Discovered a few decades ago, the Internet is a system of massive technical and social complexity. In the past few years, computers and the Internet have lost their elite status and have become a basic necessity for today's society. Many scholars and social critics believe that these changes and, specifically the Internet, are transforming the economic and social life across the globe (Anderson, Bikson, Law, & Mitchell, 1995; Attewll & Rule, 1984; King & Kraemer, 1995). People use the Internet for various purposes such as entertainment, education, information retrieval, communication, business, etc.

The Internet is a dynamic and revolutionary phenomenon that helps millions of people across the world to access, exchange, analyze, and create vast amount of information. According to Google, Internet may be defined as "a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols". When users are connected to the Internet, they can receive text, images, videos and sound on their computer from computers anywhere in the world.

Due to the availability of information over the Internet and easy access to various studies, researches and findings happening across the globe, the modern day education system encourages the use of Internet for its educational value. Internet access and use among adolescents has therefore grown exponentially over the past decade and hence more research has been done towards understanding the habits of Internet usage amongst adolescents than the adult population. For instance, it is reported that the primary purpose for which the adolescents use the Internet is for social reasons (Gross, 2004), despite various activities including doing school project work, playing games, shopping, socializing and downloading music. The Internet provides the unique opportunity and social setting for people to interact and share ideas and opinions with individuals across the globe at the click of a button,

therefore enhancing the circle of influence beyond all physical boundaries without actually having to move from the comfort of one's home.

1.1 Prevalence of Internet Use

There has been an explosive growth in the usage of the Internet globally as well as in India. The Internet has become one of the major necessities of life these days. Being a rich source of information, and containing various facilities for all age groups, the Internet is easily accessible to all. In spite of its numerous advantages, misuse of this technology can lead to Internet addiction, thus affecting lives of many. There have been several studies on the prevalence of Internet use among various age groups, especially adolescents and the youth. These studies have estimated the prevalence rates of Internet use across various countries in the range of 1.4% to 17.9% (Yen, Ko, Yen, Wu, & Yang, 2007; Mythily, Qiu & Winslow, 2008). In a study on prevalence of Internet use in Iran (Mazhari, 2012), it was found that out of 976 University students, 21% of them were High users of the Internet. Other researches on university students show the prevalence rate of Internet use to be 26.1% in the United States (Christakis, Moreno, Jelenchick, Myaing & Zhou, 2011), 10.6% in China (Wu & Zhu, 2004), 17.9% in Taiwan (Chou & Hsiao, 2000) and 34.7% in Greece (Frangos, Frangos & Sotiropoulos, 2011). However, a few studies have reported a high prevalence rate of IA among students, for example, 18.2% in Taiwan (Ko et al., 2007), and 36.7% in Italy (Milani, Di Blasio, & Osualdella, 2009). Various other studies have revealed a low prevalence of Internet addiction as 2% in Norway (Johansson & Götestam, 2004), 4.6% in Australia (Thomas & Martin, 2010), 6% in Poland (Zboralski et al., 2009).

Over the years, longitudinal studies have reported an increase in the prevalence of high use of the Internet or Internet Addiction at an extensive range of rates. Most researches have reported an overall prevalence rate of 10% or less. For example, prevalence of Internet addiction was 1.6% in South Korea in 2006 (Kima et al., 2006), which increased to 4%

during 2007(Lee et al., 2007) and further increased to as much as 10.7% in 2008 (Park, Kim, & Cho, 2008). Similarly, in China, the rate of prevalence of Internet use was 2.4% in 2007(Cao & Su, 2007), which increased to 7.1% during 2008 (Lang, Jia, Li, & Su, 2008) and further increased to 10.8% in 2009 (Lam, Peng, Mai & Jing, 2009).

In recent years, due to the widespread use of Internet in Asian countries, Internet overuse has become a growing psychiatric problem among adolescents. For example, in Taiwan and China, the incidence of this problem has been increased from 6% in 2000 to 11% in 2004 (Chou & Hsiao, 2000; Wu & Zhu, 2004).

There have been quite a few studies done on the prevalence rate of Internet use in various cities across India. For example, a study done on 987 students in Mumbai, India, found that, of the total participants 74.5% of them were moderate users (as per Young's criteria of IAT) of the Internet, 24.8% as possible addicts while 0.7% of them were found to be Internet Addicts (Goel, Subramanyam & Kamath, 2013). In yet another study on the Professional courses students in Jabalpur, Madhya Pradesh, India, reported 57.3% as normal users (based on Young's IAT criteria), 35% of the users were mild users of the Internet, 7.4% had moderate addiction to the Internet, while 0.3% had severe Internet addiction (Sharma, Sahu, Kasar & Sharma, 2014).Similarly, Chathoth, Kodavanji, Nayantara and Pai (2013), reported a prevalence of Internet addiction (comprising moderate and severe addiction) as 18.8% in undergraduate medical students in Mangalore. Nalwa and Anand (2003) investigated the extent of Internet addiction among school children in Patiala, India. For their study, they used the Davis Online Cognition Scale, a self report inventory to identify the dependents and non-dependents. It was found that 18% of the participants were Internet addicts. Krishnamurthy and Chetlapalli (2015) in their study among college students in Bengaluru found prevalence of mild Internet addiction as 34% (as per Young's IAT criteria) and that of moderate Internet addiction as 8%.

1.2 Nature of Internet Use

Internet is a magnificent means of communication to connect with outer world. People use it as a medium to connect with people across the world, sharing files, entertainment and for many other activities that are useful and beneficial in various ways. It has allowed people to have an easy access to any information. As a proficient and organized storage of data, the Internet provides the finest information retrieval systems. A very simple search inquiry to a search engine will give thousands of results in milliseconds.

Research suggests that adolescents use a variety of Internet applications such as instant messaging, bulletin boards, chat rooms, and blogs to connect with their peers (Gross, 2004; Boneva, Quinn, Kraut, Kiesler, & Shklovski, 2006) and to explore typical adolescent issues such as sexuality, identity, and partner selection (Subrahmanyam & Greenfield, 2008; Smahel, Brown, & Blinka, 2012).

Numerous commercial surveys present children's favorite websites, showing that children value this new medium of information and entertainment for getting rid of their boredom and for being in touch with their friends (chatting, email, instant messaging). British Market Research Bureau's (BMRB) Youth Target Group Index (2001) showed that the most common uses of the Internet are studying/homework (73%), email (59%), playing games (38%) and chat sites (32%) and hobbies and interests (31%) (Valkenburg & Soeters, 2001). Few use it for shopping (Nie & Erbring, 2000). Many seek out "Americanized"- i.e., commercial, global, branded websites (Holloway & Valentine, 2001).

Internet addiction has been directly related to the number of hours individuals spend on the net. For example, a study done in Thailand (Wanajak, 2011) found that students who had more experience of Internet use (more than five years) were more likely to be classified as addictive users than those who had less experience.

Nalwa and Anand (2003) found in their study that as many as 22.2% of the Internet dependents had been using the Internet for more than two years. They also found that 38.8% of them had been using the Internet for 1-2 years. However, this finding contradicts Young (1996) who found that new Internet users (using the Internet for less than six months) were more prone to be Internet addicts than experienced users.

Similarly, a study done in Punjab (Kumar & Kaur, 2005), where it was found that 30.7% of the participants had been using the Internet for 2-4 years, while 24% of them had been using it for more than 4 years. A similar kind of study done in Andhra Pradesh also revealed that as many as 70.6% of the participants had been using Internet for 2-5 years and 13.3% had been exposed to it for more than 5 years (Srijampana, Endreddy, Prabhat and Rajana, 2014).

The amount of time spent on the Internet has been reported to be an influencing factor for Internet Addiction. Several studies reported Internet addicts tend to spend at least twice the amount of time online as did non-addicts (e.g., Chou & Hsiao, 2000; Young, 1996, 1998). According to a research published by the National School Boards Association (NSBA), Virginia, (Grunwald Associates, 2007), students are spending almost equal amount of time on the Internet visiting websites and social networking services (nine hours per week) as much as they spend watching television (ten hours per week). Other researchers showed that Internet addicts reported an average of 20-39 hours per week spent online as compared to the 5-9 hours of non addicts (Young, 1996, 1998; Chou & Hsiao, 2000). Wanajak (2011) found that addictive Internet users spent approximately 29 hours per week (around 4.14 hours per day) on the Internet which is comparable to that of other researches. However, it was also found that normal users were online for about 16 hours per week (around 2 - 3 hours in a day), which is greater than the 5-9 hours found in other studies (Young, 1996, 1998; Chou & Hsiao, 2000). Similarly, Krishnamurthy and Chetlapalli (2015) found college students who were Internet addicts to be online for more than 35 hours in a week.

Thanuskodi (2013) found that 31.03% of the participants in his research used the Internet daily, out of which 23.2% of the participants accessed the Internet for 3-4 hours daily, while 7% of the participants used the Internet for more than 5 hours daily. Kanaujia and Satyanarayana (2003) conducted a study of the Science & Technology community of Lucknow city to assess the level of awareness and demand of web based learning environment among Science & Technology information seekers. The major findings of the study revealed that 49.2% users browsed the Internet for more than 2 to 4 hours and 14% for more than 5 hours a day. Kumar and Kaur (2005) got similar results which revealed that almost 8% of their sample accessed the Internet for more than 20 hours in a week.

