance in reaching those demands.

2. **Authoritative (10 items):** Authoritative parents tend to have high demands from their children and at the same time are very responsive too towards their children and assist them in reaching those demands.

3. **Permissive (10 items):** Permissive parents who practice more of warmth and lesser maturity and control over their children. Parents seldom discipline their and children enjoy without any restrictions and expectations from parents.

The questionnaire consists of 30 items per parent and yields permissive, authoritarian, and authoritative scores for both the mother and the father; each of these scores is derived from the phenomenological appraisals of the parents' authority by their son or daughter. It assesses parental authority on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The form consists of 10 items per parenting style. The three parenting styles are embedded in the questionnaire in a random order. The table below indicates the item with respect to different parenting styles.

Parenting Style	Item
Authoritarian	2,3,7,9,12,16,18,25,26,29
Authoritative	4,5,8,11,15,20,22,23,27,30
Permissive	1,6,10,13,14,17,19,21,24,28

The PAQ is scored easily by summing the individual items to comprise the subscale scores. Scores on each subscale range from 10 to 50. The minimum score that a parenting style can get is 10, and the maximum score is 50. The Cronbach's alpha reliability of the tool is 0.79.

(3.11) Procedure:

The study was conducted in two phases, i.e., Pilot study and the main study.

Phase I - Pilot study

The pilot study was conducted on a sample of 60 adolescents aged between 13-17 years from different schools of urban Ghaziabad, to check the feasibility of the scales. The results of the pilot study helped to use appropriate scales to measure the variables of the study.

Phase II – Main Study

Primary data was collected through direct administration of test and questionnaire to respondents. This data technique is much more efficient and reliable. In addition, the researcher also has the opportunity to explain the purpose of the research, to highlight the instructions for completion and to immediately handle queries and uncertainties. Five schools based in Ghaziabad city were randomly selected and approached for getting permission to collect data from the students who were studying in their school. The principals of respective schools were informed about the nature of the research. With the consent of concerned authorities, after receiving the permission, the data collection process began. Considering the inclusion criteria and exclusion criteria, the students were purposively selected from five schools to be a part of the study after receiving consent from them, as well as from their parents. Before administering the tests, a good rapport was established with the participants to encourage them to give honest responses. Having a good rapport encourages better trust and understanding between the researcher and the participants. This in turn helps in the accuracy of information received. The participants were assured that the information they give about themselves and their results would be kept strictly confidential and used for research purpose only. The participants were given a briefing about the purpose of the study and the importance of their participation. The participants were then allowed to fill the socio-demographic sheet. After explaining the instructions in detail, Young's Internet Addiction Test was administered as a screening tool to check the level of addiction among adolescents. The responses were scored and analyzed, and a sample size of 300 adolescents (Internet addicted & Non-addicted) were selected. The sample was further divided into two groups, wherein, Group 1 consisted of internet addicted adolescents with N=150 and Group 2 consisted of non addicted adolescents with N=150. For the administration of the other two tools, namely, The Big Five Inventory and Parental Authority Questionnaire, the samples were made comfortable and quick rapport was established. The instructions were provided for each of the tools, and the participants

were encouraged to ask any query as and when needed. It was ensured that all the ethical procedures were followed.

(3.12) Statistical Analysis:

1. Descriptive Statistics: Descriptive statistical techniques are Measures of central tendency such as Mean, Median and Mode; Measures of variability provide a means of describing the spread of scores in a distribution. The frequently used measures of variability are the range, standard deviation and quartile deviation. In the present study descriptive statistics like mean and SD were employed to check the difference of scores obtained by the two groups with respect to the independent variables.

2. One Way ANOVA: One way ANOVA is employed by the researcher when finding the significant difference between the Independent variables. For the present study with the help of one way ANOVA the significant difference between the scores of the two groups were checked with respect to the 3 parenting styles and 5 personality traits.

CHAPTER-4

RESULT AND DISCUSSION

(4) RESULT AND DISCUSSION

Keeping in view the objectives of the present study, in order to find out the effects of parenting styles and personality traits on internet addiction the appropriate statistical analyses were employed. The obtained results have been shown in the following tables. The analysis of results and the hypothesis testing are discussed in the following section. The obtained results and brief explanatory comments are also given. The Statistical Package for Social Sciences (SPSS) PC-version 16.0 was used for the statistical analyses of the obtained data.

(4.1) Socio-demographic details

Table-1 Showing the distribution of adolescents in different groups

Name of Group	Non-Addicted	Internet Addicted	Total
No. of adolescents	150	150	300
Percentage of adolescents	50%	50%	100%

The total participants in the present study were 300 adolescents (N=300). Table-1 shows that out of total 300 adolescents, 150 students (50%) belonged to no addiction or Non-addicted group and 150 adolescents (50%) belonged to Internet addicted group.
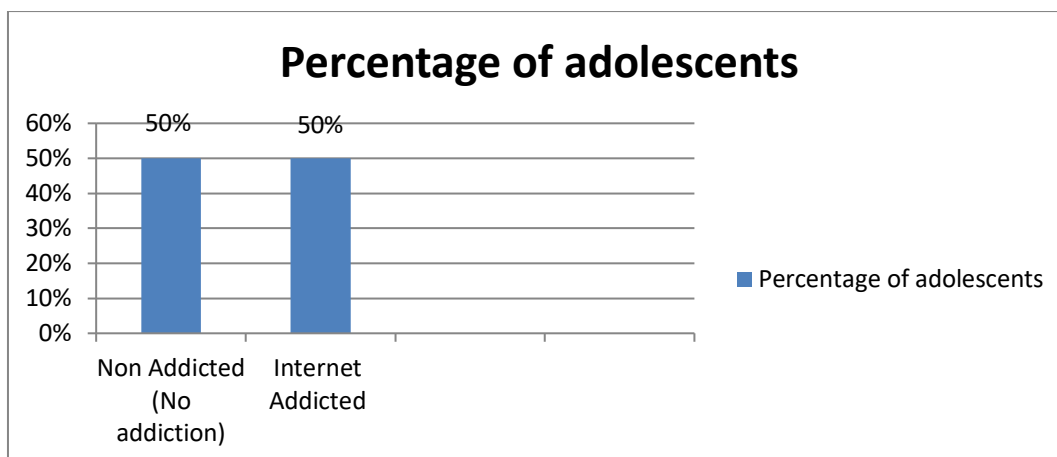
Bar diagram 1: Shows the distribution percentage of adolescents in different groups.

Table-2 Showing the distribution of adolescents according to gender in different groups – Internet Addicted and Non Addicted.

