Chapter- I

INTRODUCTION
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INTRODUCTION

Social Network Sites (SNSs) use such as face book, twitters are deeply ingrained into daily lives of people. Especially adolescents spend much time on social network sites and this would become their part of their daily life. It is important to understand the nature of social network sites use among adolescents and its influence on academic performance, Creativity, Emotional maturity and Play activities among adolescents. This chapter introduces the Concept of Social Network Sites, Academic performance, Creativity, Emotional Maturity and Play activities. It also discusses the significance of the present study, statement of the problem and operational definitions of key terms used in the research. It furthermore discusses the objectives, hypotheses and delimitations of the present study.

Social Network Sites

Boyd & Ellison (2007) over the past decade social network sites (SNSs) have increased substantially in popularity and become part of societies social practices. SNSs are various web-based platforms that allow people to e.g. interact, play games, converse through instant messaging, and share interests. According to boyd and Ellison (2007) there are three factors required to meet the definition of a SNS; (1) a constructed online profile, (2) a list of the users friends and followers who are interacted with, and (3) a link to each friends, follower or contacts profile. These profiles allow individuals to create new social relationships that would otherwise not be made and maintain existing relationships.

Globally 3.419 billion people i.e. 46% of the world population use Internet amongst which 2.30 Billion people use SNSs with 1.96 Billion i.e. 27% of population
access internet through Mobile (Chaffey, 2016). Nearly 10% of the India’s population uses SNSs amongst them 8% are active mobile SNSs users. According to Mary Meeker’s annual assessment of Internet economy report 2015, India is the 3\textsuperscript{rd} largest market with 232 Million Internet users with the annual increase of 37% every year, which increased the smart phone users by 55% for the purpose of SNSs usage (Meeker, 2015).

The famous SNSs dominating in India is Face book with 53% users followed by whatsapp 44%, Google + 40%, Twitter 34%, LinkedIn 29% and so on. Meeker, (2015) reported that amongst the Indian SNSs users 68% of users fall under the age group of 13 to 25. SNSs have revolutionized people’s communication methods (Kross et al., 2013) and become a part of our culture (Schultz, 2009).

**Historical developments of Social Network sites**

Social network sites (SNSs) is of recent origin, just 2 decades back SNSs got its existence. Geocities was the first SNS created in 1994 which provided the users to create and customize their own web sites. The Global.com which was launched in 1995 facilitated the users to interact with people who shared common hobbies and interests. During 1997, the first recognisable SNS was Sixdegree.com was launched. This site provided the facility to chat with their friends by creating their own profile which enabled them to share their personal details and this site was considered to be the most innovative SNS at that time but unfortunately it did not achieved its success.

The other sites that emerged at the same time was Classmates, Friendzy, Hi-5 and so on, among them many of them were dating sites, few are niche-driven sites
such as Asian Avenue emerged in 1997. Blackplanet was established in 1999 and in 2000, MiGente.com was established for Hispanic servers.

The new millennium was considered to be the new era in social networking. Friendster emerged in 2002 was the first modern SNS which used the same concept used by sixdegree.com. It was a dating site, which was used by 3,000,000 users and many investors just in 3 months of its emergence, but was not free from technical hassles, at present it exists only because of its online games.

Frienster was followed by MySpace, which was more popular compared to Frienster as it provided more freedom to its users in terms of customization, by providing a more entertainment services and become a very popular SNS in the USA.

LinkedIn emerged in 2003, became more successful by providing a professional and business related links to its users. Its main intention was to build business contacts and providing the service of clustering people with same professional interest. At present LinkedIn have 30 million users.

At present the leading SNS worldwide is Facebook which was launched in 2004, was initially started solely for Harvard university campus students which later during 2006 its service was extended to general public. At present Facebook have nearly 1.3 billion of active users worldwide.

**Theoretical framework**

The following section consist the theoretical framework on the concept of social network use and its associated factors. Some of the important theories are as follows
1. **Social information processing theory** The social information processing (SIP) theory was developed by Joseph waither in the year of 1992. The social information processing theory is an interpersonal communication theory which explains how people interact with other people via online. Such as text message, e-mails, instant message, whatsapp etc.

   According to this theory the interpersonal relationship which develops through online needs more time than face to face communication, further this theory suggests that the online interpersonal relationship indicates same influence as face to face communication, Which further indicates that more the students use Social network sites, the more they are influenced by their social network friends.

**Three phases of Social information processing theory**

   a. **Impersonal Phase** – Lack of non verbal cues it is believed to be more of task oriented.

   b. **Interpersonal Phase** – the non verbal cues are lean as the time of communication increases, the social information exchange is also high.

   c. **Hyper personal phase** – the process of selective self presentation can be seen. People who meet online create favorable impression on the others. Like which information they wanted to share to make favorable self presentation (O’Sullivan.B.2000).

2. **Media equation theory.**

   The media equation theory was proposed by Byron reeves and Clifford Nass. This theory suggests that media such as internet, mobile, television etc are equal to
real life and thus provides human attribution to electrical Medias. Reeves and Nass noted that equation suggests that we respond to communication media as though they are alive.

The implication of this theory is that we communicate with electronic media by making use of the rules of interpersonal interaction that we have inculcated in our life. Eg:- we yell at the television set when it turns off when we are watching it with great interest. We yell at the internet data pack when it gets emptied when we are having an important conversation with our loved one.

**Usage of social networking sites**

With the availability of smart phone and easy access to internet the SNS usage has become very easy, increasing its popularity day by day and becoming a global consumer phenomenon. As per to the reports of Kuss & Griffiths (2011) there are more than 500 million users who are active participants of Facebook. They further reported that between 55% and 82% of teens and young adults regularly use SNSs. Griffiths, (2003) in reviewing SNSs usage patterns, of both consumer research and empirical research pointed out that in general, habitual SNS use has amplified considerably over the last few years further indicating that increased use of and chance to engage in SNSs, will increase in the numbers of people who engage in such SNS usage pattern.

Pfeil, Arjan & Zaphiris (2009) study revealed that use of SNSs is found to differ across the life span. In their stud of comparing 50 teenagers aged 13 -19 years, 50 older SNSs users aged above 60 years discovered that there existed a age difference in the usage pattern of SNSs, teens friends networks is associated with their
age group people, who shared similar interest and possessed larger group compared to older users and furthermore study also revealed that tees were using more trendy and advanced versions of SNSs compared to older age group people.