Similar results were found in a study done on 2735 adolescents in Singapore (Mythily, Qui & Winslow, 2008). It was found that 17.1% of them used the Internet everyday for more than 5 hours. In a study done in Riyadh city, it was found that 25 students (65%) of the Internet addicts were using the Internet more than 5 hours per day, compared to 11.7% and 32.9% of non-addicts and possible addicts respectively (Al-hantoushi, & Al-abdullateef, 2014).

The NSBA study also revealed that 96% of the students use the Internet for social networking purposes. Seventy one percent said that they use these services at least on a weekly basis. In a national survey carried out in the USA in 2009 it was found that 73% of the teenagers use Social Networking Sites (Lenhart, Purcell, Smith & Zickuhr, 2010). Similarly, Crothers et al., (2013) found that the use of SNS is most common amongst young people, with 95% of those under the age of 30. The report states that 'visiting SNS' is the second most common activity done several times a day after 'surfing the net'. Almost a quarter of the participants checked their Facebook account several times a day according to this report.

Hargittai's (2007) study of 18- and 19-year old students showed that as many as 74% of the participants reported using at least one social networking site (from the list of six which

included: Facebook, MySpace, Xanga, Friendster, Orkut and Bebo) with Facebook being the most frequently used site. A recent survey found that almost all U.S. teens (95%) aged 12 through 17 are online, compared to only 78% of adults. Of these teens, 80% have profiles on social media sites, as compared to only 64% of the online population aged 30 and older (Lenhart et al., 2011).

According to a report released by Pew Research centre (Lenhart, 2015), 71% of the teens report using more than one social networking sites out of which 22% of them used only one site, 66% used Facebook, 13% used Google+, 13% used Instagram and 3% used Snapchat. Contrary to some beliefs, Facebook continues to be the most popular social media and networking site used by teenagers and young adults, aged 12 to 24 years old in 2015; 74% percent of respondents currently use Facebook, followed by Instagram (59%) and Snapchat (57%).

The Internet potentially reduces the importance of physical propinquity in creating and maintaining networks of strong social ties (Kraut et al., 1998). Unlike face-to-face interaction or even the telephone, the Internet provides opportunities for social interaction that do not depend on the distance between to individuals (Kraut et al., 2002) or convenience, but rather based on common interests (Kraut et al., 1998). "People often use the Internet to keep up with those whom they have preexisting relationships" (Kraut et al., 1998). However, they have also developed new relationships online. The Internet facilitates social contact at anytime, anywhere, and under any circumstances as it allows people to connect with distant as well as local family and friends, co-workers, business contacts, and with strangers who share similar interests (Kraut et al., 2002).

In addition, the Internet affects our well-being, especially our loneliness. Extroverts who used the Internet more reported increased well-being, including decreased levels of loneliness, decreased negative affect, decreased time pressure, and increased self-esteem (Kraut et al.,

2002). This may be because extroverts take pleasure in interacting with other people through social gatherings whether online, through forums, chats, or emails, or offline, through parties or communal activities (Kraut et al., 1998).

There are also positive effects of Internet usage in business. While it's true that employees are now spending less time 'relaxing' with no Internet connection and so no capacity to work; it also means that they have to take fewer trips into the office. Some people can now work entirely from home and set up their own businesses. Working from home means working from anywhere – while travelling, in a pub or while chilling in the hot tub. It also means fewer business trips abroad when people can make video conferences far more easily which means more time with the family and less damage to the environment (Su & Lee, 2010). While various technologies have taken jobs away from the public, the Internet has opened up a numerous opportunities and heralded an age where anyone can be a publisher and anyone can be an entrepreneur. Even if one sells off a few old items on e-bay or on OLX, one can make money online.

The Internet is essentially the largest library of all, and even if you do not aim to use it for learning purposes, it is hard to go online without learning something. The news for instance is flashed on most search engines and e-mail providers' home pages and it is far too tempting not to use Wikipedia as a means to settle debates and disagreements. Wikipedia and other sites in general provide almost everything you could ever need to know right at your fingertips. Furthermore, simply interacting with people from other cultures is bound to help make you more cultured and worldly. Just getting to see other people's viewpoints on forums and in chat rooms makes one more open-minded and a more reasoned critic (Su & Lee, 2010).

1.2.1 Most common uses of the Internet:

- Information seeking: The most common use of the Internet is to seek or search for any type of information. Research has found that the primary motive for using the Internet include information-seeking (Katz & Aspden 1997; Kaye, 1998; Papacharissi & Rubin, 2000) and fulfilling interpersonal needs (Papacharissi & Rubin, 2000). Any information related to any field of study can be found on the Internet. People use various search engines like the Google and the Yahoo to know about news, weather, current affairs, education policies, government policies, laws, science and technology, law and politics, economy etc. Also they love to browse websites such as Wikipedia, which is a complete information bank on the Internet.
- Social networking: Social networking sites are an essential part of many adolescents' development and life these days. There are a vast number of social networking sites available for individuals to choose from with hundreds of factors influencing the decision to use a particular site. While individuals may give many reasons for using a particular social networking site, adolescents often use such sites as a medium for identity exploration. With the availability of extensive resources on the Internet, adolescents can create individual pages and blogs, provide personal information, and communicate with other people through various websites. One of the most popular social networking sites among adolescents across the world is Facebook. According to Facebook's December 2013 statistics, 1.23 billion users are using it worldwide while 757 million users log on to it daily. In India, Facebook has more than 93 million users who access it at least once a month and 31 million mobile users who visit the site daily. Facebook's November 2016 statistics reveal that there are 1.79 billion users of Facebook worldwide while 1.18 billion users log on to it daily (Zephoria Digital Marketing, 2016). In India, Facebook has more than 142 million active users out of

which 133 million users access the site through their mobile phones (Salman, 2016). The reason for such phenomenal growth is embedded in its very nature, which is to provide an excellent medium to communicate and socialize (Srivastava & Bhardwaj, 2014). For teenagers, the number and frequency of contact with one's friends on MySpace, Facebook, or similar sites is essentially a form of social currency, and is linked to adolescent confirmation of self-esteem in addition to providing an easy means to keep up to date with what one's friends are doing and where they are located. For children aged 9-15 years of age, participating in online social networks is becoming the norm, not the exception (Lenhart & Madden, 2007) and is a hallmark of social and peer acceptance.On sites such as these, users are able to provide personal information, continually update information, and even chat with friends. A "friends" list is created by adding people who are actual offline friends and sometimes by adding people found through the social networking sites (Schmitt, Dayanim, & Matthias, 2008). Other networking sites like Instagram and Twitter help you upload pictures, posts, etc., through which one can reach out and connect to millions of individuals across the globe. Business and employment oriented sites like LinkedIn, help people for professional networking. Here, employers post job openings, while, job seekers post their resumes. LinkedIn allows users (workers and employers) to create profiles and "connections" to each other in an online social network which may represent real-world professional relationships. Users can invite anyone to become a connection.

- Communication: The world seems to be a smaller space since the Internet is an effective means of communication. People from different parts of the world are able to interact with each other at any given point of time. Thanks to email, instant messages and video calling, people who are far across the distance can still talk.

Blogging, social networking websites and online discussion forums, are platforms that allow people to express themselves freely. People in different parts of the world can also exchange viewpoints, share data and work together. People connect via each other through various instant messaging (IM) services like Gtalk, Skype, and Yahoo messenger. There are lots of other services, such as Hike, Vchat, Lime, etc., through which people can send free messages to anywhere in the world. A recent Dutch study has shown that immediate online communication applications such as instant messaging and chatting bear a higher addictive potential than most other Internet applications (Van den Eijnden, Meerkerk, Vermulst, Spijkerman, & Engels, 2008). Instant messenger use is in fact the most popular Internet function used by adolescents (Gross, 2004; Van den Eijnden et al., 2008).

- Entertainment: There is a very close relation of Internet to entertainment. The entertainment motive often involves interactions that are entertaining. For example, college students often send each other e-mails that contain jokes or funny videos (Papacharissi & Rubin, 2000). Ferguson and Perse (2000) found that visiting entertainment sites were related to the motives of entertainment, pass time, relaxation and social interaction. Those who use the Internet tend to use it in order to fulfil their motives for entertainment and for information-seeking (Papacharissi & Rubin, 2000). Whether it is watching videos on YouTube, playing live games, watching live sports, TV shows, or downloading movies; Internet proves its domination everywhere.
- Online games: Children are more interested in using the technology for their free play. They engage in various video games being downloaded through the Internet so that they can play whenever they get free time. Playing online games does not require necessarily having a partner unlike playing with other kind of games and free play

games that children play at their homes. The computer usually plays the role of the other partner.