Gender	No. and % of Students	
	Internet Addicted	Non Addicted
Male	87	79
	58%	53%
Female	63	71
	42%	47%
Total	150	150

Table-2 shows that in Group-1, that is Internet addicted, out of 150 adolescents 87 (58%) adolescents were male and 63 (42%) adolescents were female. Further, in Group-2, that is Non-addicted, out of the total of 150, 79 (53%) adolescents were male and 71 (47%) adolescents were female. The total male and female participants in the study were 166 (55%) and 134 (45%) respectively.
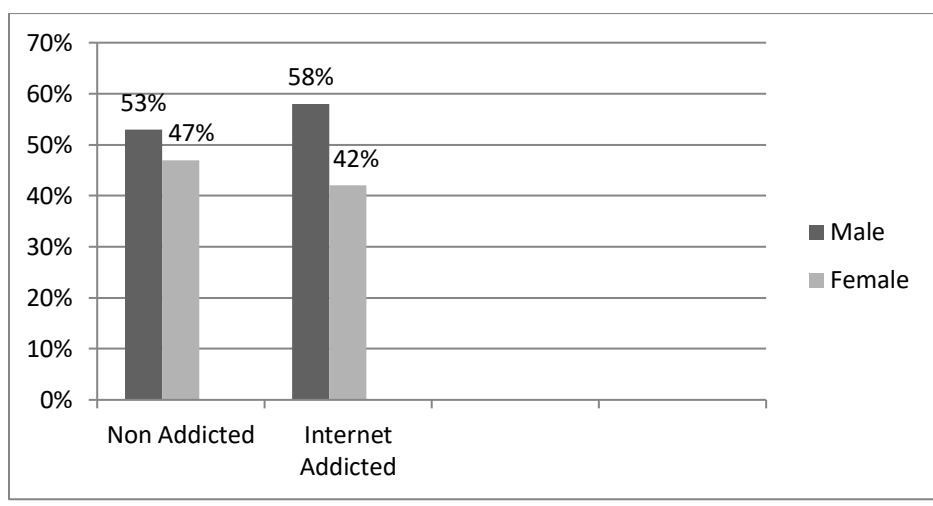
Bar diagram 2: Showing the distribution of adolescents according to gender in the two groups- Non Addicted and Internet Addicted.

(4.2) Data Analysis

> **Results of the two groups (Internet addicted and Non Addicted) on the Internet Addiction Test:**

Although the tool that was used for the assessment of Internet addiction was a standardized tool, however, in order to check the internal consistency of the scores, Cronbach's Alpha was computed on the total sample size of 300 participants. The reliability score was found to be 0.84 indicating the test to be reliable.

Descriptive statistics and ANOVA was applied to check the significance of difference between the two groups on IAT.

Table-3 Shows the Mean and Standard Deviation (SD) score of the two groups – Internet Addicted and Non Addicted on Internet Addiction Test.

Groups	N	Mean	SD
Internet Addicted	150	55.29	17.20
Non Internet Addicted	150	27.12	2.91

The above table indicates the mean score of Internet addiction in Internet addicted

and Non-addicted adolescents. For Internet addicted, the mean score came out to be 55.29 (SD=17.20). On the other hand, the mean score of Non-addicted adolescents was 27.12 (SD=5.52). The mean difference of the two groups was found to be 28.17. The mean score of Internet addicted adolescents indicate the moderate level of internet addiction among adolescents (IAT score 50-79). The mean score of Non-addicted adolescents indicate normal internet usage (IAT score<31) which means no internet addiction among adolescents.
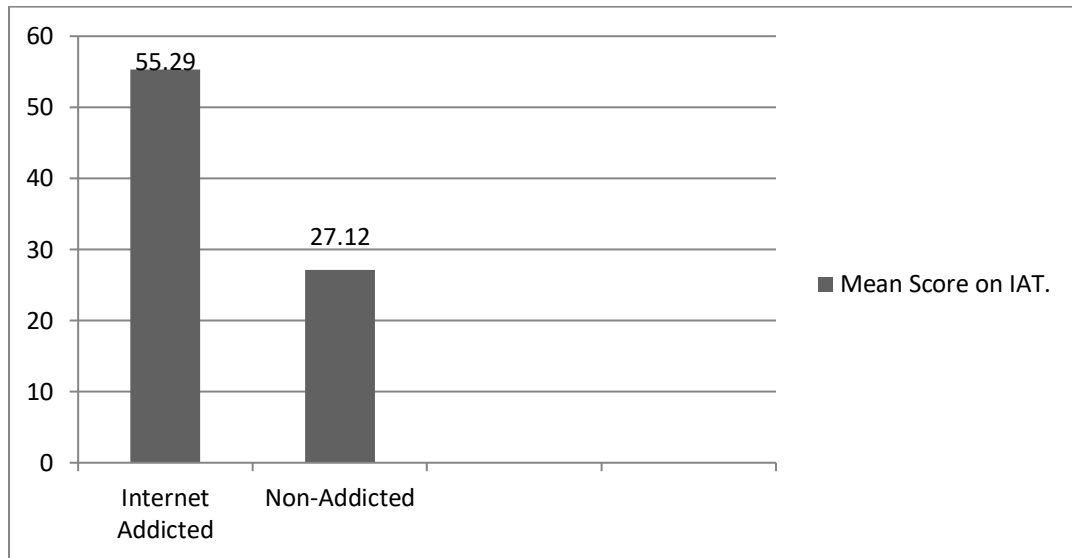
Bar diagram 3: Showing the mean scores obtained on the IAT by the two groups- Internet Addicted and Non-Addicted.

Table-4 One Way ANOVA of Internet Addiction among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	59502.08	1	59502.08	390.72	< 0.01
Within Groups	45381.68	298	152.28		
TOTAL	104883.76	299			

In order to find out the significance of difference in the Internet addiction among the two groups, Analysis of Variance was used. Table-4 shows the result of ANOVA.

One Way ANOVA was applied to the two groups to check the significance of difference. The f-ratio calculated is 390.72, where $p < 0.00001$ indicating the result is significant at 0.01 level. It infers that there is significant difference between the level of Internet addiction among Internet addicted (Mean=55.29, SD= 17.20) and Non-addicted (Mean=27.12, SD=2.91) adolescents.

- ➤ **Results of the two groups (Internet addicted and Non Addicted) on the Parental Authority Questionnaire (PAQ) for the three Parenting styles- Authoritarian, Authoritative and Permissive:**

The tool that was used to assess parenting styles was Parental Authority Questionnaire which was a standardized tool, however, in order to check the reliability of the scores on the total sample of the present study (N=300), Cronbach's Alpha was calculated. The reliability score was found to be 0.79 indicating the test to be reliable. Descriptive statistics was calculated and further, ANOVA was applied to check the significance of difference between the two groups on the three parenting styles – Authoritarian, Authoritative and Permissive.

Table-5 Shows the Mean and Standard Deviation (SD) score of the two groups – Internet Addicted and Non Addicted on the 3 Parenting Styles (PAQ).

Parenting Style	Group	N	Mean	SD
Authoritarian	Internet Addicted	150	20.77	7.99
	Non-Addicted	150	27.42	8.74
Authoritative	Internet Addicted	150	25.02	8.33
	Non-Addicted	150	23.83	9.06
Permissive	Internet Addicted	150	29.55	8.82
	Non-Addicted	150	18.88	6.98
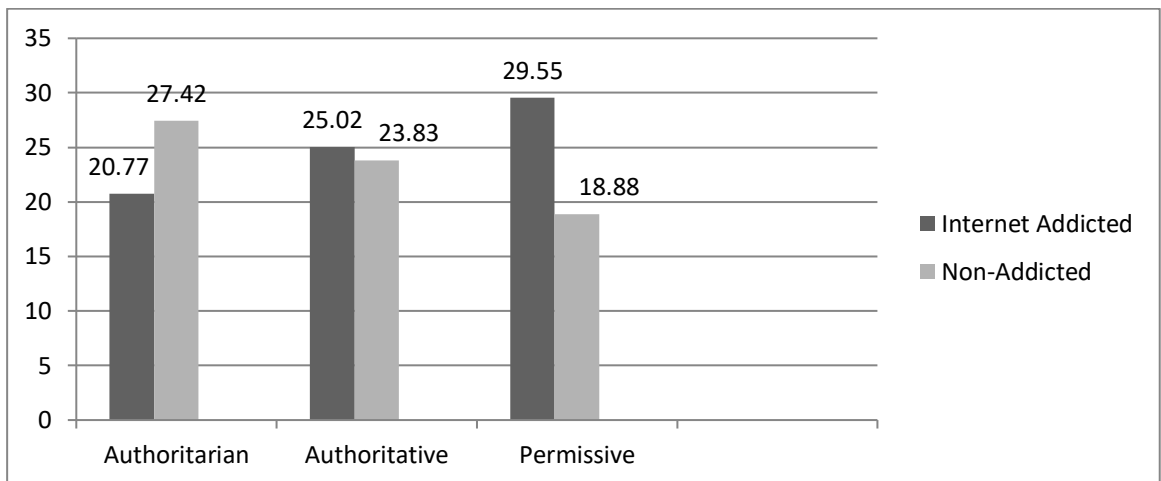
Bar diagram 4: Showing the mean scores obtained on the PAQ by the two groups- Internet Addicted and Non-Addicted.