Gender wise research on teenagers use of SNSs by Barker (2009) showed that females use SNSs for chatting with their peer group, whereas males use SNSs for social compensation, learning, and social identity gratifications and they would prefer to unveil their personal information than compared to female counterpart (Jelicic, Bobek, Phelps, et al, 2007; Fogel & Nehmad, 2009). Correa, Hinsley & de Zuniga (2010) study suggested that usage pattern differed in comparison with gender as a function of personality, thus male with neurotic traits were more likely than female neurotic traits to use SNSs frequently. Zhou (2010) proved that more that female it’s the male who are more likely to show addicted behaviour on SNS games such as Farmville, candy crush etc, indicating that male population who developed addictive behaviour to online games are at high risk (Kuss & Griffiths, 2011b).

Social Network Site Usage among Adolescents

From last few decades the world has witnessed technological changes which have brought immense changes in our human life. One among such technological change is the emergence of social network sites, which have reduced the communication barrier by facilitating the users to connect with the users worldwide and can communicate instantly when ever needed with the help of these sites. Social networking sites are an international development which has attracted almost everyone with its trendy facilities provided to the users and has spread to every corner of the world. As budding adults who show more interest in any technological advancement, especially the social network sites it has its own impact on them.
According to Kuss and Griffiths (2011) adolescence is a vulnerable period susceptibility to various social influences such as, cognitive, emotional, and physical. During this period use of smart phones, maintaining SNSs profile becomes a question of status to get accepted among the peer group. Review literature suggests that majority of the SNSs users are adolescents (De Leo & Wulfert, 2013). Studies have shown that the use of SNSs have socially and psychologically negative effects on people (Baek, Bae, & Jang, 2013; Kross et al., 2013; Teppers, Luyckx, Klimstra, & Goossens, 2014).

Adolescents use a variety of Internet applications such as instant messaging, bulletin boards, chat rooms, and blogs to connect with their peers (Boneva et al., 2006; Gross, 2004) and to explore typical adolescent issues such as sexuality, identity, and partner selection (Subrahmanyam, Smahel, and Greenfield, 2006).

According to Pew Research Center as reported by Amanda (2015), 92% of teenager use online websites daily amongst them, 24% reported that they are almost constant users and the reason is because of easy access of internet in their smart phones.

Adolescents are very much interested in SNSs, the most favourite SNSs among adolescents is Facebook which is used by nearly 71% of adolescents followed Instagram 52%, snapchat 41%, twitter 33% and so on.

The Teen’s Internet Activity Statistics (2010) reported that adolescents are increasingly tempted by most appealing Internet apps specially related to Social networking, where they share their personal details to the strangers and are least bothered about the forth coming consequences or misuse of their information.
Online use of social network sites is considered to be potentially addictive. The appeal nature of social network sites on internet is the root cause of concern for which young people remain online most of their times and the resultant of the same is developing addictive behaviour. Young (2009) in psychological perspective explained the criteria’s of Facebook addiction disorder which can be otherwise called as Social network site addiction disorder, the criteria includes ignorance of personal life, preoccupied mentally all the time with SNSs, escapism from daily routines, mood modifying experiences, tolerating and masking the addictive behaviour are seen among those who use SNSs excessively.

**Negative consequences of social networking site usage**

The review literature indicated that there are many studies which highlighted the negative consequences of extreme SNS usage. Their wellbeing and self esteem are affected by the type of feedback they receive through their SNSs usage. For instance, Valkenburg, Peter & Schouten (2006) in their study on Dutch adolescents aged 10 to 19 years, showed that those adolescents who received more negative feedback on their profile had low self-esteem, which led to low well being among them.

Usage of SNSs also interfered with adolescent’s scholastic achievement, recent study by Kirschner & Karpinski (2010) in identifying the relationship between Facebook usage and academic performance, indicated that those students who are highly addicted to Facebook had had lower grades and spent less time in their studies than compared to students who did not use Facebook., Kirschner & Karpinski (2010) further reported that the possible reason for this may be that the students are distracted by the instantaneous engagement of Facebook while they are using Internet for studying purpose, which is detrimental for their academic achievement.
SNSs usage pattern also had negative impact on interpersonal relationships among adolescents. Studies have shown that social network sites like Facebook and MySpace may provide people with a false sense of connection that ultimately increases loneliness in people who feel alone. These sites should serve as a supplement, but not replacement for face-to-face interaction. Caornblatt (2009).

Addiction to social networking sites

Echeburua & de Corral (2010) in their study reported that people who are addicted to SNS experience the same symptoms experienced by people who are suffering from substance addiction and other familiar addiction behavior. La Barbera, La Paglia & Valsavoia (2009) study revealed that people with narcissistic behavior are highly prone to show SNSs addictive behavior.

A survey conducted by Pelling & White (2010) on 233 students showed that those students who are considered to be high level SNSs users were using SNSs four times per day and self identity and belongingness which they had developed for SNSs were the main predictors of addictive behavior among adolescents.

Wilson, Fornasier & White (2010) study on teenage students concluded that there is a correlation between high extraversion and low conscientiousness on internet addictive tendencies and SNSs usage pattern. This research suggested that the extraversion and addictive tendency relationship is discussed because using SNSs would satisfies the socialized need for extraverts. Kuss & Griffiths (2011) explained that those students with low conscientiousness scores tend to be addicted to internet than compared to any other personality traits.
A case study by Karaiskos, Tzavellas, Balta & Paparrigopoulos (2010) revealed that a young female who repeatedly used SNSs, more than 5 hours a day had showed changes in her behavior where in use of SNSs interfered in her personal and professional life, Due to her addictive tendency she was dismissed from her job and she had developed clinical symptoms like insomnia, anxiety which revealed the clinical relevance of addiction towards SNSs.

Karaiskos, et al, (2010) had mentioned SNSs addiction as Internet spectrum addiction disorder. In addition to this Kuss & Griffiths (2011) stated that SNSs addiction can be categorized in the large frame of Internet addiction followed by Internet gaming addiction, Internet gambling addiction (Griffiths, 2010), and Internet sex addiction.

To conclude, severe use of SNSs by adolescents, particularly students for the purpose of social searching, online games, chatting posting pictures and videos etc is associated with narcissistic personality traits. This may indicate the further need of research in understanding the population who are at risk of addictive behavior towards internet, symptoms, impact on their social and personal life etc. Furthermore, that researchers assess factors that are specific to SNS addiction, including the pragmatics, attraction, communication and expectations of SNS use because these may predict the etiology of SNS addiction as based on the addiction specificity etiology framework and its influence on several psychological behaviors such as emotional maturity, academic performance, Creativity and preferences of play activities.