- Online education: Apart from offering various opportunities to entertain oneself, the Internet proves to be a great source of learning as well. The Internet is a medium benefitting both teachers and students. The Internet provides an individual with thousands of online courses to choose from, which cater to various fields. Besides being a profuse portal of information, the Internet provides up to date news on a certain subject being tackled. It also reduces barriers for people with physical impairment, who may have problems getting to the library. For students who have visual impairment, there are a lot of resources and software that can assist in their studies.
- Current affairs: The Internet also helps people to be up to date regarding the current affairs and news. Any event or incident which has taken place few minutes ago is on the Internet. It gives recent and up to date knowledge about the happenings around the world.
- Gambling: The Internet is now commonly available in the home and at the workplace, making it easier to partake in gambling. The availability of the Internet as a medium for gambling practices among adolescents is of particular concern (Dickson, Derevensky & Gupta, 2008). Adolescents are particularly vulnerable to developing addictive behavioural patterns (Griffiths and Wood, 2000; Pallanti, Bernardi & Quercioli, 2006). The Internet also provides a medium for unlimited opportunities to participate in gambling practices. Moreover, the Internet per se may provide a less protective environment for vulnerable, and consequently potentially problematic, gamblers (Griffiths, 2003; Griffiths, Parke, Wood & Parke, 2006). In particular, both, the anonymity and accessibility secured by the Internet medium allows for

adolescents to readily participate in Internet gambling at any time, regardless of the legal prohibitions and/or limitations imposed by governments regarding adolescent gambling in real-world gambling venues (Tsitsika, Critselis, Janikian, Kormas, & Kafetzis, 2011). As the early onset of gambling behaviour constitutes a risk factor for both the development and severity of problem gambling among youth (Pallanti et al., 2006; Dickson et al., 2008), the likelihood for developing consequent pathological gambling during adulthood may be augmented (Johansson and Gőtestam, 2003). In addition, it has been posited that the early onset of gambling behaviours may enhance adolescents' risk of developing multiple addictive disorders, including that of Internet addiction (Pallanti et al., 2006). As the Internet is more accessible, it is becoming cheaper for people to obtain Internet services. The Internet creates a feeling of anonymity in its users, allowing them to engage in gambling privately. It becomes more comfortable for one to gamble as no one can see them.

1.2.2 Factors that lead adolescents to use the Internet

- *Identity experimentation and exploration* - Adolescents are constantly grappling with who they are. For adolescents who are on the verge of leaving home and establishing their own life, it's particularly an intense issue. A lot of emphasis given on the self-identity and self-worth of these adolescents. While adolescents are developing their self-identity, a process of developing goals, opinions, attitudes, and new traits, the Internet provides a space in which identity can be explored and experimented with. Personal homepages and blogs are the most public and personal forms of self-presentation on the Internet; in these mediums, adolescents are able to experiment with various self-presentations and essentially gain feedback from peers and others. According to Schmitt, Dayanim and Mattias (2008), children in early adolescence may be spurred to create personal online homepages due to the development of

mastery motivation (one's ability to accomplish a goal, such as online content creation), a key developmental challenge for children aged six to twelve, in reference to Erik Erikson's (1963) developmental theory. Schmitt at al. (2008) surveyed children aged 8 to 17 and their parents on technology use and access, self presentation when interacting with others on the Internet, and mastery skills and identity formation. A majority of the participants reported feeling proud of their homepage creation skills (showing mastery of the technique), in support of Erickson's theory, and that it would be easy to learn new technologies. In relation to identity development, 80% of participants who had created personal websites reported that the site helped them understand who they are as an individual.

- *Intimacy and belonging* - During adolescence, humans experiment intensely with new intimate relationships, especially opposite sex relationships. They look for friends and companions and new groups where they can feel a sense of belonging. All these relationships become a big part of exploring one's own identity. On the Internet, there is an unlimited range of people and groups to interact with - all kinds of people and groups with all kinds of personalities, backgrounds, values, and interests. Several studies have reported links between family characteristics and Internet addiction. For instance, quality of the parent–child relationship was negatively associated with level of Internet addiction among students (Liu & Kuo, 2007), while parent–adolescent conflict (Yen, Yen, Chen, Chen & Ko, 2007) and lower satisfaction with family functioning (Ko et al., 2007; Yen, et al., 2007) were positively related to adolescent Internet addiction.
- *Separation from parents and family* - For adolescents' their search for identity, relationships, and groups goes hand-in-hand with their drive to separate them from their parents. They want to be independent, to do their own thing, to have an identity

of their own self. It's an exciting process, and cyberspace is an exciting place to fulfill those needs of a growing, exploratory spirit. On the other hand, adolescents are also anxious about the separation process. The fascinating thing about the Internet - and perhaps one of the reasons why it is so alluring to some adolescents - is that it neatly takes care of this ambivalence.

- *Venting frustrations* - Adolescence is a stressful period which is one of the most difficult and frustrating period of life. Expectations from school, family, and friends can feel overwhelming at times. What does one do with all those frustrations, including the sexual and aggressive ones? The safest place where adolescents can vent out their frustrations is the Internet. While some may view the Internet as simply another element in the lives of adolescents, it can be a powerful and significant factor contributing to their development. When adolescents are exploring their identity, the Internet can be a safe outlet for experiences such as mood swings, self-doubt, confusion, and conflict with parents; adolescents may be able to explore their feelings more and gain support from others with similar experiences (Williams & Merten, 2008).

1.3 Models of Excessive Internet Use

As of this point in time, there are no fixed answers to the question, "what causes excessive Internet use?" Nevertheless, there have been many attempts and theories proposed by medical doctors and psychologists to explain factors contributing to addictive disorders. These viewpoints include psychodynamics and personality model, socio-cultural model, behavioral model, biomedical model and cognitive model.

1.3.1 Psychodynamics and Personality Model

Psychodynamic and personality views account for excessive use of Internet through early childhood traumas, correlations with other certain personality traits or other disorders, and

inherited psychological dispositions (Sue, 1994). A dispositional model or diathesis-stress model of addiction might help in understanding excessive use of the Internet by adolescents. Certain people, due to a variety of factors, may be predisposed (diathesis) to developing an addiction to something, be it alcohol, heroin, gambling, sex, shopping, or on-line computer services. Despite this, some may go through their entire lives not developing any kind of addiction. On the other hand, if the stressor, or combination of stressors, affects the person at a critical time, the person may be more inclined to develop an addiction. If the person begins drinking alcohol even occasionally, but continues to increase consumption, he may develop a dependency on alcohol. The same premise holds for Internet addiction. The correct combination of time, person, and event, will mostly lead to addiction. The idea is that it is not the activity or subject that is important. It is the person that is most crucial to the equation (Ferris, 2007). Survey research has suggested that personality characteristics may include low sensation seeking, shyness, and low locus of control (Chak & Leung, 2004). According to the feelings state theory of impulse-control disorder (Miller, 2010) individuals compulsively go on doing an act that produces positive feelings and thus addiction is linked to the experience of a positive state of feelings which the individual wants to experience again and again. As noted impulsivity and low self- regulation result in the development of Internet addiction (Larose, Mastro, & Eastin, 2001). Poor self- regulation that leads to the development of addiction is characterized by an inability to use psychological energy, inattention and absence of relational judgment, inaccessibility of goal representations and disorganized cognitive structures (Karoly, 1993). All these hidden mechanisms function at the service of poor self- regulation that in other words make the person susceptible to Internet abuse.

Individuals suffering from loneliness and depressive tendencies are found to be more vulnerable to the abuse of Internet so much so that they become addicted to it without which

life would be unbearable. Empirical studies report higher incidence of Internet addiction among lonely and depressive individuals compared to normal individuals (Whang, Lee, & Chang, 2003; Hopley & Nicki, 2010). Lonely and depressive individuals, in an attempt to offset these feelings, turn to this new form of technology that provides varied sources of pleasure in a rather passive and effortless manner. Internet provides a safe haven, confined setting, greater anonymity and reduced importance of physical appearance (McKenna & Bargh, 2000) to those individuals who are otherwise unable or unwilling to seek social activities.

Grohol's (1999) Model of Pathological Internet Use describes addiction as being directly related to the recency of exposure to the Internet. According to him, Internet addiction occurs in three phases. The first phase of initial exposure to Internet is accompanied by obsession and enchantment. During the second phase, disillusionment with the Internet sets in and the user avoids online activity. The third phase is characterized by a balancing of the two previous phases and development of normal non-problematic use. This model is supported by the findings that 82% of self-described Internet dependents had been online for less than one year (Young, 1998).

1.3.2 Socio-Cultural Model

Addictions vary according to sex, age, socioeconomic status, ethnicity, religion, and country. Some addictions are more common among persons of different categories. For example, alcoholism is most common in the middle socioeconomic classes, in Native and Irish Americans, and in Catholics. Whites are more likely to use phencyclidine (PCP) and hallucinogens, but less likely than Blacks or Latinos to use heroin (Sue, 1994). Not enough data is available yet about those persons addicted to the Internet to determine if a particular class is more predominant. In addition, at this point there is not enough diversity among Internet users to make any definitive statements. As the diversity among users' increases, and

as the amount of research on the problems caused due to excessive Internet use increases, it will be easy to determine the socio cultural vulnerable groups for excessive use with regard to the Internet (Ferris, 2007).

1.3.3 Behavioral Model

According to the behaviourists working on operant conditioning (Sue, 1994), the person performs a behaviour and gets either rewarded or punished for the behaviour. For instance, there might be a child who is very shy and fears meeting new people. Whenever it is time for recess, he goes off on his own, and does not play with the other children. Thus, he avoids having to talk to anyone new, and consequently avoids the anxiety associated with new encounters. This avoidance of anxiety is rewarding and reinforces his behavior. This means that he is likely to engage in this behavior (escaping from the problem) in the next recess, or the next time he must meet new people. He resorts to Internet since it offers love, excitement, physical, emotional, and material comfort, and a means to escape from reality. These can all be rewards. If an individual wants these rewards and learns that the Internet will allow him to escape, or receive love, or have a lot of fun, he will probably turn to the Internet the next time he feels these needs. This becomes reinforcing, and the cycle continues (Ferris, 2007)

1.3.4 Biomedical Model

There has been no empirical research investigating the relationship between genetics or biology and Internet use. These theories focus on hereditary and congenital factors, chemical imbalances in the brain and neurotransmitters. There could be chromosomes, hormones, and surplus or lack of certain necessary chemicals and neurotransmitters that regulate activity in the brain and the rest of the nervous system. According to this perspective, this would cause someone to be susceptible to addiction (Sue, 1994). There is definitive research which shows that some drugs act to fill in the synaptic gaps of the neurons in the brain, fooling the brain into sending out faulty information. This is one of the reasons for the "high" one gets from

engaging in activities such as running, drug use, and gambling. This might apply to excessive usage of Internet, since many opportunities on the Internet are fun and exciting (Ferris, 2007). Besides this, there has been no research investigating the brain and its possible alteration through dependency; although, some have suggested that behavioral dependencies may alter the brain in a manner similar to substance dependencies (Beard & Wolf, 2001; Beard, 2005). Some recent researches on the brain differences have shown that there is lesser volume of the white matter in the brain of people who are hooked onto the Internet for long hours as compared to those who do not use the Internet much (Walton, 2012).