Table-6 One Way ANOVA of Authoritarian Parenting Style among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	3320.01	1	3320.01	47.28	<0.01
Within Groups	20922.98	298	70.21		
TOTAL	24243	299			

Table-5 shows that the mean score of Internet addicted adolescents on the authoritarian parenting style is 20.77 (SD=7.99) and the mean score of Non-addicted adolescents on the authoritarian parenting style came out to be 27.42 (SD=8.74). The mean difference was found to be 6.65. The Non-addicted group scored higher on authoritarian parenting style than the Internet addicted group (Bar diagram-4). Further, in order to check the significance of difference between the two groups on the parenting style authoritarian, One Way ANOVA was applied (Table-6). The F ratio calculated was 47.28, where p<0.00001. The results of ANOVA indicate

significant difference among the means of the two groups at 0.01 level. It indicates there is significant difference in the authoritarian parenting style among the Internet addicted (Mean=20.77; SD=7.99) and Non-addicted (Mean=27.42; SD=8.74) adolescents.

Table-7 One Way ANOVA of Authoritative Parenting Style among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	106.80	1	106.80	.40	>0.05
Within Groups	22598.72	298	75.83		
TOTAL	22705.53	299			

Table-5 shows that the mean score of Internet addicted adolescents on the authoritative parenting style is 23.83 (SD=9.06) and the mean score of Non-addicted adolescents on the authoritarian parenting style came out to be 25.02 (SD=8.33). The mean difference was found to be 1.19 (Table-5). One way ANOVA was applied to check the significance of difference between the two groups. The F ratio calculated was 1.40 where p is 0.2362 indicating insignificant difference at 0.05 level. Hence, there was no significant difference observed in the mean scores of the Internet addicted and Non-addicted group. It infers that parents of both the groups didn't practice authoritative parenting style as a significant parenting style responsible for Internet addiction.

Table-8 One Way ANOVA of Permissive Parenting Style among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	8544	1	8544	134.73	<0.01
Within Groups	18896.91	298	63.41		
TOTAL	27440.91	299			

As indicated in Table-5 the mean score of Internet addicted adolescents on the permissive parenting style is 29.55(SD=8.82) and the mean score of Non-addicted adolescents on the permissive parenting style came out to be 18.88(SD=6.98). The mean difference was found to be 10.67. The Internet addicted group scored higher on permissive parenting style than the Non-addicted group (Bar diagram-4). Further, in order to check the significance of difference between the two groups on the permissive parenting style, One Way ANOVA was applied (Table-8). The F ratio calculated was 134.73, where p<0.00001. The results of ANOVA indicate significant difference among the means of the two groups at 0.01 level. It indicates there is significant difference in the Permissive parenting style among the Internet addicted (Mean=29.55; SD=8.82) and Non-addicted (Mean=18.88; SD=6.98) adolescents.

➢ **Results of the two groups (Internet addicted and Non Addicted) on the Big Five Inventory (BFI) for the five Personality traits- Extraversion, Openness, Conscientiousness, Neuroticism and Agreeableness:**

The tool that was used to assess personality traits was the Big Five Inventory which was a standardized tool, however, in order to check the reliability of the scores on the total sample of the present study (N=300), Cronbach's Alpha was calculated. The tool was found to be reliable with the score of 0.80.

Descriptive statistics was calculated and further, ANOVA was applied to check the significance of difference between the two groups on the five personality traits – Extraversion, Openness, Conscientiousness, Agreeableness and Neuroticism.

Table-9 Showing the Mean and Standard Deviation (SD) score of the two groups – Internet Addicted and Non Addicted on the five Personality Traits (BFI).

Personality Traits	Groups	N	Mean	SD
Extraversion	Internet Addicted	150	1.76	0.59
	Non Addicted	150	3.04	0.83
Openness	Internet Addicted	150	2.24	0.67
	Non Addicted	150	2.09	0.97
Conscientiousness	Internet Addicted	150	2.56	0.60
	Non Addicted	150	3.62	0.98
Neuroticism	Internet Addicted	150	3.07	0.83
	Non Addicted	150	1.8	0.59
Agreeableness	Internet Addicted	150	2.58	0.68
	Non Addicted	150	2.71	0.53
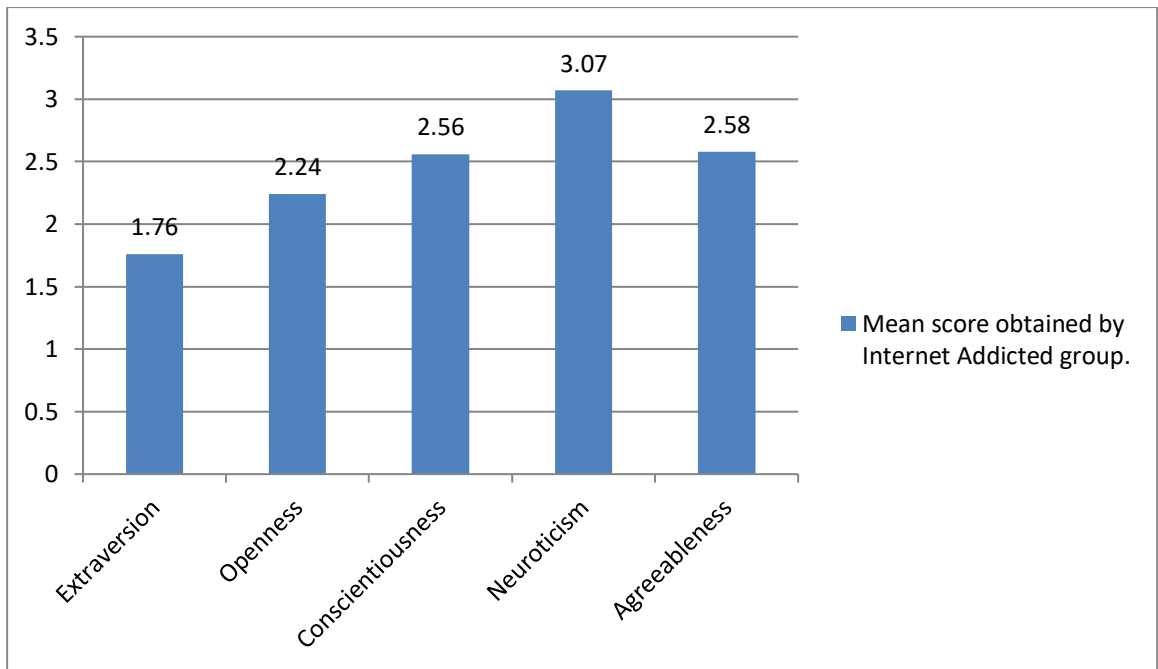
Bar diagram 5: Showing the mean scores obtained on the BFI by Internet Addicted adolescents.
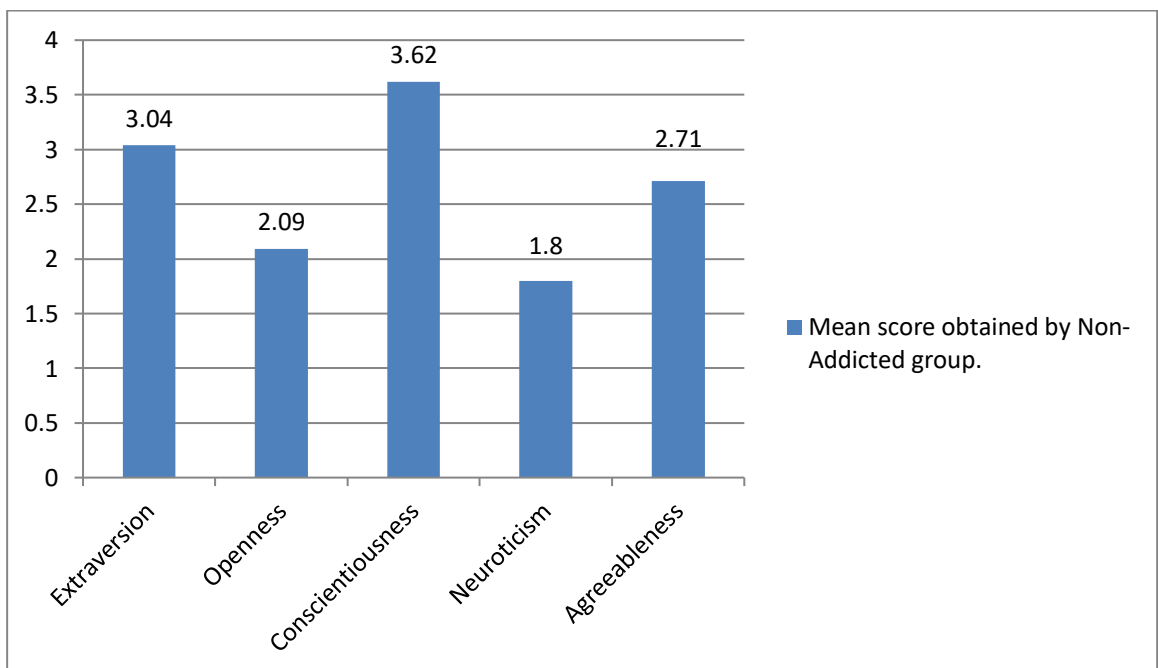
Bar diagram 6: Showing the mean scores obtained on the BFI by Non-Addicted adolescents.