Due to the apparent scarcity of research on SNS addiction, further empirical research is clearly necessary. Hence it is important of investigating the relationship of
SNS usage and emotional maturity, academic performance, Creativity and preferences of play activities.

**Academic Performance**

Academic performance refers to how students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers. Academic performance is considered as the success measured by the educational instructions by academic performance or how well a student meets standards set out by local government and the institution itself. In other words Academic performance is the ability to study and remember facts and being able to communicate their knowledge verbally or on paper. Academic performance is also called as academic achievement thus it is the degree to which a student, teacher or intuitions has achieved their educational goal and which can be measured through education.

In California, the achievement of school is measured by the academic performance index. There are many factors which influences academic performance namely intelligence, personality (Stoker 1996), mental curiosity (Thomas 2011), parental influence on shaping the behaviour and attitude towards school, socio economic status (Katherine 2007) and physical activity of the child which helps in increasing the neurotic activity in the brain which improves executive brain functioning such as attention span and memory (Tomporowski 2008).

**Social network sites and Academic Performance**

The rapid advancement of media technology has had a great impact on the way people communicate on a daily basis. The growing dimension of the use of the social media among the youth of today cannot be over emphasized. Over the years,
social networking among students has become more and more popular. It is a way to make connections, not only on campus but with friends outside of school. Social networking is a way that helps people feel they belong to a community. Due to the increased popularity of it, economists and professors are questioning whether grades of students will not be affected by how much time is spent on these sites.

Choney, (2010), MehMood & Taswir, (2013), Kist (2008), Jacobsen & Forste, (2011), believe that the use of technology such as SNS is one of the most important factors that can influence educational performance of students positively or adversely. Many parents and guardians are worried that students are spending too much time on facebook and other social media sites and have not enough time to study. Though parents are worried about students’ constant use of the social media sites, many students continue to utilize these sites on a daily basis. It is against this background that this research is being conducted to ascertain the impact of students’ use of social media sites on their academic work.

Off late social media usage have become very common, has become the question of status and pride among the adolescent peer group. SNSs provide the opportunity to communicate with their friends and with the world. Schneider, (2009), survey report on usage of social network sites showed that approximately 85% of the undergraduate students use Social network sites especially Facebook. According to University of New Hampshire (2009) report suggests that there are equal no of YouTube users as with Facebook users.

Social network sites act as a tool by providing facilities such as online chatting, information sharing and bounding new online relationships. Literature review suggests that the increased popularity of social network web sites affecting the
social interaction of the people in various ways, increased use of social network sites engrossed the people usage pattern of and had let to addictive behavior among them. Due to online chatting the students are showing less interest in their academics resulted in low grades in their schools. Asur and Huberman (2010) reported that the pattern of social interaction such as face-to-face interaction, interaction with the help of nonverbal cues, and the dynamics of social group and friendship are ruined by online social network chatting. Abdulahi Samadi, & Gharleghi, (2014) indicated that use of SNSs had serious effects on the academic performance among the students.

Maqableh et al., (2015) study on how and to what degree use of SNSs affects the students’ academic performance, to analyse the same data was collected on 366 undergraduate students from the University of Jordan. The statistical technique of descriptive analysis, T-test and ANOVA were used. The findings indicted that SNS usage had a impact on the academic performance of the students and SNS usage per week had an impact on the student’s academic performance but no differences found in the impact of use of SNSs on academic performance due to age, academic achievement, and use per day to most used sites were found.

Mingle & Adams (2015) found that majority of the students used facebook and whatsapp for the purpose of chatting with their friends, and these students had poor grammar and spellings, further it was also reported that due to the use of SNS these students submitted their assignments very late, had less study time and maintained poor academic records. Iorliam & Ode (2014) found that students’ academic performance was significantly influenced by time spent on SNSs, frequency of visit to SNSs and number of friends in SNSs. Al-rahmi & Othman (2013) found
that collaborative learning had a positive effect on learning improved students interaction with teachers and engagement with learning.

The growing dimension of the use of the social media among the youth of today cannot be over emphasized. Over the years, social networking among students has become more and more popular. A’lamElhuda & Dimetry (2014) reported that nearly 93.1% students used social network sites among them males were more in number compared to female. Famous Social network sites among these students were Facebook with (98.8%) users, Skype with (61.3%) users, What’s App with (59%) users, and Hotmail with (56.6%) users. Nearly 72.3% of the students were using Mobile and tablets for using social network sites. Usage of SNSs negatively affected the academic performance of the students among them females were more affected. It is further noted that those who were addicted to SNSs were found to be engage very less in sports and other exercise related activities. Paul, Baker, & Cochran (2012) found that the time spent on OSN was found to be heavily influenced by the attention span of the students. Specifically, they determined that the higher the attention span, the lower is the time spent on OSN. Further, attention span was found to be highly correlated with characteristics that predict or influence student behavior, such as their perceptions about society’s view of social networking, their likes and dislikes of OSN, ease of use of OSN”, etc. Madhusudhan (2012) reported that the majority of respondents said using SNSs may be a waste of time and adversely affect on academic performance.

There is much talk of a change in modern youth – often referred to as digital natives or Homo Zappiens – with respect to their ability to simultaneously process multiple channels of information. In other words, kids today can multitask.
Unfortunately for proponents of this position, there is much empirical documentation concerning the negative effects of attempting to simultaneously process different streams of information showing that such behaviour leads to both increased study time to achieve learning parity and an increase in mistakes while processing information than those who are sequentially or serially processing that same information. Kirschner, & Karpinski (2010) presented the preliminary results of a descriptive and exploratory survey study involving Facebook use, often carried out simultaneously with other study activities, and its relation to academic performance as measured by self-reported Grade Point Average (GPA) and hours spent studying per week. Results showed that Facebook users reported having lower GPAs and spend fewer hours per week studying than nonusers.