1.3.5 Cognitive Model

According a cognitive-behavioural model by Davis (2001), an individual's problematic thought patterns lead to Compulsive Internet use (CIU) and obsessive thoughts about the online material and development of feelings where the Internet is perceived as a ''friend'' further encourages the behaviour.

He explains that CIU is the consequence of problematic cognitive or behavioral patterns that evolve around daily Internet use, which leads to several behaviors that strengthen or maintain the maladaptive responses. According to him, both daily Internet use and CIU are related to people's social contexts. That is to say, a lack of social support from one's family members or peers, and/or experiencing social isolation in the peer context may facilitate the development from daily Internet use to CIU, because the social connections and reinforcement which are obtained on the Internet may result in an increased desire to maintain a ''virtual'' social life. When adolescents develop CIU, however, they have little time and energy left to actively maintain social connections in daily life, and this would increase their risk for the onset of feelings of loneliness, depressive moods, and low self-esteem (N Var der, Overback, & Engels, 2008).

Davis proposed that psychosocial problems such as loneliness and depression are the extreme causes of CIU. Lonely and depressed individuals turn out to have higher preference for online interaction, since they perceive that online communication might be the ‘‘Prozac of social communication,’’ relatively less risky and easier than face-to-face communication because of its greater anonymity. This model is refined to become the social skill account of CIU. According to this model, individuals who have deficient self- representational skills might prefer online communication to face-to-face communication. As they devote more time and attention to their online social interaction, some of them have a hard time regulating their Internet use, which is termed as compulsive. Compulsive use in turn leads to negative life outcomes such as lower academic grades, missing classes or work, and missing a social engagement (LaRose, Kim, & Wei, 2009).

Caplan (2003) proposed that one of the important cognitive symptoms of CIU is a preference for online, over Face to Face (FtF) social interaction. According to Caplan “preference for online social interaction is a cognitive individual-difference construct characterized by beliefs that one is safer, more efficient, more confident, and more comfortable with online interpersonal interactions and relationships than with traditional FtF social activities” (Caplan, 2005). The cognitive perspective gives importance to the mental processes of thoughts, images, symbols, visualizations and the way the cognitive processes are organized and structured to interpret and deal with the world. The individual as an information processor attends to, registers, stores and uses information from internal and external environments. In the cognitive approach to understanding the addictive behavior, the focus is on the role of cognitions and/ or cognitive processes in the mediation of the addictive behavior (Craighead & Craighead, 2003). In gambling studies it has been found that the player’s cognitions and the machine interact in such a way that it fires the play and the players continue to remain in the game which leads to the identification of dysfunctional and

disordered cognitions (Nower & Blaszczynski, 2010). Dysfunctional or disordered cognitions and/or cognitive processes trigger the addictive-behavior in conscious and unconscious ways. The presence of complex memory schemata (Oxford, 2001), cognitive biases (Sher & Slutske, 2003) automatic, implicit and preconscious processing of stimuli (McCusker, 2001) and thinking styles (Emond & Marmurek, 2010) all contribute to the development of the addictive behavior. That is, Internet provides a platform for the individual to stimulate these forms of thoughts such that it facilitates these lower order forms of thinking. The platform opens a gateway to these forms of thoughts that become pleasurable, satisfying and gratifying to the individual. The varied forms of material embedded in the world wide web stimulates and fires the thought processes of the individual at lightning speed that the mind of the individual sinks into a state of utter chaos, bewilderment and wonder so far not encountered by the individual. The whirlwind opened by the Internet technology opens another whirlwind of pleasure and excitement to which the individual becomes an easy addict.

1.4 Various aspects of Internet use in adolescents

In the search for a unique social identity for themselves, adolescents are frequently upset. Struggles with adolescent identity and depression usually set in when an adolescent experiences a loss. The most important loss in their lives is the changing relationship between the adolescent and their parents. Adolescents may also experience strife in their relationships with friends. This may be due to the activities their friends take part in, such as smoking, which causes adolescents to feel as though participating in such activities themselves is likely essential to maintaining these friendships. Teen depression can be extremely intense at times because of physical and hormonal changes but emotional instability is part of adolescence. Their changing mind, body and relationships often present themselves as stressful and that change, they assume, is something to be feared. Sleep deprivation has also been linked to adolescent depression, particularly in the teen years.

It is critical to view the Internet as a new social environment in which universal adolescent issues pertaining to identity formation, sexuality, and self-worth are explored in a virtual world (Subrahmanyam, Reich, Waechter, & Espinoza, 2008). As a social context, the Internet enables multiple communication functions, such as E-mail, Instant Messaging (IM), chat, and blogs, to allow adolescents to participate and co-construct their own environments (Greenfield & Yan, 2006). Easy and continuous access to the Internet provides numerous opportunities for adolescent socialization, allowing them to connect with their peers as well as with complete strangers from across the world. Clearly, the Internet has transformed the social world of adolescents by influencing how they interact, establish and maintain relationships, and find social support. Number of studies has highlighted the danger that excessive Internet use may pose to students as a population group. This population is deemed to be more vulnerable and at risk given the accessibility of the Internet and the flexibility of their schedules (Moore, 1995).

While the Internet has become a vital part of our lives today, many studies have shown that there are differences based on age group and gender in terms of uses of Internet and the amount of usage.

1.4.1 Differences in Internet Usage Based on Gender:

Some studies regarding gender differences in Internet use have shown that men are more likely to use Internet for varied purposes as compared to women. It has also been seen that the results seem to vary depending on the demographics of the sample on which the research was conducted. For example, Nachimias, Mioduser, and Shelma, (2001) indicated a bias towards male use of the Internet amongst Israeli school children. Similar results were found by Durndell and Haag (2002) amongst Romanian university students. Furthermore,

Schumacher and Morahan-Martin (2001) made related findings with a sample of American undergraduate college students.

Several studies on Pathological Internet use (PIU) have also suggested that males are more likely to be High Internet users as compared to females. For example, in a study by Niemz, Griffiths and Banyard (2005), it was found that males were three times more likely than the females to be PI users. This is consistent with another study where males were seven times more likely to be PI users than females (Anderson, 1999). Scherer (1997) found that males were almost three times more likely, and Morahan-Martin and Schumacher (2000) who found male PIU to be four times higher. Li et al., (2014) found that males (14.8%) were twice as likely as the females (7.0%) when it came to Internet use.

Many studies have also shown that men are more likely to use the Internet for many other purposes such as research purposes and engage in online shopping (LaFerle, Edwards, & Lee, 2000; Odell, Krogen, Schumacher, & Delucchi, 2000; Weiser, 2000). Other authors have indicated that males may more likely play or download games (LaFarle et. al., 2000; Odell et al., 200; Weiser, 2000; Nachimias et al., 2001), listen to or copy music (Odell et al., 2000) and also use the Internet to find out about their subject of interest (LaFarle et al., 2000; Mandell & Muncer, 2004).

In a survey among adolescents, it was found that - among school going adolescents, the incidence of technology addiction (Internet and mobile addiction) was moderate and females were at lower risk to develop technology addictions like – Internet addiction (Ruiz-Olivares, Lucena, Pino, & Herruzo, 2010)

However, there have been a few researches where significant differences among both the genders were not seen in terms of Internet use. For example, Soh, Teh, Hong, Ong and Charlton, (2013), in their study on Malaysian urban school adolescents, found no significant difference between males and females in terms of Internet usage. In a similar kind of a study

done in Thailand on children and youth aged 6-24 years, 76.3% of them were Internet users, with no significant difference between males (52.6%) and females (47.4%) (National Statistics Office, 2010). Brenner (1997) also did not find any significant gender differences in the use of Internet. In a similar kind of study done in India (Thanuskodi, 2013), it was found that there was not much of a significant difference between the males (52.3%) and females (47%) use of the Internet. Odell et al., (2000) too found that there was virtually no gender gap in Internet use in their sample of American undergraduates. Similar results were found by Teo and Lim (2000) with their sample of undergraduates in Singapore and by Jackson, Ervin, Gardner, and Schmitt (2001) with their sample of Anglo American undergraduates (Mandell & Muncer, 2004).

Thus, although there has been no major difference in the number of male and female Internet users, the results from various studies show difference in the purpose for which males and females use the Internet. Males are found to be using Internet for varied reasons such as gambling, shopping, downloading and playing online games, whereas females use the Internet mainly for chatting and online shopping.