Table-9 shows the Mean and Standard Deviation (SD) scores of Group-1, that is, Internet addicted and Group-2, that is, Non-addicted on the 5 personality traits – Extraversion, Openness, Conscientiousness, Neuroticism and Agreeableness- as scored on the Big Five Inventory. Bar diagram 5 and Bar diagram 6 depicts the graphical representation of the mean scores of the 5 personality traits by the Internet addicted and Non-addicted group, respectively.

Table-10 One Way ANOVA of Extraversion Personality Trait among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	123.90	1	123.90	236.44	<0.01
Within Groups	156.16	298	0.52		
TOTAL	280.07	299			

As per Table-9 the mean score of personality trait extraversion in Internet addicted adolescents is 1.76 (SD = 0.59). The mean score of Non-Addicted adolescents on extraversion was 3.04 (SD = 0.83). The mean difference was found to be 1.28. Group-1 was found to score more one extraversion than Group-2.

In order to find out the significance of difference One Way ANOVA was applied. The F ratio calculated was 236.44 with p<0.00001. The result is found significant at 0.01 level.

Table-10 shows result of ANOVA which is significant at 0.01 level indicating significant difference between groups (Internet addicted & Non-addicted) on extraversion.

The results indicate that there is significant difference between the personality trait extraversion of Internet addicted and Non-addicted adolescents. Furthermore, the mean scores indicate that Non-addicted adolescents are more extroverted than the Internet addicted adolescents.

Table-11 One Way ANOVA of Openness Personality Trait among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	1.58	1	1.58	2.49	>0.05
Within Groups	189.02	298	0.63		
TOTAL	190.61	299			

As per Table-9 the mean score of personality trait openness in Internet addicted adolescents is 2.24 (SD = 0.67). The mean score of Non-addicted adolescents on openness was 2.09 (SD = 0.97). The mean difference of the score was found to be 0.15. In order to check the significance of difference between the two groups One Way ANOVA was applied (Table-11). The F ratio calculated was 2.49 where the value of p is 0.115098 indicating insignificant difference in Group 1 and Group 2 at 0.05 level.

The results indicate that there is no significant difference between the personality trait Openness of Internet addicted and Non-addicted adolescents. This infers openness to experience as a personality trait doesn't influence the level of addiction among adolescents. Openness as a personality dimension is characterized by interest in art, adventure, curiosity and imagination. People who score high on openness are open to new ideas, experiences and have creative thinking. In the present study both the groups were seen to be moderately open to new experiences. There was no difference seen in the two groups based on this personality trait.

Table-12 One Way ANOVA of Conscientiousness Personality Trait among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	84.48	1	84.48	127.77	<0.01
Within Groups	197.03	298	0.66		
TOTAL	281.51	299			

For the personality trait conscientiousness the mean score obtained by Internet addicted adolescents came out to be 2.56 (SD=0.60). Whereas, the Non-addicted group received a mean score of 3.62 (SD=0.98). The mean difference came out to be 1.06. Results indicate Group 1, that is Internet addicted, scored lower on conscientiousness than Group 2, that is Non-addicted. Table-12 shows the result of the One Way ANOVA of the two groups on conscientiousness. The F ratio calculated was 127.77 where p<0.00001. It results in confirming the significant difference between the mean scores of the two groups at 0.01 level.

The results indicate that there is significant difference between the personality trait conscientiousness of Internet Addicted and Non-addicted adolescents. Furthermore, the mean scores indicate that Non-addicted adolescents are more conscientious than the Internet addicted adolescents.

Table-13 One Way ANOVA of Neuroticism Personality Trait among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	121.47	1	121.47	231.51	<0.01
Within Groups	156.35	298	0.52		
TOTAL	277.82	299			

As per Table-9 the mean score of personality trait neuroticism in Internet addicted adolescents is 3.07 (SD = 0.83). The mean score of Non-addicted adolescents on Extraversion was 1.8 (SD = 0.59). The mean difference was found to be 1.27. Group-1 was found to score more on neuroticism than Group-2.

The significance of difference was checked with One Way ANOVA. The F ratio calculated was 231.51 with p<0.00001. The result is found significant at 0.01 level. Table-13 shows result of ANOVA which is significant at 0.01 level indicating significant difference between groups (Internet addicted & Non-addicted) on neuroticism. The results indicate that there is significant difference between the personality trait neuroticism of Internet addicted and Non-addicted adolescents. Furthermore, the mean scores indicate that Internet addicted adolescents are more neurotic than the Non- addicted adolescents.

Table-14 One Way ANOVA of Agreeableness Personality Trait among the two groups: Internet Addicted and Non-Addicted.