Aslanidou, & Menexes (2008) found (a) Internet access remains at a very low level and is insufficiently used for school purposes, (b) younger students (aged 12–15 years) use it more frequently than older ones for information seeking concerning school work, (c) the Internet is an indicator of social and economic stratification since most young people with access to it come from family environments with a higher educational and socioeconomic background and live in urban and semi urban areas, (d) boys make up the majority of systematic users, mainly for entertainment purposes, (e) the Internet is a place and space safeguarding the privacy of young people with the majority of them preferring to surf alone, (f) parental supervision and monitoring seems to be absent largely from the relationship between youth and the Internet, and (g) in general, the frequency and type of Internet use are not significantly affected by students’ places of residence or the educational level and profession of their parents.
Pasek & Hargittai (2009) verified the findings of a study suggested that the Facebook use might be related to lower academic achievement in college and graduate school (Karpinski, 2009). The report quickly became a media sensation and was picked up by hundreds of news outlets in a matter of days. Their study reported in the press release using three data sets: one with a large sample of undergraduate students from the University of Illinois at Chicago, another with a nationally representative cross sectional sample of American 14- to 22-year-olds, as well as a longitudinal panel of American youth aged 14-23. In none of the samples do we find a robust negative relationship between Facebook use and grades. Indeed, if anything, Facebook use is more common among individuals with higher grades. They also examined how changes in academic performance in the nationally representative sample related to Facebook use and found that Facebook users were no different from non-users.

Lenhart et al., (2010) report suggested that nearly 60% of online social network users were multiple social network sites users they had accounts in at least 4 to 5 social network sites. In addition Pempek, Yermolayeva, and Calvert (2009) study on the time spent on social network sites varied among different age group, wherein the study indicated that students group was the group which used social network sites for longer hours compared to older people. More than 50% of college students go online several times a day (Sheldon, 2008). Quan-Haase and Young (2010), reports that 83% of the college students login into Facebook several times a day. Furthermore Pempek et al.,(2009) younger students tended to use Facebook more frequently than older students to keep in touch with friends from high school or from their hometown.
Owusu-Acheaw & Larson (2015) noted that majority of the students use their mobile phone for internet and per day thirty to three hours these students used social Medias. Students also reported that using social media sites is negatively affecting their academic performance which further indicates that use of social media is directly related to decrease in academic performance among the adolescents. Literature review on student’s use of social network sites indicated a adverse effect of use of social network sites on their academic performance (Choney; 2010, San Miguel; 2009 and Enriquez; 2010).

Jacobsen & Forste (2011) report on Nelson Media Research study, reported that students almost 25% of their time remain in Internet using online social network websites. The research conducted by American Educational Research Association, in its annual conference stated that those students who use more social network sites are ones who get lower grades in their schools and colleges. Abaleta et al, 2014).

Karpinski and Duberstein (2009) study conducted in Ohio Dominican University to know the impact of social network usage on college students, showed a significantly lower grade points amongst severe social network users that those who do not use social network sites. Further through the interview with the students it was clear that majority of the students preferred Facebook than compared to any other social networking sites, indicating Facebook is the biggest distractions to the students. According to Khan (2009), Facebook users often experienced and reported poor academic performance several times. In a similar manner, Englander et al., (2010) reported that social network usage by students had negative correlation with academic performance and further stated that these social network sites were more disadvantageous to student’s community.
Karpinski (2009) in his study showed that those students who are highly engrossed in social network sites especially Facebook had lower grade points than those who did not used the Facebook. His further explanation on the paper explained that students keep themselves busy with social network site; they remain online most of the times and give very less time to studies. Pasek, more, and Hargittai (2009) further analyzed the same topic by using longitudinal studies including many control variables like socioeconomic status, previous academic records and race. The analysis obtained revealed that Facebook usage had no significant effect on students’ grade points.

Mingle and Adams (2015) study aimed at knowing the influence of social network usage and academic performance showed that majority of the students used whatsapp and Facebook for being connected with their friends reported to have negative impact on their academic performance, which includes error in their grammar, spelling, problem with late submission of assignments, poor study time and poor academic records due to the use of social network sites. (Asemah et al 2013, Moon 2011, Kalpidou, Costin, & Morris, 2011) showed that use of social network sites had negative effect on student’s performance.

The literacy perspective which focused on learning practices which aims at creating new media and practical view of learning rather than following the primitive methodologies. (Greenhow & Robelia, 2009; Ito et al., 2009; Jenkins, 2006) the same concept was explained by Hull and Schultz (2001) wherein they emphasized literacy program should enchase the practical understanding of the concept.

However, literacy practice by using new technology suggests that children learn from outside the school environment than compared to formal schooling
environment. In this context Jenkins (2006) suggested that the present generation students should have possess the knowledge about social media environment. He defines performance as the ability to adopt different identities for the purpose of discovery and opines that SNSs are the tools that help students to explore different concepts and make learning more enjoyable and meaningful.

According to Jenkins (2006) social network sites are media tools which integrate numerous facilities, which could be applied practically to help students to gather information, learn and synthesize the concepts. Thus Social network sites provide a natural platform to evaluate their practical information.

Jocabsen and Forste (2011), study showed a negative correlation between academic self reported grade points and use of social media networks among various Universities of United states. Yen at el. (2009), studied the association between use of mobile phones and academic achievement which showed that mobile phone usage was negatively interfered with students’ academic achievement. Similarly, Hong et al. (2012) identified that regular use of cell phones is associated with difficulty in academic performance among the Taiwan students. Sanchez-Martinz and Otero (2009) survey on Spanish school students’ use of intensive mobile use reported a significant effect on failure in school.

Ahmed and Qazi (2011), Hanqittai and Hsich (2010), Pasek and Hanqittai (2009), studies identified no significant relationship between social network use and academic achievement among students. Survey conducted at Whittemore school of Business and Economic reported no correlation between Academic performance and duration spent on social network sites usage (Martin, 2009). In addition University of
New Hampshire (2010) indicated that social network site usage pattern had no effect on academic grade point of students.

Survey literature also indicated increased use of internet technology by adolescents has been accompanied by decrease in academic achievement (Cooper, Valentine, Nye, & Lindsay, 1999; Griffiths, Davies, & Chappell, 2004; Hancox, Milne, & Poulton, 2005; Koivusilta, Lintonen, & Rimpela, 2007; Zavodny, 2006).

Thus the above contradictory research findings indicates the need of more research in terms of the use of Social network site on academic performance among adolescents.

Creativity

Creativity comes from the Latin term creo means “to create or make” It refers to ability to think about something in novel and unusual ways and come up with unconventional solution to problems. It is one of important cognitive aspect, which involves divergent thinking where in divergent thinkers elicits multiple creative answers to the set problem.

Creativity is an important component of cognition several attempts are made to explain the process involved and to know about the functioning of the creativity. It was Sir Francis Galton (1869) who first introduced the concept of creativity, but the concept of creativity was brought into light by Wallas (1926). It’s the Guilford (1950) Wallas (1926) and Torrance (1962) was considered to be the main pioneers who scientifically studied creativity by adopting psychometric approach

According to Torreance (1962) creativity is measure based on 4 important aspects such as fluency, flexibility, originality and elaboration. Sternberg and Lubart
(1999) define “creativity is the ability to produce work that is both novel and appropriate”.