1.4.2 Differences in Internet Usage Based on Age Group/Grade:

Across many studies, people in the age group of 20 to 35 years have been the highest users of the Internet. Prevalence of excessive Internet use among adolescents have been reported as 6.7% in Hong Kong (Fu, Chan, Wong, & Yip, 2010), 12% in Asia (Hechanova & Czincz, 2008) and 10.7% in South Korea (Park, Kim, & Cho, 2008). Ko, Yen, Lui, Huang and Yen (2009) conducted a study on adolescents and reported a direct correlation between age and Internet addiction. Yang and Tung (2007) studied the high school students and noted that although the prevalence of Internet addiction drops with grade, this was not statistically

significant. Johansson and Götestam (2004) studied Norwegian high school students and found no relationship between age and Internet addiction.

Şaşmaz et al., (2013) in their study found Internet addiction to be significantly higher in 9th Grade students than in other students among female individuals. Also, the comparison of students relative to grade level showed that Internet addiction was higher in male than in female participants across all grades.

Contrary to this, Muthuthandavan & Christadoss (2014) found that 59.4% of adolescents in Grades VIII and IX and 75.3% in Grades X to XII in Chennai were Internet users. The difference between the two groups was statistically significant. DeBell and Chapman (2006) also found Grade 12 participants to be the highest users of the Internet (81%) as compared to Grades 9 (70%) and Grades 10 and 11 (80% each).

Based on the criteria for addiction in DSM-IV that psychologists often use, online surveys estimate the prevalence of addictive behavior patterns among heavy Internet users ranges from 6% (Greenfield, 1999) to as high as 80% (Young, 1998).

A number of researches have been conducted on Internet abuse and other Internet-related problems. The results show that around 15% of university students in the United States and Europe know someone who is addicted to the Internet (Anderson, 1999; Morahan-Martin, 2005).

Accurate prevalence of Internet use in the general population has not been established in spite of abundant researches done to study the behaviour patterns pertaining to Internet use. This may be due to the lack of consensus and lack of large epidemiological studies in the field.

1.5 Indian Scenario

Increase in the use of the Internet has been evident worldwide. In Asia too, it has grown from 114 million Internet users in the year 2000 to 1.07 billion by the end of the year 2012. India is a fast growing developing nation and the latest technology never hesitates in making its way

in to the Indian society. In India, there were around 137 million Internet users in June 2012 as compared to 5 million in the year 2000 (www.Internetwolrdstats.com, 2012). We observe that most of the students now own a cell phone which was a luxury a decade back. According to a research conducted by the Internet and Mobile Association of India (IaMAI) and the Indian Market Research Bureau (IMRB) in June 2013, India had 190 million users of the Internet, of which 130 million users were urban users and 60 million of them belonged to the rural India (IAMAI, 2013). With the introduction of new technology from the developed nations, the rise in the prevalence rate of Internet users has also increased in India.

India, with a little over 300 million users, is the second largest wireless market after China, and has the world's second largest Internet user base after China (D'Monte, 2015). According to an article published in The Hindu (2013), India was the third largest user of Internet after China and the United States. According to the report titled Mobile Internet in India, published by the Internet and Mobile Association of India (IaMAI), there were around 389 million mobile Internet users in India as on December 2016 (Agarwal, 2017). In India, middle class youth have different ages in becoming active Internet users, with boys starting to use social media actively at 14.1 years of age while girls start using social media almost a year later at 15.2 years of age (Bhola & Mahakud, 2014). Indian men are more likely to engage with social media with the purpose of identifying a potential spouse, whereas women are more likely to use social media to develop and maintain relationships (Gonibeed, 2014).

Cyber bullying is becoming a big problem and a recent survey (The Hindu businessline) found that India is third on the list behind China and Singapore. Cyber bullying has been associated with some disastrous outcomes including attempted and completed suicides (NDTV) as the impact of cyber bullying is probably more than face-to-face bullying given that a few posts on Facebook can let the world know about your secrets! These issues further

highlight the vulnerability of young people and the impact that such media is having on their development and psychological well-being.

Episodes of completed and attempted suicides by teenagers have also been linked in the media to being restricted from using social networking sites like Facebook (Srivastava & Bhardwaj, 2014).

Approximately 46 percent of India's offline population are youth—a demographic that is typically an early adopter of technology. Since the International Telecommunications Union's definition of Internet users includes only the population above 6 years of age, India's future Internet user population could grow rapidly (as of 2012, its median age was the lowest in the world, with 58 percent of the total population under the age of 30) (McKinsey & Company, 2012). This demographic dividend will be a key driver of Internet growth in India. Growth projections for India's online population vary widely, ranging from approximately 150 million to 500 million new users by 2018.

The increase in the Internet penetration in India has been majorly driven by the rapid expansion in mobile network coverage, shrinking device and data plan prices and increasing utility of the Internet (Gnanasambandam et al., 2012). In the past few years, India has witnessed a humongous growth in the sales of smartphones. With the expansion of mobile network coverage, mobile connections in India grew from 21% in 2013 to a penetration of 35% in 2014 with almost 451million population. While 2G coverage was reported to be 87%, 3G coverage reached out to 75% of the population by the end of 2014 (Groupe Speciale Mobile Association (GSMA), 2015). The number of mobile Internet userbase in India has increased from 238 million in June 2014 to nearly 306 million by the end of December 2015, a report by Internet and Mobile Association of India (IMAI) said. Further the report also said that the mobile Internet users in India are expected to grow at 55% to 371 million users by June 2016, out of which 71% of them would belong to the urban areas. The massive adoption

of low-price smartphones is allowing the users to carry their digital world with them. The lowering cost of mobile data and free accessibility to the Internet via WiFi in many areas is attracting smartphone users like never before. Consequently, the average consumption of mobile data per smartphone user in India is expected to reach 2.08 GB per month by 2020, up by 384% from mere 430 Mb in 2015, claims Cisco (Salman, 2016).

The rapid development in the telecommunications technology in the past decade has changed many aspects of our lives, including e-commerce, i.e., the buying and selling of products and services through electronic channels. With an expected 33% of the global market in 2015 and over 37% in 2018, the Asia Pacific region is becoming the leader of the e-commerce industry. Recent statistics show that retail e-commerce sales in India have grown tremendously, from 2.3 billion U.S. dollars in 2012 to an estimated 17.5 billion U.S. dollars in 2015, representing an almost eight-fold growth. As of 2015, the retail e-commerce sales as a percent of total retail sales in India are set to account for 0.9 percent of all retail sales in India, but this figure is also expected to grow in the near future, reaching 1.4 percent in 2018. (https://www.statista.com/topics/2454/e-commerce-in-india/). The impact could be felt more in urban than rural areas; 50 percent of urban online Indian consumers cited online shopping as a main use of the Internet, a higher rate than that of India's rural population.

1.6 Groups vulnerable to Internet use

Growing concern over the recent exponential increase of Internet use among teenagers has spawned a surge of research into the possible adverse effects of Internet use on well-being, with a primary focus on internalizing problems (Kraut et al., 1998; Weiser, 2000; Caplan, 2003; Gross, 2004). Recent US (Gross, Juvonen, & Gable, 2002), Canadian (Hampton & Wellman, 2002), and Dutch (Sikkema, 2005) studies have shown that the vast majority of adolescents spend several hours daily online. Further, surveys show that adolescents consider the Internet a highly important medium in their everyday social life and use it to form and

maintain social relationships (Wolak, Mitchell, & Finkelhor, 2003; Subrahmanyam, Šmahel, & Greenfield, 2006; Valkenburg & Peter, 2007b). One theoretical approach to this phenomenon is that Internet use robs individuals of their social activities and might intervene with the development and maintenance of social relationships (Nie & Erbring, 2000; Weiser, 2000; Amichai-Hamburger & Ben-Artzi, 2003; Caplan, 2003). In line with this reasoning, several cross-sectional survey studies have found that Internet use was associated with more depression for adolescents (Sun et al., 2005; Cooper, 2006) and adults (Nie & Erbring, 2000; Weiser, 2000; Amichai-Hamburger & Ben-Artzi, 2003; Caplan, 2003). In contrast, another theoretical approach is that Internet use expands, rather than displaces, possibilities to contact peers, and thus enhances feelings of self-esteem and well-being (Morgan & Cotten, 2003; Valkenburg & Peter, 2007b). In accordance with this, cross-sectional survey studies have shown that college students' Internet use was directly (Morgan & Cotten, 2003) and indirectly (LaRose, Eastin, & Gregg, 2001) related to depression. Furthermore, studies have revealed that Internet use can lead to online relationship formation, and thereby to more social support (Nie & Erbring, 2000; Wellman, Quan-Haase, Hampton, & Witte, 2002; Wolak, Mitchell, & Finkelhor, 2003), which may subsequently lead to less internalizing problems. Kraut et al., (1998) found that, over a period of 8-12 months, both loneliness and depression increased with time spent online among adolescent and adult first-time Internet users.

Researchers have explored the links between excessive Internet use and a variety of factors, including demographic characteristics such as gender (Amichai-Hamburger & Ben-Artzi, 2003), personality traits such as neuroticism and extraversion (Wolfradt & Doll 2001), emotional states such as loneliness and anxiety (Caplan, 2003; Moody 2001; Shepherd & Edelmann, 2005; Yao, Lin & Feng, 2006), inadequate social support networks (Cummings,

Butler & Kraut, 2002; Kraut et al., 2002) and specific types of Internet activities (Widyanto & McMurran, 2004).