	Sum of Squares	Df	Mean Square	F	p
Between Groups	1.20	1	1.20	3.21	>0.05
Within Groups	111.48	298	0.37		
TOTAL	112.69	299			

As per Table-9 the mean score of personality trait agreeableness in Internet addicted adolescents is 2.58 (SD = 0.68). The mean score of Non-addicted adolescents on agreeableness was 2.71 (SD = 0.53). The mean difference of the score was found to be 0.13.

In order to check the significance of difference between the two groups One Way ANOVA was applied (Table-14). The F ratio calculated was 3.21 where the value of p is 0.0739 indicating insignificant difference in Group 1 and Group 2 at 0.05 level.

The results indicate that there is no significant difference between the personality trait agreeableness of Internet addicted and Non-addicted adolescents. This infers that agreeableness as a personality trait doesn't influence the level of addiction among adolescents. Agreeableness as a personality trait is characterized by being warm, altruistic, caring and nurturing. Agreeable people are soft hearted, good natured and kind. Both the groups- Internet addicted and Non-addicted scored high on this dimension of personality indicating there is no influence of agreeableness on the level of addiction among adolescents.

(4.3) Discussion

The data was analyzed with the help of SPSS 16.0 version. Descriptive statistics were applied and ANOVA was used to check the significance of difference between the two groups with respect to the two variables – parenting styles and personality traits.

The mean age of the adolescents was 15 years. Out of the total 300 adolescents, 150 adolescents were Internet addicted and 150 were Non-addicted. Out of the 150 Internet addicted adolescents 87 were male and 63 were female participants. Out of 150 Non-addicted adolescents 79 were male and 71 were female adolescents. Three standardized tools were used for the purpose of assessment. For the assessment of internet addiction, the Internet Addiction Test (Young, 1998) was used. For the assessment of parenting style, the Parenting Authority Questionnaire was used. For the assessment of Personality traits, the Big Five Inventory was used. The data was analyzed with the help of SPSS 16.0 version. Descriptive statistics were applied and ANOVA was used to check the significance of difference between the two groups with respect to the two variables – parenting styles and personality traits. The mean score of Internet addicted adolescents on the Internet Addiction Test was found to be 55.29 with SD= 17.20. The mean score on Non-addicted adolescents on the Internet Addiction Test was found to be 27.12 with SD=2.91.

Hypothesis 1: There will be significant difference between Internet addicted and Non-addicted groups on Authoritarian parenting style.

Hypothesis 2: There will be significant difference between Internet addicted and Non-addicted groups on Permissive parenting style.

Hypothesis 3: There will be significant difference between Internet addicted and Non-addicted groups on Authoritative parenting style.

With respect to the three parenting styles, the Non-addicted group scored higher on the authoritarian parenting style (Mean=27.42; SD=8.74) than the Internet addicted group (Mean=20.77; SD=7.99). Significant difference between the mean of the two groups were seen with respect to the authoritarian parenting style at 0.01 level.

The finding is similar to a study by Dogan et al., (2015) wherein, on examining high school students they found adolescents with Internet addiction perceived their parents more protective, demanding and authoritarian as compared to Non-addicted adolescents.

The high score on authoritarian parenting style as obtained by the Non-addicted group indicate that the parents of these adolescents are more strict and rigid in their ways. They may exhibit strict control over the use of technology by enforcing non-flexible regulations at home. These adolescents may be having a structured environment at home. Due to high controlling atmosphere, the children of these parents may not have an easy access to the technology making them less susceptible to developing internet addiction. Low score on authoritarian parenting style obtained by Internet Addicted group indicate that their parents may not be keeping a check on the usability of internet. There may not be any rules regarding the usage of technology and they may be less demanding in terms of expectations. The easy reach ability and access to the internet makes them easily addicted to the internet.

The Internet addicted group scored higher on the permissive parenting style (Mean=29.55; SD=8.82) than the Non-addicted group (Mean=18.88; SD=6.98). Significant difference was observed between the groups with respect to permissive parenting style at 0.01 level.

High score on permissive parenting style by Internet addicted adolescents indicate that parents of these adolescents have low expectations and high emotional warmth.

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They don't practice rigid rules and guidelines for their children. These adolescents have an easy access to the technology without any restriction which makes fall prey to Internet addiction. Lack of control on parents' part plays an important role in causing Internet addiction (Ashley et al., 2014). The findings are similar to that of Reymond & Simon (2019) where they found permissive parenting style significantly associated with internet addiction. Similarly, Robert et al., (2017) found students with permissive parents to be easy going and high on Internet addiction. Rammazi et al., (2015) found similar result in his study where permissive parenting was found positively related to Internet addiction. Tyler (2015) argues that when left unsupervised, adolescents tend to move towards new experiences in order to get thrill from it and Internet is one such tool for new experiences. Permissive parenting involves no limit setting on adolescent's behavior. The emotional warmth is too much that there is no expectation of behavior is set for the children. This makes these adolescents unable to learn differentiation between acceptable and non-acceptable behaviour leading to the development of impulsive behaviour and low behaviour control making them more susceptible to developing addiction to the net (Milevsky et al., 2007).

Support also comes from the study by Kraer & Akdemir (2019) wherein they found lower parental strictness/supervision was found to be significant predictors of internet addiction.

Low score on permissive parenting style by Non-addicted group indicate that their parents are strict on the usage of the internet which prevents them from getting addicted to the internet.

There was no significant difference seen on the authoritative parenting style in the two groups Internet addicted (Mean=23.83; SD=9.06) and non addicted (Mean=25.02; SD=8.33) at 0.05 level. The scores on Authoritative parenting style of adolescents who were Internet addicted were similar to those who were not addicted. This indicates according to the result of the study authoritative parenting style was not found to be related to the level of Internet addiction. In previous researches, Authoritative parenting was seen to have both positive (Dogan et al., 2015; Xiuqin et al., 2010) as well as negative relationship with Internet addiction. It is argued that children with authoritative parents who have sufficient parental behavioral control

have a lower level of Internet addiction (Chen, 2014), however, due to a lack of expectations and monitoring, the permissive parenting style might increase the probability of Internet addiction among children (Shek et al., 2018).

The results indicate that parental control plays an effect on the level of addiction among adolescents. Permissive parenting style was dominant on Internet addicted adolescents indicating their parents are low on parental control and practice high emotional warmth. On the other hand, Non-addicted adolescents had high control over their internet usage by their parents making them authoritarian in nature. Hypothesis 1 : "There will be significant difference between Internet addicted and Non-addicted groups on Authoritarian parenting style." got accepted. Hypothesis 2 : "There will be significant difference between Internet addicted and Non-addicted groups on Permissive parenting style" got accepted. Hypothesis 3 :"There will be significant difference between Internet addicted and Non-addicted groups on Authoritative parenting style" was rejected.

Hypothesis 4: There will be significant difference between Internet addicted and Non-addicted groups on Neuroticism personality trait.

Hypothesis 5: There will be significant difference between Internet addicted and Non-addicted groups on Extraversion personality trait.

Hypothesis 6: There will be significant difference between Internet addicted and Non-addicted groups on Openness personality trait.

Hypothesis 7: There will be significant difference between Internet addicted and Non-addicted groups on Agreeableness personality trait.

Hypothesis 8: There will be significant difference between Internet addicted and Non-addicted groups on Conscientiousness personality trait.

With respect to the personality traits, the Internet addicted group scored higher on the neuroticism personality dimension (Mean=3.07; SD=0.83) than the Non-addicted group (Mean=1.8; SD=0.59). Significant difference was found between the two groups on the dimension neuroticism at 0.01 level. Additionally, the mean difference highlight that Internet addicted adolescents were more neurotic than the Non-addicted adolescents.