Theories of creativity have explained the different factors of creativity among them the most important aspects which a creative person should possess are

- Preparation – considered as the first stage of creative thinking wherein a person gets prepared to solve the problem in a more unusual way.
- Incubation – the second stage or a period of creative thinking wherein the creative thinking person go blank regarding the novel ideas to solve problem but unconsciously his mind will working on the same.
- Illumination – the next stage of creative thinking wherein as an insight all of a sudden he gets an idea as to how the problem can be solved.
- Verification – the final stage of creativity wherein the person verifies the solution that he has obtained, it is also considered to be evaluative stage.

(Walls 1926).

The understanding creativity would be made possible with the understanding of cognitive approaches which mainly deals with higher mental processes through which creative outputs are generated. This includes the concept of Divergent thinking, imagination, understanding of concepts etc. Divergent thinking is considered to be the important concept among all other concepts and this divergent thinking involves the generational of multiple, often unconventional, possibilities (Guilford, 1968).

**Divergent Thinking**

Divergent thinking is considered to be the key aspect of creative thinking. It refers to diverge from the old one to the new idea or concept. Divergent thinking is
considered to be an essential tool in problem solving and fosters varied types of thinking to solve a single problem. It has the ability to elicit the unusual and original ideologies which might be correct or at times might not produce the convincing solutions to the problem. Many a times people may laugh at the novel ideas generated by the divergent thinking but not to deny it’s the divergent thinking that enhance the creative ability of a person.

Divergent thinking is defined as an idea-generating process wherein an individual is faced with problems or questions for which there is not just one answer (Guilford, 1950; Runco et al., 2006). Conventionally, divergent thinking is defined as the production and practical implication of different ideas to solve a given problem which is considered to be a main assessment tool of creativity (Runco, 1990). Charles and Runco (2001) pointed out that divergent thinking is main predictor of a person’s caliber of creative performance. (Lovecky, 1991) stated that divergent thinking is the ability to perceive the concepts in a new and unusual manner. (Wakefield, 1992, Baer, 1993) opined that Divergent thinking is the key character of any creative mind. It is further stated that Divergent thinking is an important cognitive process that has great importance for education, and solving practical problems. (Shore, Aulls, & Delcourt, 2008). Divergent thinking is a key component needed for solving ill-defined problems, for flexible thinking and to participate in creative brainstorming (Hayes, 1989; Newell, Shaw, & Simon, 1964).
**Fundamental elements of Divergent thinking**

Important fundamental elements of divergent thinking are as follows

- Authenticity
- Imagination
- Inherent curiosity
- Simplification
- Calculative Risk Taking
- Flexibility
- Fluency
- Elaboration

**Social network sites and Creativity**

Creative people adopt divergent thinking. Social networking site involves many processes that could be embedded within the organizational structures that influence innovative knowledge sharing behavior. Thus through using the knowledge in an appropriate way one can definitely improve their creative thinking.

Research suggests that using the Internet helps boost brain power for middle-aged and older people specially the cognitive functioning such as discussion making and complex pattern of thinking.

Social network sites are designed in such a way that its platform is very much open to public, through which opinions and conversation about various issues can be generated. By making use of social network sites students can be benefitted to have a collective opinions and having brainstorming sessions which enhance their creative abilities, thus the tie of formal classroom education can be broken which limits the students’ creative thinking process.
During the past few decades, the SNS use has become increasingly important in adolescents’ lives. Recently, among scholars and in the popular media a heated debate has unfolded about the impact of SNS use—especially online communication—on adolescents’ creativity.

Research review suggested that as per (2011) report by the Entertainment Software Association reported that 72% of American students were indulged in online computer games or video games, though it had its own impact on the users the positive side of it cannot be denied, Green & Bavelier, (2003, 2006, 2007) suggested that use of computer games increases the visual-spatial skills of the adolescents, which are the key factors to have success in mathematics, engineering and science subjects (Subrahmanyam, Smahel, & Greenfield, 2006).

Jackson et al, (2008) summarised that use of internet is found to be having a positive correlation in enhancing the cognitive abilities of young children (Jackson, Zhao, Fitzgerald, von Eye, & Harold, 2006) and adolescents (Jackson, 2008). Through which we can indirectly assert that internet usage helps in fostering creativity which is one of the key component of cognition.

Jackson et al, (2011) in their paper on information technology use and creativity among children found that internet use was positively correlated with creative abilities of the children.

Ekstrom and Ostman (2013) showed online political interaction acting as an intervening variable, while political participation was found to be indirect when the effects of internet use was on informational and interactional forms. Political participation is positively related to the creative production of internet usage, whereas it is negatively related to the knowledge about politics, which is statistically
significant. Thus giving an insight into the internet usage which may encourage or hinder youth’s democratic engagement. Lee & Son (2012) adopted SNS for smart learning in” Creative Activity”. Creative Activity serves the purpose of self-directed, learner-centered and interaction based learning. As it is educationally centered with numerous experience and autonomous attitude, creative activity has been established as, ‘Revised Educational Curriculum 2009’ making it as an important application for elementary, middle and high school classes since 2011. Here the learners themselves investigate the activity, participate, record, the content and produce the portfolio of the investigation through stages. Thus helping in developing smart learning which is learner-centered, self directed, interaction-oriented and informal learning takes place. Easy accessibility of learner’s information to other learners through smart learning takes place. Thus learners can boost their creativity and self directed study plan to become more creative and increase their academic talent.

Schaarschmidt (2008) found the relations between intrinsic motivation, creativity and social network platforms. Results of these empirical investigations of a social software platform called “StudiVZ.net” proved that these two propositions are valid. Further Perry-Smith (2006) found weaker ties are beneficial for creativity, whereas stronger ties have neutral effects on creativity. Centrality is found to be more positively associated with creativity when individuals have fewer ties outside their organisation.

Leenders, Van Engelen, & Kratzer (2003) found that an essential part to perform new product development (NPD) team is creativity. Communication becomes an important part of NPD creative team to combine the inputs from multiple NPD members. Member proximity, Communication modality, Team task structure, a three factor model developed to address the role of creativity in managing Virtuality in
NPD teams. Perry & Shally (2003) found the association between several contexts of social relationships and individual creativity. They highlighted the static and dynamic social network concepts while treating the social relationships. They argued that weaker social ties are not beneficial for creativity and proposed the facilitators and constraints of creativity on network positions, and described about 3 moderators. They also proposed a spiralling model on creativity and network position, describing an individual’s creative life on network position.