Concerns about how media may influence young people has been around ever since the advent of media itself. Research on this question has drawn from the media effects model, which suggests that media influences users' attitude and behaviour. Extrapolating to the Internet, the expectation is that online use, similar to the use of television and video games will have effects on the user. One mechanism of influence centers on online time use Subrahmanyam & Šmahel 2011). The idea is that online activities represent not only time spent on the Internet but also time away from other activities. This idea is reflected in the displacement hypothesis, which argues that since time is a limited quantity and the time spent on the Internet comes at the cost of neglecting other activities (Nie & Hillygus, 2002). With regard to young people, activities that may be displaced because of Internet use include sleep, participation in physical activities (e.g., organized sports), and social interactions with "real people" in face-to-face contexts as well as over the phone.

A second mechanism of influence involves the nature of online interactions and communication (Subrahmanyam & Šmahel, 2011). Such interactions typically occur via a screen, involve text, and may lack important face-to-face cues, such as gesture, gaze, and body language (Greenfield & Subrahmanyam, 2003). Thus online interactions may be "artificial" or "poor" or "impoverished" and result in what sociologists call "weaker ties" (Granovetter, 1973; Subrahmanyam, Kraut, Greenfield, & Gross, 2000). It is speculated that such Internet-engineered weaker ties may ultimately lead to lowered psychological well-being (Kraut et al., 1998; Subrahmanyam & Lin, 2007).

A third pathway of influence stems from the vast and virtually unlimited content of the Internet that we can access at any time with little effort. Some of this content can be used for considerable benefit such as for school work, to answer questions about wellness and illness,

and general information needs (e.g., jobs, internships, careers, community events, etc) Subrahmanyam & Šmahel, 2011). Unfortunately, the Internet also includes content that can be potentially harmful for young people, for instance, aggressive and hateful sites as well as pornographic material. Internet activities may not only displace physical and social activities, but also potentially replace "higher quality" face-to-face activities with "lower quality online social activities".

1.7 Problems Associated With Internet Usage/ Variables under study

The Internet has made a significant impact on life worldwide. Many people rely on the Internet to make a living, while others incorporate the Internet effortlessly into their social lives or as a form of entertainment. However, for many people, the Internet presents a safe place that becomes a retreat and, ultimately, withdrawal from the real world. The health effects that result from excessive usage of Internet can be serious and sometimes even life-threatening.

Many feel out of control and helpless and report serious impairments in their lives as a result of their Internet use. Impairments include work and school-related problems and dismissals, interpersonal problems, separations and divorces, and even impaired health (Orzack, 1999; Young, 1998). Research also has confirmed that for some Internet users their use of the Internet has characteristics akin to those found with substance abusers and gambling addicts. These individuals are likely to use the Internet to alter moods (i.e., when down or when anxious or as an escape), are preoccupied with using the Internet, have symptoms of tolerance and withdrawal, have tried unsuccessfully to cut back on use, and have serious disturbances in their lives because of their Internet use (Morahan-Martin, 2001, 2005).

1.7.1 Physical Health

Physical health can be defined as a state of well-being when all internal and external body parts, organs, tissues and cells can function properly as they are supposed to function. This

also includes physical health as a state of physical well-being in which a person is physically fit to perform their daily activities without restrictions (www.normalbreathing.com). Good physical health would mean that, for example, our ears can normally hear, our eyes have normal vision; our legs can walk, jump, run, and perform many other normal activities without problems. Physical health can thus be defined as general condition of a person in all aspects. It is also a level of functional and/or metabolic efficiency of an organism. Internet overuse can lead to sedentary lifestyles, weight gain and a decline in physical fitness. Other symptoms can include carpal tunnel syndrome, dry eyes, migraine headaches, a decline in personal hygiene and back aches, according to Maressa Hecht, founder of Computer Addiction Services and a member of the Harvard Medical School (Cocke, 2013). As children spend more time on the computer, they typically spend less time in physical activities. The sedentary lifestyle associated with computer usage can be prime risk for obesity, according to clinical psychologist Kaleyvani Geeseeny Sawmy, author of "The Impact of Internet use on Children/Adolescents. Physical ailments, such as constant headaches, backaches, eye strain, blurred vision, dry eyes, musculoskeletal discomfort, pain and fatigue, may signal that an individual is spending too much time on the computer. Carpal Tunnel Syndrome (numbness and pain that can affect hands, wrists, elbows and shoulders) may also be seen in people spending too much time on the Internet which takes a toll on the body (Patrick, 2015). Newborne (2000) summarized the impacts of Internet addiction on the health status of the individuals. According to him, the obsessive Internet user is likely to become obese since the individual spends most of his time in front of the computer. There is no time for physical exercise and the excessive fat and calories just keep on piling up in the body. Secondly, too much Internet use can cause visual impairment as the person spends most of time on staring at the computer screen which emit lot of radioactive rays.

Pertaining to the above mentioned criteria, we define physical health as a general condition of an individual's well being when all his internal and external body parts, organs, tissues, and cells can function properly as they are supposed to function.

1.7.1.1 Musculosketal pain

Musculoskeletal pain is the pain that affects the muscles, ligaments, tendons and bones (www.pain-focus.com). Musculoskeletal pain can also be chronic or persistent. One of the most common types of musculoskeletal pain is low back pain. Overuse (for instance, in work-related injuries or repetitive stress), poor posture or prolonged immobilization can also lead to chronic musculoskeletal pain. There are many causes for musculoskeletal problems which include harm to muscles due to accident, trauma to an area or overuse and lengthened restriction of body movements. In a Nigerian study (Adedoyin, Idowu, Adagunodo & Idowu, 2003) on computer related musculoskeletal disorders among 1250 university students it was found that lower back pain and neck pain rated the highest pain complaint with 74% and 73% respectively; 67% of the respondents complained of wrist pain, followed by finger pain (65%), shoulder pain (63%) and general body pain (61%). The knee and foot pains were the least complaints reported with 26% and 25% respectively. The reason for such pain may be attributed to bad body posture while sitting for longer periods of time on the computers. Keeping in mind the above fact, we thus define musculoskeletal pain as the pain that affects the bones, muscles, ligaments and tendons of our body due to overuse, poor posture and immobilization of body movements.

1.7.1.2 Fatigue

Fatigue is a state of awareness describing a range of afflictions, usually associated with physical and/or mental weakness, though varying from a general state of lethargy to a specific work-induced burning sensation within one's muscles. Fatigue can be defined as a feeling of extreme tiredness resulting from physical or mental exertion or illness

(www.emedicinehealth.com). Physical fatigue is the inability to continue functioning at the level of one's normal abilities due to lack of energy and motivation. Mental fatigue, on the other hand, is a weakness in mental activities due to stress, which often manifests in sleepiness. In a cross sectional study done on female hospital nurses in Taiwan (Lin, Tsai, Chen, & Koo, 2012), statistically significant associations were found between fatigue levels and Internet use.

Pertaining to the above facts, we therefore define fatigue as a state of extreme tiredness and lack of energy resulting from physical or mental exertion.

1.7.1.3 Immunity

Immunity is a state of having sufficient biological defenses to avoid infection, disease, or other unwanted biological invasion. In other words, it is nothing but the capability of the body to resist harmful micro-organisms or toxins from entering the body. According to the Webster dictionary, immunity is defined as a 'condition of being able to resist a particular disease especially through preventing development of a pathogenic micro-organism by counteracting the effects of its products'. According to a study conducted by Professor Phil Reed of Swansea University, UK (Times of India, 2015), it was found that people who have greater levels of Internet use, catch more cold and flu, thus damaging their immune system. People with greater levels of Internet addiction had around 30% more cold and flu symptoms than those with less problematic Internet usage.

Pertaining to the above facts, we thus define immunity as the ability of an individual to resist particular infections and toxins from entering the body.

1.7.1.4 Stamina

Stamina is a measure of the capability to sustain prolonged stressful efforts. Stamina provides valuable insight into overall physical constitution and power to endure disease, fatigue, and illness. Webster's dictionary defines stamina as 'a great physical and mental strength that

allows you to continue doing something for a long time'. A survey from Hearst Communications found that the productivity levels of the people that used social networking sites were 1.5% lower than those that did not (Brian, 2013). People who sit for long hours on the Internet do not exercise, which in turn, decreases their stamina and makes them feel lethargic.

Thus, we define stamina as the capability of great physical and mental strength that allows an individual to continue doing something for a longer period of time.

1.7.2 Mental Health

World Health Organization (WHO) defines mental health as a state of well being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community'. Poor mental health can be associated with rapid social changes, stressful work environment and unhealthy lifestyle. Several studies have shown that people who generally are anxious, depressed and stressed are more prone to use Internet excessively. The individual may use the Internet to distract himself from his worries and fears. An anxiety disorder like obsessive-compulsive disorder may also contribute to excessive email checking and compulsive Internet use. On the other hand, the Internet can be a means to escape from feelings of depression, but too much time online can make things worse. While some people may use the Internet to relieve the stress, it can have a counterproductive effect if a person sits for too long on the Internet. Excessive Internet usage may further contribute to stress, isolation and loneliness. In a 1-year longitudinal study, it was found that people who spent more time on the Internet subsequently developed higher levels of depression and loneliness (N var der, Overback, & Engels, 2008). Similarly, Sanders, Field, Diego & Kaplan (2000) also found a higher rate of depression and social isolation among adolescents who were high users of the Internet. Excessive Internet use in children and adults has been linked to physical

and social withdrawal and isolation from things such as schoolwork, careers, friends and family.

Thus, for the present study, we define mental health as a state of well being in which every individual realizes his or her own potential, can cope with the normal stresses of life and can work productively and fruitfully without hampering his daily routine.