High score on neuroticism by Internet addicted adolescents shows they are worrisome and emotionally unstable. They get anxious easily and experience negative emotions. They are more self conscious and people pleasers (Shiwer, 2016). They are temperamental and moody. The findings are similar to Saini et al., (2016) where they found neuroticism positively associated with Internet addiction. Similarly, Mehroof & Griffiths (2010) claimed neuroticism to be positively related to Internet addiction. Neurotic people will generally encounter expanded degrees of stress and relational struggle as a result of their character attribute. They find it difficult to cope with stressors properly. This makes them susceptible to developing addiction (Hajializadeh & Samavi, 2015). Several researchers have observed that the people who were high on attributes of neuroticism were liable to involve in internet as a coping strategy adapting (Ross et al., 2009). They may have trouble in control urges and delaying gratification. In another research by Yung (2009) adolescents were studied for their level of internet addiction. It was found that adolescents with neurotic personality traits had higher level of internet addiction as compared to those with low scores on neuroticism.

They find internet as an easy medium to release tension and distract themselves from the stressors. Low score on neuroticism by Non-addicted groups indicate they are more emotionally stable and less reactive to stress. They don't get anxious over situations easily and are calm in facing stressors. Their easy emotional management makes them less prone to developing internet addiction as they don't seek internet as a medium to relieve themselves from stress.

On the personality dimension extraversion, Non-addicted group scored higher (Mean=3.04; SD=0.83) than the Internet addicted group (Mean=1.76; SD=0.59). Significant difference was observed in the means of the two groups on extraversion at 0.01 level. The mean difference indicated that non-addicted adolescents were more extroverted than the internet addicted adolescents.

The findings are similar to Saini et al., (2016) where they found low extraversion significantly related to internet addictive behavior. Low score on extraversion by the Internet addicted group indicates that these adolescents are more reserved and private. They prefer to spend time by themselves than socializing with others. Low

score on extraversion indicates presence of introversion. This mean these adolescents may enjoy their own company and have less interest in going out and meeting people. They may prefer isolation over large crowds. Introversion is related to shyness (Afshan et al., 2015).Their lack of will to mingle up with people in a social setting may attract them to making friends online. Because they exhibit traits of shyness, they may find making friends online more comforting and easy than offline. The finding is consistent with previous researches by Dong et al., (2013) & Celik et al., (2012) who found individuals with Internet addiction were low on extraversion. Sahraian et al., (2016) found extroversion negatively correlated with Internet addiction, which means low score on extroversion gives higher score of internet addiction. The feeling of social-emotional loneliness sand perceived poor social support have been believed to have an immediate relationship with addiction to internet (Shaw & Gant, 2002; Beyrami & Movahedi, 2015).

High score on extraversion by Non-addicted adolescents mean these adolescents are more outgoing and socializing. They are talkative and gain their energy by meeting others. They enjoy interacting with people and look forward to social gatherings. Similarly, Zamaniet et al., (2010) found people with high extraversion were less prone to Internet addiction. Because they enjoy one on one conversations and social meetings, they are less likely to get addicted to the internet.

Similarly, Non-addicted group scored higher on conscientiousness personality trait (Mean=3.62; SD=0.98) than the Internet addicted group (Mean=2.56; SD=0.60). Significant difference in the means of the two groups were observed at 0.01 level confirming there is significant difference between the personality trait conscientiousness of Internet addicted and Non-addicted adolescents. The results indicate that there is significant difference between the personality trait conscientiousness of Internet addicted and Non-addicted adolescents. Furthermore, the mean scores indicate that Non-addicted adolescents are more conscientious than the Internet addicted adolescents.

High score on conscientiousness by Non-addicted adolescents indicate that they are more organized in their lives. They are self-disciplined, cautious, orderly and self-efficient. They keep a check on their day to day activities and organize their tasks

well. They have a good self-control which is a key characteristic associated with Internet addiction. Their discipline and dutifulness refrains them from excessively using the internet as opposed to the Internet addicted adolescents. Low score on conscientiousness by Internet addicted adolescents depicts they are disorderly and spontaneous with their actions. Results of the study by Davis (2004), Lee & Chang (2004), Rasmussen (2000), Babington (2000), Benjamin & Ferraro (1999), and Yang (1996) showed that those who are internet addicts obtain lower scores in conscientiousness.

They lack discipline and may be compulsive. They lack self-control and their inability to organize their time and tasks brings them closer to Internet addiction. The findings are similar to that by Shi & Du (2019) who found conscientiousness negatively correlated with Internet addiction among students of China. Andreassen et al., (2013) found conscientiousness, neuroticism, and agreeableness were significant predictors of Internet addiction. Similarly, conscientiousness and neuroticism were seen to be related to Internet addiction among students of Columbia (Puerta & Carbonell, 2013).

No Significant difference was observed between the means of the two groups Internet addicted (Mean=2.24; SD=0.67) and Non-addicted (Mean=2.09; SD=0.97) on the dimension openness to experience. This indicates the scores obtained by the two groups on openness were similar. ANOVA showed insignificant difference at 0.05 level. The results are similar to the researched by Reer & Kramer (2018) and Reed et al., (2015) where openness to experience was not seen as a significant factor influencing Internet addiction among adolescents. Openness to experience reflects one's creativity, appreciation for art, emotion, adventure, imagination. It is also related to openness to new ideas and culture. According to Shi et al, (2015) being open to experience can be done through online activities as well as in the offline world. Since such people like to experience new culture and explore interests, both can be done in the real world through practical activities, whereas similar experience can be received through online activities like net surfing, Youtube video watching, and exploring social media channels. Davey et al., (2016) similarly stated in his study that openness to experience is not related to addiction to the internet as people

can satisfy their need to explore cultures and interests through online activities as well as by stepping outside their house.

Similarly, no significant difference was seen between the means of the two groups Internet addicted (Mean=2.58; SD=0.68) and non-addicted (Mean=2.71; SD=0.53) on agreeableness. This means the scores of the two groups on agreeableness personality traits were similar. ANOVA showed insignificant difference at 0.05 level. As per the result of the study, this dimension of personality didn't show a significant effect on Internet addiction. The result is in line with previous researches like Kayis et al., (2016) where no significant relationship was found between agreeableness and Internet addiction among adolescents. Some studies indicated otherwise. The relationship between Internet addiction and agreeableness was found to be quite significant (Sahraian et al., 2016; Saini et al., 2016; Stodt et al., 2018). One reason why this trait resulted in insignificant difference could be that agreeableness reflects a person's altruism, trustworthiness, earnestness and modesty. Such qualities can be practiced in both the type of settings- online and offline. A person could be kind, cooperative an sympathetic and still be addicted to the internet in order to cater to their need to be kind to their friends online. Similarly, such people can be altruistic, helpful and generous in real life by meeting friends, being involved in philanthropic acts, and being involved in social work.

Therefore, hypothesis 4:"There will be significant difference between Internet addicted and Non-addicted groups on neuroticism personality trait.", hypothesis 5: "There will be significant difference between Internet addicted and Non-addicted groups on Extraversion personality trait." and hypothesis 8:"There will be significant difference between Internet addicted and Non-addicted groups on Conscientiousness personality trait." got accepted. On the other hand, hypothesis 6 "There will be significant difference between Internet addicted and Non-addicted groups on Openness personality trait." and hypothesis 7 "There will be significant difference between Internet addicted and Non-addicted groups on Agreeableness personality trait" were rejected.