By analyzing the above few reviews it can be concluded that the studies have provided mixed results i.e. Some of these studies revealed the adverse effects of internet use on creative abilities in children and others showed that positive effects and association between SNS usage and creativity. The studies colligate internet usage and creativity demonstrated that Internet use is positively related to time spent with social network sites.

Since there is lack of empirical studies and studies related to know the impact of social network sites usage on creativity, the present study has been initiated.

**Emotional Maturity**

Goleman (1995) says the success of a person solely depends on the art of managing emotions which includes practical skills and the ability to handle people.

L. J. Saul (1960) discussed the main characteristics of maturity as Independent living, being productive and responsible, to remain away from inferiority feelings and selfishness, to remain competitive, away from aggressiveness, a good sense of reality, elasticity and adaptableness (1981). The five basic magnitudes to maturity explained by J. D. Carter (1974) are possessing practical view about oneself and others,
accepting oneself and others, having a long term goal, abiding values in one’s life, enriching one’s interest and abilities and developing coping mechanism.

Allport (1963) described the criteria of maturity as expansion of the sense of self, showing gratitude to others, being emotionally secured, having realistic perception and skills and having a unified philosophy of life. Thus maturity is an art of living, being brave in changing that which cannot be changed and being ready to know and accept the difference.

Types of Maturity

There are different types of maturity such as:

- Emotional maturity – maturity in which a person shows emotional balance and self confidence in social interactions, able to understand and have a control over one’s emotions.
- Intellectual maturity – Maturity a person shows in his scholastic and occupational situation.
- Social maturity – Knowing how to be in the social situation, following the role model in order to achieve desired social behaviour.
- Chronological maturity – Maturity which a person shows according to age.

Concepts of Emotional Maturity

The concept of emotional maturity is perhaps the most vital part of modern psychology (Saul, 1957, Sivakumar and Visvanthan, 2010). Emotional maturity is basic concept in human life without which one cannot lead a happy life. Jersild (1947) suggested that emotions dominate our lives. In a person’s personal life the concept of emotions play a key role wherein it arises as a resultant of complex interplay of
physiological, cognitive, and situational variables (Singaraelu, 2008). Based on the values one develop, belief system one has abided and nurturing the type of emotions in one’s life emotions can construct us or destruct us (Jersild, 1947).

Manoharan and Doss, (2007) explains emotional maturity as the ability to display one’s emotions in a proper manner with a reasonable control over his emotions. Person with emotional maturity possess calibrate to bare the delay in need gratification and adjust to demands and pressure of the family, peer, society and culture.

Skinner (2001) defined emotional maturity as the degree to which a person gets to know about his potentiality for living and the capacity to enjoy things what he has, to relate himself to others, to show love and possess whole heartedness. It is a state of reaching an adult level of emotional development and no longer showing the children pattern of emotions (Chaplin, 1975).

Seoul (1951) opines that a person can have high adaptability to situations, can lower regressive tendencies when he is complete in his emotional development. Smitoson (1974) suggest that emotional maturity is a process of continuous striving for greater sense of emotional health in intra physical and intra-personal way. It’s a process of evaluation and clarification of our thoughts, feelings and integration of feelings and synchronise it and showing appropriate behaviour as per to the situation (Singaravelu, 2008). Smitson (1974) further briefed that emotional maturity is the process of controlling our impulses with the help of “self” and “ego”.

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The Key Criteria of Emotional Maturity

According to Bernard (1954) following are the criteria of mature emotional behaviour

1. Inhibition of direct expression of negative emotions.
2. Cultivation of positive, up building emotions.
3. Development of higher tolerance for disagreeable circumstances.
4. Increasing satisfaction from socially approved responses.
5. Increasing dependence of actions.
6. Ability to make a choice and not broad about other choices.
7. Freedom from unreasonable fear.
8. Understanding and action in accordance with limitations.
9. Awareness of the ability and achievement of others.
10. Ability to err without feeling disgraced.
11. Ability to carry victory and prestige with grace.
12. Ability to delay the gratification of impulses.
13. The enjoyment of daily living. (Singh and Bhargava, 1990)

Levels of Emotional Maturity

Kevin FitzMaurice (2010) listed levels of emotional maturity in his book ‘The Secret of Maturity’ such as:

1. Basic Emotional Responsibility
2. Emotional Honesty
3. Emotional Openness
4. Emotional Assertiveness
5. Emotional Understanding
6. Emotional Detachment
Social Network Sites and Emotional Maturity

Adolescent is considered to be transitional period, wherein we can find the transition from childhood and young adults. This transitional period is connected with drastic changes in physiological, psychology, social and cognitive areas which play a vital role in their life and these changes further influences their lifestyle in terms of their communication with family, peer group, teachers and others. This is the time they tend to have role confusions, stress, uncertainty about the future, scholastic and parental pressure where in they will be finding new ways of developing stress resilience, ego defence mechanism different coping strategies etc. any new technological development would definitely attract the adolescents, in the same manner Internet and Social network sites tends to attract the adolescents with its appealing features and prolong use of the same would develop the addictive behaviour amongst the adolescents.

The review literature suggests that youngsters are one who develops more interest in SNSs usage than compared to old age people. With this context the present paper attempts to study the impact of SNSs usage among adolescent in their Emotional maturity.

Van den Eijnden, (2008) study related to adolescent usage of SNSs indicated that adolescents are highly vulnerable to the development of compulsive internet use. Van den Eijnden, (2008) study on Dutch students indicated that online communication such as instant messaging, what's app and messenger usage among adolescents had greater addictive behaviour development tendency than any other internet applications. Meerkerk et al (2009) suggested that compulsive internet use developed a serious symptoms of internet use irrespective of the purpose, they develop a irritable behaviour when the availability of internet is made impossible, addicted people tend to use
internet in order to escape from negative feelings, he further suggested that internet dominates cognitive and behavioural aspects of people and using internet results in conflicting behaviour among the users.

Pew Internet Project (2010) report on the survey of 800 adolescents who belongs to age group of 12 and 17 indicated that nearly 93% of teenagers remain online, among them 78% of them use online for the purpose of playing online games, 73% of them use it for email and social networking usage purpose, 67% of them use it for sending instant messages online, 62% of them use it for gets news updates, 57% watch videos, 48% of them go for online shopping, and 31% are concerned with health related information.