1.7.2.1 Mood

Mood is a conscious state of mind or predominant emotion (Webster's dictionary). Moods differ from emotions in that they are less specific, less intense, and less likely to be triggered by a particular stimulus or event. Moods generally have either a positive or negative valence. In other words, people typically speak of being in a *good* mood or a *bad* mood. In a pilot study lead by Dr. Peter Polos and colleagues in JFK Medical Center (2010), it was found that more than half of children and teenagers who text, or surf the Internet at bedtime are likely not only to have problems falling asleep, but experience mood, behavior and cognitive problems during the day (Paddock, 2010). The findings also reported that those who used electronic technology to do things like text, send emails, surf the Internet and play online games at bedtime not only experienced sleep-related problems such as excessive movements, leg pain and insomnia, but also had a "high rate of daytime problems, which can include attention deficit hyperactivity disorder (ADHD), anxiety, depression, and learning difficulties. Scientists at Swansea and Milan Universities have found that young people who use the Internet for excessively-long periods can suffer from increased negative moods after they stopped using the Internet, possibly triggering them to re-engage in the use of the Internet to remove these unpleasant feelings (Romano, Osborne, Truzoli & Reed, 2013).

Thus, for the present study, we define mood as a conscious state of mind or feeling.

1.7.2.2 Depression

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, feelings and physical well-being. According to the WHO, depression is a mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self worth, disturbed sleep or appetite, feelings of tiredness and poor concentration. Depressed people may feel sad, anxious, empty, hopeless, helpless, worthless, guilty, irritable, or restless. They may lose interest in activities that once were pleasurable, experience loss of appetite or overeating, or problems concentrating, remembering details or making decisions; and may contemplate or attempt suicide. In relation to the Internet over use, people and adolescents often go into depression when they think low of their self-image, or they are very sure that they have very limited number of friends in the real life. So as to get out of that sad feeling of not having any friends, such adolescents take Internet as their medium to interact with people of various ages all across the globe. A study published in the "Archives of Pediatrics and Adolescent Medicine" found depression, as well as ADHD and social phobia, to increase the chances of excessive Internet use in adolescents. It was found in a study that using the Internet to communicate with friends and family was associated with declines in depression (Bessière, Pressman, Kiesler, & Kraut, 2010).

For the present study, definition of depression has been taken as that defined by the WHO.

1.7.2.3 Withdrawal

According to the Webster's dictionary, withdrawal is an act of moving or taking away something. In psychology, it means physical reaction to the cessation of an addictive substance. Thus, withdrawal is commonly used to describe the group of symptoms that occurs upon the abrupt discontinuation/separation or a decrease in dosage of the intake of medications, recreational drugs, and alcohol or any addictive substance. In order to experience the symptoms of withdrawal, one must have first developed a physical/mental

dependence (often referred to as chemical dependency). This happens after consuming one or more of these substances for a certain period of time, which is both dose dependent and varies based upon the drug consumed. Too much Internet use can make an adolescent dependent upon the Internet. Use of the Internet, like watching TV, may represent a privatization of entertainment, which could lead to social withdrawal and to declines in psychological well being (Kraut et. al, 1998). When the use is discontinued for various reasons by force, this may result in the child being withdrawn from the family.

Pertaining to this, in the present study we define withdrawal as a group of symptoms that occur upon the abrupt cessation or discontinuation of Internet use.

1.7.2.4 Anxiety

American Psychological Association (APA) defines anxiety as an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. In other words, anxiety can be defined as a constant state of worry or nervousness about something with an uncertain outcome. Social anxiety is characterised by an intense fear of humiliation, embarrassment and negative evaluation by others in social situations, which often causes the socially anxious individual to avoid feared situations (Kashdan & Herbert, 2001). The mean age of onset for social anxiety is between 15 and 16 (Walsh, 2002), and it can vary across individuals, ranging from mild normative anxiety about specific events (e.g., public speaking) to a severe clinical syndrome.

The need for group affiliation and peer acceptance is often more pronounced in adolescence than in adulthood, with success in adolescent interpersonal relationships very much determined by level of proficiency of social skills. Deficits in social skills are one of the factors that support as contributing to the preservation of social anxiety (Kashdan & Herbert, 2001). La Greca and Lopez (1998) found that adolescents with social anxiety reported fewer friendships and close relationships, lower perceived romantic attractiveness, and less social

support and acceptance from peers. Social anxiety generally affects females slightly more than males, with adolescent females typically worrying more about how others judge their appearance and behaviour (Stein et al., 2001).

McKenna and Bargh (1999) not only found that the socially anxious were more likely than the non–socially anxious to form relationships via the Internet, but that they were more likely to have formed very close (as opposed to weak) Internet friendships and romantic relationships.

Thus, for the present study, we define anxiety as a constant state of nervousness or worry about something that has an uncertain outcome.

1.7.2.5 Aggression

Aggression/ Violent Behavior refer to harmful behavior directed towards the goal of harming another living being who is motivated to avoid such treatment. It is the response of an individual to various stimuli or inputs, whether internal or external, conscious or subconscious, overt or covert, and voluntary or involuntary. According to Almeida, Cabral and Narvaes (2015) aggression is an overt social interaction with the intention of inflicting damage or other unpleasantness upon another individual. Adolescents who are deprived of using too much Internet may turn out to be aggressive towards their parents and friends when their needs are not fulfilled. In adolescents, aggression has been associated with Internet addiction after controlling for television watching (Ko, Yen, Chen, Yeh, & Yen, 2009). Online disinhibition (Joinson, 1998), as a consequence of online anonymity, may lead to deindividuation (Zimbardo, 1969) and can foster aggressive behaviours (Ko et al., 2009). This process may be particularly problematic for adolescents as their cognitive control capabilities may not be adequately developed (Casey, Tottenhem, Liston & Durston, 2005). Pertaining to the above facts, aggression is defined as an act of anger or harmful behaviour or hostility resulting in destructive and violent behavior.

1.7.2.6 Isolation/ Loneliness

Isolation refers to the tendency to stay alone and in solitude, away from the group. It is a state where individuals prefer to stay lonely. According to the Webster's dictionary, isolation is a state of being in a place or situation that is separated from others. Adolescents who use too much of Internet usually experience isolation in terms of not having much friends in the real world and also being isolated from the family. Several studies have shown links between Internet use and loneliness (Morahan-Martin & Schumacher, 2003; Matsuba, 2006). Shaw and Gant (2002) found that greater Internet use was associated with a decrease in loneliness and an increase in perceived social support. Moody (2001) found in a study of 166 university students (mean age 19.2 years) that high levels of Internet use were associated with high levels of emotional loneliness, defined as a sense of emptiness brought on by the absence of intimate relationships. This absence in intimacy was hypothesised as being a direct result of too much time being spent online, physically removed from peer relations. In one highly publicized study (Caruso, 1998; Harmon, 1998), Kraut and colleagues (1998) administered depression and loneliness scales to participants before they began to use the Internet for the first time and again 1 year later. Kraut et al. (1998) found that, overtime, both depression and loneliness increased with the amount of time a person spent online.

For the present study, isolation has been defined as an individual tendency to stay alone and separated from others.

1.7.2.7 Stress

Stress is defined as any physical or psychological event perceived as potentially constituting physical harm or emotional well-being. According to the APA, stress is any uncomfortable emotional experience accompanied by predictable biochemical, physiological and behavioural changes. Stress tolerance is the ability of an individual to withstand any stressful situation. Since greater use of the Internet is associated with some social and psychological

maladaptive variables such as, declines in the size of social circle, loneliness (Yang, 2001), lower self-esteem and life satisfaction (Ko, Yen, Chen, Chen & Yen, 2005), sensation seeking (Lin & Tsai, 2002), poor mental health (Young & Rogers, 1998; Yang, 2001), and low family function (Armstrong, Phillips & Saling, 2000), Internet addiction may enhance anxiety and stress. Consistent with this suggestion, in a study Internet addiction was linked positively to anxiety and stress. These results of this study indicate that the more addictive a student is to the Internet, the more stress and anxiety he/she has (Akin & Iskender, 2011)

For the present study, stress has been defined as any physical or psychological uncomfortable experience accompanied by perceived biochemical, physiological or behavioural changes.

1.7.3 Social Health

Social health involves an individual's ability to form satisfying interpersonal relationships with others. In other words, social health is characterized by how a person gets along with other members of the society. With the advent in technology and the Internet making the world a small place, many adults as well children tend to make online relationships. Most of the people feel that online social networking helps them be in touch with people regularly who live far way. On the other hand, children who lack rewarding or nurturing relationships with their parents, or who suffer from poor social and coping skills take on to the Internet to form new relationships. Because they feel alone, alienated, and have problems making new friends, they turn to invisible strangers in online chat rooms looking for the attention and companionship missing in their real lives. They may come from families with significant problems, and they cope with their problems by spending time online. Socially, they learn to instant message friends rather than develop face-to-face relationships, which can impact their way of relating to peers. The Internet is hurting students' ability to work in groups. Teachers struggle to get them to participate in any kind of team assignments (Webroot.com, 2015).

Thus, for the present study, social health is defined as an individual's ability to form and have lasting satisfying interpersonal relationships.