CHAPTER-5

CONCLUSION, LIMITATIONS,

IMPLICATIONS & SUGGESTIONS

FOR FUTURE RESEARCH

(4) CONCLUSION, LIMITATIONS, IMPLICATIONS AND SUGGESTIONSFOR FUTURE RESEARCH

(4.1) Conclusion

The aim of the present study was to observe the effect of parenting styles and personality traits on Internet addiction among adolescents. This research gave a good insight to us on how parenting styles and personality traits affect the Internet addiction among adolescents. The results suggest that neuroticism, extraversion and conscientiousness have an effect on Internet addiction. Adolescents who scored high on neuroticism personality trait also scored high on Internet Addiction as compared to Non-addicted. Adolescents who scored low on extraversion and conscientiousness scored high on Internet addiction as compared to Non-addicted adolescents. The findings indicate that adolescents who are neurotic tend to be Internet addicted. Adolescents who are extroverted are more social, talkative, make friends easily, and have peer circle. It is because of their active social life outside the virtual arena that they stay away from the trap of addiction. Conscientiousness is characterized by diligence and being careful. Such individuals are efficient and organized. Internet addicted adolescents scored low on this trait indicating because of their lack of orderliness and self-discipline, they become addicted to the internet. Individuals who are dutiful and self efficient don't get addicted to the internet.

Adolescents who scored high on authoritarian parenting style scored low on Internet addiction and adolescents who score high on permissive parenting style scored high on Internet addiction in comparison to Non-addicted adolescents. The findings indicate that children of authoritarian parents have limited access to internet as compared to children of permissive parents. This suggests that having high expectations from child and having control over their internet use can prevent them from getting addicted to the internet. It can also help in building greater discipline. Permissive parenting style was dominant on Internet addicted adolescents indicating their parents practice application of no or minimum rules and provide high emotional warmth. This type of parenting is characterized by low parental control and

therefore, no guidelines were set for usage of the internet. On the other hand, Non-addicted adolescents had high control over their internet usage by their parents.

(4.2) Limitations

The study was successful in highlighting the effect of parenting styles and personality traits on Internet addiction among adolescents. However, there are certain limitations of the study –

1. The study could be more effective if the sample size was larger than 300.
2. The geographical area was limited to urban Ghaziabad. Inclusion of rural areas of Ghaziabad could have given a broader perspective of the current scenario of Internet addiction among adolescents.

(4.3) Implications

The present study had systematic revelation of the effect of parenting styles and personality traits on Internet Addiction among adolescents of urban Ghaziabad. The various sorts of parenting styles and the individual's personality traits will undoubtedly have either ideal or antagonistic effect on the adolescents' propensities. Parenting style enormously affects the habits of adolescents as they are reared under specific pattern or style of parenting. The personality of the child will have an effect on how he/she interacts with the outer environment and is tempted by the world. Thus, remembering the impact of parents and their parenting styles on adolescents, this study has colossal utility and social ramifications. Hence, this exploration would be of extraordinary use to clinicians, instructive organizers, institutional heads, and instructors alongside guardians and society.

1. Counsellors or instructors can utilize this exploration to plan and conduct workshops for parents. Guardians can be made mindful of different parenting styles, which will assist them with to become cognizant guardians. Parents can also be educated with the current scenario of Internet addiction among

adolescents to raise awareness on the topic. They can be motivated to practice effective parenting skills. Certain tips related to increasing parental control while maintaining emotional warmth with their children can be shared with the parents.

2. Workshops for students can be organised in schools wherein, the students can be made aware of Internet addiction and its harmful effects. Adolescents can be motivated to redirect their energy into something productive. Some coping strategies to deal with problematic internet use can be shared with the adolescents. They can be encouraged to seek professional help if they are not being able to cope with the problematic internet use on their own and simultaneously efforts can be put to remove the taboo that is associated with counselling or other mental health services.

3. Parental control was seen as a major factor influencing Internet addiction among adolescents, therefore, parents can be advised to supervise their child's internet usage so that they can be prevented from falling into the trap of Internet addiction.

4. Personality traits were also observed to have an effect on Internet addiction. Parents can be advised to build a better emotional bond with their child and focus on spending quality time with their child. This will also help in curbing the gaps in personality that the child may have.

5. School's counsellor and/or parents can work on giving exposure to introverted adolescents. Adolescents who are introverted were found more addicted to Internet suggesting that parents of such adolescents can encourage their child to make friends or join hobby groups. They can be engaged in recreational activities which will help in developing social skills and confidence along with virtues like patience and empathy.

6. Group therapy can be planned and implemented for adolescents with high neurotic trait to reduce anxiety. They can be advised to seek professional help.

(4.4) Suggestions for future research

The following suggestions were given by the researcher:

1. It is suggested that future researches can study Ghaziabad in totality including urban, suburban and rural areas of Ghaziabad. This will help in studying the condition of adolescents of Ghaziabad with a broader perspective.

2. More variables can be studied in relation to Internet addiction such as anxiety, depression, stress and academic performance. This will be useful in studying the effect that internet addiction may be causing in adolescents' life with respect to these variables.

3. The new personality measure can be used to assess personality, that is, "HEXACO-60 – A short measure of the major dimensions of personality" by Ashton, M.C., & Lee, K.(2009). The HEXACO model of personality conceptualizes human personality in terms of six dimensions – Honesty-Humility (H), Emotionality (E), Extraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O).

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APPENDIX – 1

Socio-Demographic data

1. Name –

2. Age –

3. Sex -

4. School-

5. Class-

6. Address –

7. Phone number -

8. Father's Name-

9. Father's Occupation-

10. Mother's Name -

11. Mother's Occupation-

12. Socioeconomic status–

APPENDIX - 2

Parent's Consent Letter

This is to certify that I , _____ mother/father of _____ has no objection with my child participating in the study related to Internet Addiction. I understand the cause and relevance of the study, therefore, I allow my child to actively answer all the questions that the study demands.

 Parent's Signature : _____

        Date   : _____

APPENDIX- 3

INTERNET ADDICTION TEST

Name_____

Male _____ Female _____

Age _____ Years Online _____ Do you use the Internet for work? _____Yes _____No

This questionnaire consists of 20 statements. After reading each statement carefully, based upon the 5-point Likert scale, please select the response (0, 1, 2, 3, 4 or 5) which best describes you. If two choices seem to apply equally well, circle the choice that best represents how you are most of the time during the past month. Be sure to read all the statements carefully before making your choice. The statements refer to offline situations or actions unless otherwise specified.

0 = Not Applicable

1 = Rarely

2 = Occasionally

3 = Frequently

4 = Often

5 = Always

1. ___How often do you find that you stay online longer than you intended?

2. ___How often do you neglect household chores to spend more time online?

3. ___How often do you prefer the excitement of the Internet to intimacy with your partner?

4. ___How often do you form new relationships with fellow online users?

5. ___How often do others in your life complain to you about the amount of time you spend online?

6. ___How often do your grades or school work suffer because of the amount of time you spend online?

7. ___How often do you check your email before something else that you need to do?

8. ___How often does your job performance or productivity suffer because of the Internet?

9. ___How often do you become defensive or secretive when anyone asks you what you do online?

10. ___How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?

11. ___How often do you find yourself anticipating when you will go online anticipating when you will go online again?

12. ___How often do you fear that life without the Internet would be boring, empty, and joyless?

13. ___How often do you snap, yell, or act annoyed if someone bothers you while you are online?

14. ___How often do you lose sleep due to being online?

15. ___How often do you feel preoccupied with the Internet when off-line, or fantasize about being online?

16. ___How often do you find yourself saying "just a few more minutes" when online?