The level of SNSs usage is so severe that nearly 85% of the teenagers, who belongs to the age group of 12-17 years, remain at least occasionally in some form of electronic personal communication, which includes text messaging, sending email or instant messages, or posting comments on social networking sites. (Amanda et al 2008) Pfeil, Arjan & Zaphiris, (2009) found that there is a difference in the age group amongst the Usage of social network sites, for which this research compared 50 teenagers and 50 old aged people using SNSs and the study indicated that teenagers had a larger group of SNSs friends and were similar in the interest and preference in using SNSs compared to older people.

Study by Brenner’s (1997) indicated that among 600 sample 80% of them showed at least 5 related problems such as failure to manage time, missed sleep etc, even use of social network has influenced students, and 13% of the respondents who were using SNSs reported that use of internet and SNSs had affected with their
personal and professional life which indulges their scholastic achievement also Scherer’s (1997).

Milani et al (2009) in his study on relationship among problematic Internet use (PIU), examined the quality of interpersonal relationship and the cognitive strategies used by 98 adolescents aged between 14 to 19, amongst them 36.7% had the signs of problematic Internet use and these adolescents had developed Internet use as a dysfunctional coping strategies and had worst interpersonal relationships compared to those adolescents who has less problematic Internet use signs. Kalia (2013) found that residential background of the students had significant influence on emotional maturity among adolescent internet users, interactive influence between Residential Background and Academic Stream on Social Competence, Emotional Maturity and General Well-being of Internet user adolescents.

Many researchers showed that excessive use of internet and online social network sites will have a serious negative impact on users (e.g., Kuss & Griffiths, 2011; Leung & Lee, 2012) as it results in building and maintaining their own online social network rather than being social with the virtual society. Hofmann, Vohs, & Baumeister, (2012) in their study on neurobiology of SNS usage showed that excess use of SNSs is believed to activates the pleasure seeking dopamine system and using SNS has negative consequences on real life communication.

Mehroof & Griffiths, (2010) in their study revealed that online addiction is related to certain personality traits like neuroticism, anxiety, and sensation seeking. Few studies also suggested that internet addicted adolescents had significantly low scores in extraversion personality than compared to non-addicted adolescents (Huang et al., 2010), have low emotional stability, low extraversion, and low agreeableness
Of course, there are few studies which contradict the above studies and showed how social network usage had positive influence on emotional maturity among adolescents. Morahan-Martin & Schumaker, (2003) in their study summarized that online Internet users are more likely to find online social support and find satisfaction with online friends than offline friends.

Park (2010) showed that social network site usage among students had significantly high relationship with face-to-face interaction with friends and acquaintances. Sheldon (2008) in his study indicated that college students who had more offline communication had more online friends.

In knowing the use of gadgets and its influence on cognitive abilities among youths in Karnataka Mamatha, Hanakeri & Aminabhavi (2016) found that more gadget users have high emotional maturity and slightly high reasoning ability compared to low gadget users. This helped us to understand the pattern of gadget use and its influence on cognitive abilities and emotional maturity among college students in Karnataka.

Adolescents are more prone to be addicted to online social network sites, their significant factors such as body image also would be correlated factor with online social network sites. In examining the effects of adolescents in comparison with friends and celebrities on social network sites on their body image dissatisfaction (BID) and drive to be thin (DT) or muscular (DM), to achieve the same a survey was conducted on 1,059 adolescents in Singapore Ho, Lee, and Liao (2016) found that SNSs use was related to adolescents’ BID and social comparison with friends on SNSs was significantly associated with adolescents BID, DT, and DM. Further it was also noted that female participants showed social comparison with celebrities.
associated with BID and DT and male participants showed Celebrity involvement with BID. Mikami, Szwedo, Allen, Evans & Hare (2010) reported that youths at the age of 13-14 years who had been better adjustment were more likely to be using social networking web pages at ages 20–22 years.

Gender also could be the associative factor with the online social network sites usage, in a study on gender difference in emotional maturity among internet users Dangwal & Srivastava (2016) found that young internet users are not emotionally matured and further it was also indicated that there existed a gender differences in emotional maturity among internet users, female showed better emotional maturity compared to male internet users.

It is important to understand the role of social networking sites (SNSs) in early adolescents’ social lives. In order to achieve the same social network use and its relation between aspects of social lives such as friendship quality, bridging social capital, and bonding social capital Antheunis, Schouten & Krahmer (2016) reported that there existed a positive relation between social network use and friendship quality, bridging social capital, and bonding social capital. The study also found that the presence of positive effects of SNS membership on these social indicators.

To understand the frequency of social network sites use by adolescents in order to monitor attractive peers. Vandenbosch & Eggermont (2015) indicated that the use of sexualizing mass media was linked with the appearance of ideals promoted in mass media as one’s own standards to pursue. Thus the use of social network sites to monitor attractive peers and the use of sexualizing mass media encouraged self-objectification and body surveillance gradually and frequency of SNS use had a narrow role in the relationship between mass media and an objectified self-concept.
Social network sites may be considered third place for young adults to have a unrestricted place for personal expression and reflection apart from formal environments and parental control. Köhl, & Götzenbrucker (2014) found that few effects pertaining to emotional aspect of technology usage is contingent on the stage of diffusion of technology and the aspects related to emotional experience and expression was inclined by cultural models.

Byun et al., (2009) in the report of a meta-analysis of empirical studies on Internet addiction over a decade which was published in academic journals, showed that earlier studies have incorporated contradictory criteria to explain internet addiction and applied same techniques and investigated data using primarily rather than confirmatory data analysis techniques to investigate the degree of association rather than causal relationships among variables.

The above discussion showed that the teenagers are more prone to use SNS than other age group people, they face several emotional disturbances while using SNS and interns that may leads to several adjustment problems. Thus, it can be concluded that for the Internet to realize its potential as an effective resource for teenagers struggling with emotional problems, further studies is needed (Gould et al., 2002).

Thus the above contradictory research findings indicates the need of more research in terms of the use of Social network site on emotional maturity among adolescents.

**Play Activities**

Play is an activity normally associated with recreational pleasure and enjoyment. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according
to fixed rules and in an orderly manner. It promotes the formation of social groupings that tend to surround themselves with their friends. Play can be of both indoor as well outdoor games.

Huizinga (1955) defines play as summing up the formal characteristic of play we might call it a free activity standing quite consciously outside 'ordinary' life as being 'not serious' but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings that tend to surround themselves with secrecy and to stress the difference from the common world by disguise or other means.