1.7.3.1 Quality of interaction with parents, peers and teachers

Parent-child interaction has long been considered a crucial influence on a child's functioning. Some of these influences include such things as a child's personality formation, academic achievement, behaviour and empathy. In fact, it could be argued that the parent-child relationship is the most important factor in child behavior and development. A good and healthy parent child interaction would involve an open space where, both the parents and the child are open to listen to each other without judging the other person. Here the children are guided towards positive behaviour and attitudes thus reducing the opportunities for negative behaviours. Most parent child interactions have later implications because the family is the setting in which each one of us learns to deal with other people. The general idea is that the quality of the interaction between the mother and her infant determines how that tiny individual responds to other people throughout his or her life. As the infant becomes a child and then an adolescent, parenting can constitute more of a challenge. Adolescents are found to love their parents to the extent that they like them and to the extent that the adolescent is a decent person who behaves in a moral and ethical way. In these crucial years if enough care is not taken in communication, the adolescent may resort to indecent ways of seeking attention and may end up being online for long hours. Grossbart, Hughes, Pryor and Yost (2002) explore the relationship between the mother and child and how Internet use affects this relationship. This study forms its basis around the idea that the relationship between parent and child is highly influenced by the changing experiences and events of each generation (Sussman & Steinmetz, 1987). "Parental warmth" is a factor in how receptive a parent is to being taught the nuances of the Internet by their child versus the traditional method of the parent influencing the child. If the parent displayed "warm" tendencies she was

more open to learning how to use the Internet from their child even if the parent happened to be more knowledgeable on the subject. This fosters teaching in a positive environment, which sustains a strong relationship between mother and child, encourages education, and promotes mature behaviour. “Cooler” mothers only allowed themselves to be taught if they thought that their child held the same amount of knowledge or greater and would dismiss the teaching otherwise suggesting a relationship that stems from the majority of influence coming from the parent (Grossbart, Hughes, Pryor, & Yost, 2002).

For the present study, quality of interaction with parents, peers and teachers has been defined as an open space where, both the parents and the child are open to listen to each other without judging the other person and where the children are guided towards positive behavior and attitude.

1.7.3.2 Self Concept

Self-concept is an organized collection of beliefs and perceptions about oneself. Self concept is a general term that refers to how an individual thinks about, evaluates and perceives himself. Baumeister (1999) defines self concept as “the individual’s belief about himself or herself, including the person’s attributes and who or what the self is”. The self provides the framework that determines how we process information about ourselves, including our motives, emotional states, self-evaluations, and abilities. If the adolescent thinks too low of his self and feels that he is worthless in his family and his peer group, he may seek to use the Internet in order to save himself from the environment. According to McKenna and Bargh (1999) "people are turning to the Internet to meet important social and psychological needs". Expressing identity is a strong self-motivator for using the Net. People who feel important aspects of their identity are unexpressed due to fear of a negative reception will often search chat rooms for role relationships in which to engage stigmatized aspects of their identity (Long & Chen 2007).

For the present study, self concept has been defined as an individual's belief and perceptions about oneself.

1.7.4 Routine habits

Compulsive Internet use is related to neglect of other life areas, such as school or work, and is known to result in decreased work productivity and family time, strained relationships, decreased communication within the family, decreased sleeping time, reduced quality of meals, a narrowing range of interests, and poor diet (Kraut et al., 1998; Young, 1998; Nalwa & Anand, 2003; Beard, 200). Compulsive Internet users lose track of time when they are on the Internet and as a result of that they experience a change in sleep habits, according to the Human Development and Family Life website. Irregular sleeping habits are also the reason for feeling exhausted during the day, missing appointments or activities or consistently showing up late for school or work. According to Dr. Block (2008) compulsive Internet users share symptoms commonly associated with addictions: neglect of basic drives such as food, sleep or sex in favor of continued Internet use; withdrawal symptoms when they attempt or are forced to limit Internet use; tolerance, requiring more time online and more elaborate equipment, and negative repercussions.

1.7.4.1 Sleeping Habits

Sleeping habits refers to a series of habits and rituals that can improve an individual's ability to fall asleep and stay asleep. An average adolescent needs at least 8-9 hours of sleep. Adolescents have a tendency to stay up late in the night to be online, which may result in lack of sleep or improper sleep. This hinders their academic performance in the school as well since lack of sleep results in mental fatigue, drowsiness and an inability to concentrate. Van Den Bulck (2007) suggests that the use on Internet and mobile phones by adolescents may be extending their already delayed bed time leading to sleep deprivation and excessive sleepiness during the day. Chronic lack of sleep among adolescents is associated with mood

regulation problems, learning and memory problems, poorer school performance including school tardiness and absenteeism, impulsivity and risk taking as well as substance abuse (Fredriksen, Reddy, Way, & Rhodes, 2004; Tarokh & Carskadon, 2008).

Thus, healthy sleeping habits have been defined as an individual's ability to have a proper sleep for the required amount of time and staying asleep.

1.7.4.2 Eating Habits

Eating habits can be defined as what and how people eat, their selection of food, their way of getting food, etc. It also includes when and at what intervals they have their meals. It also shows whether they have healthy diet or not. Usually people or adolescents who are engaged most of the times on Internet have a tendency to skip their meals in order to stay online. They have their meals at weird times when they are not required to be online. In a Korean study on adolescents (Kim et al., 2010) associations between the students' levels of Internet addiction and their lifestyle patterns and dietary behavior were analyzed. Results indicated that in high-risk Internet users, irregular dietary behavior due to the loss of appetite, a high frequency of skipping meals, and snacking might cause imbalances in nutritional intake. Diet quality in high-risk Internet users was also worse than in potential-risk Internet users and no risk Internet users.

For the present study, eating habits have been defined as an ability to maintain a proper routine and a healthy diet while eating.

1.8 Rationale

The use of Internet has become a necessity of our daily lives. Day by day our educational system is being more digitalized and hence children do not have any other option but to use the Internet. Easy and continuous access to the Internet provides tremendous opportunities for adolescent socialization, allowing them to connect with their peers as well as with complete strangers from across the world.

Internet is helpful in various ways such as bringing awareness to people about various issues, social, political, health and information technology. Internet is increasingly becoming a channel through which people, and especially adolescents, socialize and be in constant contact with their family, relatives and friends. More than a medium of acquiring knowledge, for adolescents, it has become a medium of expression of their implicit feelings and to know what is happening in their peer group. On the web world they are free to share any thoughts, ideas or feelings explicitly with anonymity.

Although the Internet has been a very facilitating medium and making lives easier for many of us on the one hand, it is also impairing the adolescent lives in different ways. Easy and free access to the Internet provides them with numerous gambling opportunities. Studies on Internet addiction have also revealed that adolescents who spend long hours on the Internet are more violent and aggressive. It has also resulted in decreased interpersonal skills among adolescents and has also affected the communication styles within the family. Too much Internet use has also made adolescents more impulsive and unable to delay their gratification of being online.

There are no clear cut reasons as to why adolescents engage in too much Internet use. Most of the studies have revealed that adolescents, who are introvert and shy, use more Internet than ones who are extrovert and outgoing. Children of parents having constant marital discord are more likely to use the Internet as an escape from the family situation that they have to face quite frequently. Studies have also shown that adolescents suffering from feelings of loneliness and worthlessness engage in excessive Internet use.

Clearly, the Internet is transforming the social world of adolescents by influencing how they communicate, establish and maintain relationships, and find social support. Therefore, it becomes necessary to gain awareness of both the potential benefits and risks of teen Internet

use. It is also necessary to provide reasons behind adolescents engaging in such over use of the technology.

There has been large number of researches done in the field of Internet across the world, and few in the Indian context. Thus while we are aware of the scenario elsewhere, it becomes necessary to study the prevalence and nature of Internet use in India.

1.9 Objectives

1) To study the prevalence of Internet use among:
    i) Male and female adolescents
    ii) Adolescents studying in grades 9^{th} to 12^{th}.
    iii) Adolescents studying in English and Gujarati medium schools
    iv) adolescents residing in urban and rural areas
2) To study the nature of Internet use in context of :
    i) Time participants spent online
    ii) Use of Social Networking Sites (SNS)
    iii) Mode and place of Internet use
    iv) Purpose/Nature of Internet use
3) To study the effect of Internet use on physical health of adolescents.
4) To study the effect of Internet use on mental health of adolescents
5) To study the effect of Internet use on social health of adolescents.
6) To study the effect of Internet use on health habits of adolescents.
7) To compare gender differences in Internet use on the above mentioned psychosocial correlates of Internet use.
8) To compare the adolescents across different grades on above psychosocial correlates of Internet use.

9) To compare the adolescents studying in English and Gujarati medium on above psychosocial correlates of Internet use.
10) To compare the adolescents residing in urban and rural areas on the above psychosocial correlates of Internet use.

1.10 Hypotheses

There will be:

1) Significant difference in the use of Internet by male and female adolescents.
2) Significant difference in the use of Internet by adolescents across different classes (grades).
    i) The use of Internet will be higher in grade 10 than in grade 9
    ii) The use of Internet will be higher in grade 11 than in grade 10
    iii) The use of Internet will be higher in grade 12 than in grade 11
3) Significant difference in the use of Internet by adolescents studying in English and Gujarati medium schools.
4) Significant difference in the use of Internet by adolescents residing in urban and rural areas.
5) Significant difference in the physical health of adolescents who are high on Internet use and who are low on Internet use.
6) Significant difference in the mental health of adolescents who are high on Internet use and who are low on Internet use.
7) Significant difference in social health of adolescents who are high on Internet use and who are low on Internet use.
8) Significant difference in the eating habits of adolescents who are high on the Internet use than those who are low on it.
9) Significant difference in the sleeping habits of adolescents who are high on the Internet