17. ___How often do you try to cut down the amount of time you spend online and fail?

18. ___How often do you try to hide how long you've been online?

19. ___How often do you choose to spend more time online over going out with others?

20. ___How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back online?

APPENDIX – 4

PARENTAL AUTHORITY QUESTIONNAIRE

Instructions: For each of the following statements, circle the number of the 5-point scale (1 = strongly disagree, 5 = strongly agree) that best describes how that statement applies to you and your parents. Try to read and think about each statement as it applies to you and your parents during your years of growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

> 1 = Strongly disagree
>
> 2 = Disagree
>
> 3 = Neither agree nor disagree
>
> 4 = Agree
>
> 5 = Strongly Agree

1. While I was growing up my parents felt that in a well-run home the children should have their way in the family as often as the parents do.	1	2	3	4	5
2. Even if their children didn't agree with them, my parents felt that it was for our own good if we were forced to conform to what they thought was right.	1	2	3	4	5
3. Whenever my parents told me to do something as I was growing up, they expected me to do it immediately without asking any questions.	1	2	3	4	5
4. As I was growing up, once family policy had been established, my parents discussed the reasoning behind the policy with the children in the family.	1	2	3	4	5
5. My parents have always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable.	1	2	3	4	5
6. My parents has always felt that what their children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want.	1	2	3	4	5
7. As I was growing up my parents did not allow me to question any decision they had made.	1	2	3	4	5
8. As I was growing up my parents directed the activities and decisions of the children in the family through reasoning and discipline.	1	2	3	4	5
9. My parents have always felt that more force should be used by parents in order to get their children to behave the way they are supposed to.	1	2	3	4	5
10. As I was growing up my parents did not feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them.	1	2	3	4	5

11. As I was growing up I knew what my parents expected of me in my family, but I also felt free to discuss those expectations with my parents when I felt that they were unreasonable.	1	2	3	4	5
12. My parents felt that wise parents should teach their children early just who is boss in the family.	1	2	3	4	5
13. As I was growing up, my parents seldom gave me expectations and guidelines for my behavior.	1	2	3	4	5
14. Most of the time as I was growing up my parents did what the children in the family wanted when making family decisions.	1	2	3	4	5
15. As the children in my family were growing up, my parents consistently gave us direction and guidance in rational and objective ways.	1	2	3	4	5
16. As I was growing up my parents would get very upset if I tried to disagree with them.	1	2	3	4	5
17. My parents feels that most problems in society would be solved if parents would not restrict their children's activities, decisions, and desires as they are growing up.	1	2	3	4	5
18. As I was growing up my parents let me know what behavior they expected of me, and if I didn't meet those expectations, they punished me.	1	2	3	4	5
19. As I was growing up my parents allowed me to decide most things for myself without a lot of direction from them.	1	2	3	4	5
20. As I was growing up my parents took the children's opinions into consideration when making family decisions, but they would not decide for something simply because the children wanted it.	1	2	3	4	5
21. My parents did not view themselves as responsible for directing and guiding my behavior as I was growing up.	1	2	3	4	5
22. My parents had clear standards of behavior for the children in our home as I was growing up, but they were willing to adjust those standards to the needs of each of the individual children in the family.	1	2	3	4	5
23. My parents gave me direction for my behavior and activities as I was growing up and they expected me to follow their direction, but they were always willing to listen to my concerns and to discuss that direction with me.	1	2	3	4	5
24. As I was growing up my parents allowed me to form my own point of view on family matters and they generally allowed me to decide for myself what I was going to do.	1	2	3	4	5
25. My parents have always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up.	1	2	3	4	5
26. As I was growing up my parents often told me exactly what they wanted me to do and how they expected me to do it.	1	2	3	4	5

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27. As I was growing up my parents gave me clear direction for my behaviors and activities, but they were also understanding when I disagreed with them.	1	2	3	4	5
28. As I was growing up my parents did not direct the behaviors, activities, and desires of the children in the family.	1	2	3	4	5
29. As I was growing up I knew what my parents expected of me in the family and they insisted that I conform to those expectations simply out of respect for their authority.	1	2	3	4	5
30. As I was growing up, if my parents made a decision in the family that hurt me, they were willing to discuss that decision with me and to admit it if they had made a mistake.	1	2	3	4	5

APPENDIX - 5

BIG FIVE INVENTORY
How I am in General

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

1	2	3	4	5
Disagree Strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly

I am someone who…

1. _____ Is talkative

2. _____ Tends to find fault with others

3. _____ Does a thorough job

4. _____ Is depressed, blue

5. _____ Is original, comes up with new ideas

6. _____ Is reserved

7. _____ Is helpful and unselfish with others

8. _____ Can be somewhat careless
9. _____ Is relaxed, handles stress well.

10. _____ Is curious about many different things

11. _____ Is full of energy

12. _____ Starts quarrels with others

13. _____ Is a reliable worker

14. _____ Can be tense

15. _____ Is ingenious, a deep thinker

16. _____ Generates a lot of enthusiasm

17. _____ Has a forgiving nature

18. _____ Tends to be disorganized

19. _____ Worries a lot

20. _____ Has an active imagination

21. _____ Tends to be quiet

22. _____ Is generally trusting

23. _____ Tends to be lazy

24. _____ Is emotionally stable, not easily upset

25. _____ Is inventive

26. _____ Has an assertive personality

27. _____ Can be cold and aloof

28. _____ Perseveres until the task is finished

29. _____ Can be moody

30. _____ Values artistic, aesthetic experiences

31. _____ Is sometimes shy, inhibited

32. _____ Is considerate and kind to almost everyone

33. _____ Does things efficiently

34. _____ Remains calm in tense situations

35. _____ Prefers work that is routine

36. _____ Is outgoing, sociable

44. _____ Is sophisticated in art, music, or literature

37. _____ Is sometimes rude to others

38. _____ Makes plans and follows through with them

39. _____ Gets nervous easily

40. _____ Likes to reflect, play with ideas

41. _____ Has few artistic interests

42. _____ Likes to cooperate with others

43. _____ Is easily distracted

AUTHOR'S BIO DATA

My name is NIMISHA SHUKLA and I am pursuing Ph.D. in Psychology. I completed Bachelor's in Arts (B.A.) in the field of Applied Psychology from Vivekananda College, Delhi University. In the year 2015, I completed Post graduation (M.A.) in Applied Psychology from Galgotias University and was awarded with a gold medal. In 2016 I joined Ph.D. in Psychology at Galgotias University. Four research papers were successfully published during the course of Ph.D. and one paper was presented in an international conference.

PUBLISHED PAPERS

- Published a research paper in Studies in Indian Place Names (UGC Care Journal) under the title **"**The effect of Parenting Styles and Personality Traits on Internet Addiction among Adolescents of Urban Ghaziabad".

- Published a research paper in Shodh Sarita (UGC Care Journal) under the title "Internet Addiction and Personality Traits among Single Child and Non-Single Child Adolescents".

- Published a research paper in Shodh Sanchar Bulletin (UGC Care Journal) under the title "Internet Addiction among adolescents amidst COVID-19 pandemic : A cross-sectional study".

- Published a research paper in Turkish Online Journal of Qualitative Inquiry (Scopus Journal) under the title **"**Effect of Parenting Styles on Internet Addiction among Adolescents".

PAPER PRESENTATION

- Presented a paper in a two-day online International Conference organised by Chaudhary Bansi Lal University, Haryana, on "Internet Addiction and Psychological Well-Being among adolescents amidst COVID-19 pandemic".