National Institution for play describes 7 play types:-

1. Attunement- refers to Play between newborn and mother.

2. Body- refers to the play which infant follows to explore its body and knowing about body functioning.

3. Object- refers to playing with objects like toys.

4. Social- refers to the game or the play behaviour which involves social groups like friends or peer group.

5. Imaginative- refers to imagination play which generally small children does. It is also called as fantasy.

6. Narrative- play activity, which is associated with acquisition of language, and learning by small kids with the help of storytelling or listening to stories narrated by parents.
7. Transformative- a higher level of play activity, associated with imagination to transcendent from current state to higher state. Eg playing musical instrument in a more creative manner.

For the present study the concepts of Indoor play activities, outdoor play activities and online play activities and its preferences among the adolescents are initiated. Through literature review it was found that those students who are high in using social network sites are more prone to use online games than compared to outdoor play activities.

**Social network Sites and Play activities**

It is true and hard reality that social network sites are getting popularity because of its extraordinary features that it provides to its users. One among its feature is online games which attracts users. Theses online games posses the ability to pull the users to get addicted to it by providing competitive motivation, desire to be in the first position amongst the players and the attractive rewards which are not virtual but still have reinforcing properties to its users. Consenza, (2009) in his survey reported that Facebook is biggest social network site which offers plenty of online games to its users. It is further suggested that the structure of social network sites is designed in such a way that it can be used to play the games for recreation with friends and other users.

The main features of online social games is that social platform based, can be played by multiple users at a time, possess the special feature of real identity and property of casual gaming. These features can be considered as social features and players online connection is important part of the game and these games are designed in such a way that it provides social interaction amongst the players, mutual help,
barter system, competition and cooperation can be seen as a main component of these games.

Boyd and Ellison, (2007) is of the opinion that online social games are not social until unless it is played with others. Online games facilitate the players to communicate with their friends, family members, old classmates, work buddies.

As a researcher the main intention of any researcher it that to know about the impact and the implication of these online social network games on human kind.

Putnam (2000) suggested that too much of engagement in social network sites and passive time spent on social network sites make the people to be more isolated from social and community related activities. Which made a big debate whether Internet based activity ruined social activities. Many researches are under the impression that these internet related activities are make people more lonelier, making them spend too much time on online gaming than spending time with their family and friends (Kraut, et al., 1998; Nie and Erbring, 2002). But other researchers are contradiction with the above findings and arguing that traditional media like television making people passive whereas online social games connects people and fosters social interaction and communication among the users (Williams, 2006; Wellman, 2001; Boase, et al., 2006).

Review literature from decades suggests that children and adolescent are showing more interest towards computer based electronic entertainment than compared to other entertainment. (Funk, 1993; Greenfield, 1994; Kubey & Larson, 1990; Roberts, Foehr, Rideout, & Brodie, 1999). This game playing in electronic gadgets is encroaching the time of other activities which includes their scholastic activities, sports, outdoor games, further such gaming behaviour displayed by
adolescents would be a impediment for their social interaction and many games leads young children and adolescents to remain aggressive.

Earlier research literature review (Cupitt & Stockbridge, 1996; Funk, 1993; Kubey & Larson, 1990; Roberts et al., 1999) indicated that the involvement of adolescents towards computer games is only a part of children leisure time activities and is much lesser than television watching time. Creasey & Myers, (1986) & Mitchell, (1985) conducted a short scale longitudinal study, showed that initially adolescents will be completely engrossed with the computer games, after a point of time there engagement towards these games reduces gradually.

Greenfield, (1984, 1994); Turkle, (1984) analysis of children with computer game activities specially in knowing the cognitive and perceptual motor abilities showed that playing computer games enhance the skills required to meet the challenges and improves the intellectual abilities among these children.

Subrahmanyam, Greenfield, Kraut, & Gross, (2001) suggested that children have more computer knowledge than their parents can prompt a role reversal in terms of help giving within the family. Anderson & Dill, (2000) conducted experimental studies to know the behaviour pattern of adolescents with game addiction showed that those who play violent computer games had reported to have high aggressive behaviour. They further stated that many of these studies are susceptible to the opposition that aggressiveness and arousal were perplexed (Fleming & Rickwood, 2001).

Ahn and Randall (2008) conducted a survey on the Massively Multiplayer Online Role-Playing game players (MMOGs) and indicated that nearly 50% students addicted with MMOGs were affected in their social and academic life, these students
also showed arguing behaviour indicating playing MMOGs also affected the interpersonal relationship.

Durkin and Barber (2002) studied the relationship between game play, adjustment and risk taking measures among 16 years old high school adolescents. Obtained findings did not show negative outcomes on several measures including family closeness, activity involvement, positive school engagement, positive mental health, substance use, self-concept, friendship network, and disobedience to parents among game players. Game players scored more favourably than peers who never played computer games. Findings conclude that playing computer games has a positive impact on adolescent’s development.

Clements (2004) discussed children’s participation in active outdoor play activities in comparison with older generation in USA. Nationwide survey was done to compare 830 mothers and their children regarding their outdoor play experiences. Mothers were asked their experiences on play during their childhood days and their children’s play activities at present. Findings indicate today’s younger generation spending less time on outdoor play activities compared to their mothers. Reasons for spending less time on outdoor play activities are TV and digital media. After reviewing this study we come to know children are declining in playing outdoor games from generation to generation. As USA is fast moving country and has its own influence on other countries too, hence this study has been considered.

Grusser, Thalemann and Griffiths (2006) investigated the potential for gaming addiction and its relationship between excessive gaming and aggressive attitudes and behaviour. A total of 7069 gamers answered online to two questionnaires. 11.9% participants (840 gamers) fulfilled the criteria for gaming addiction behaviour. The
The assumption that aggressive behaviour is interrelated to excessive gaming was established in a very few sample indicating a very weak relationship between the two. The results also indicate gamers who play without monetary benefit meets the criteria for addiction. After reviewing this study we came to know that children are almost addicted to video games and have close relationship between excessive gaming and aggressive attitudes and behaviour. In simple words excessive gaming has direct impact on attitude and behaviour of children. Hence, this study has been considered.

Blais, Craig, Pepler and Connolly (2008) determine the role of internet usage on their relationship with friends or peer group. The criteria to meet the quality relationship were determined by visiting chat rooms, using internet for entertainment or participating in online gaming. Participating on online gaming and visiting chat rooms were the two important activities which influenced the adolescents for their relationships with friends. Negative relationship was found between visiting chat rooms and best friendship. Findings also indicate as the usage of internet increases, relationship quality decreases. After reviewing this study we came to know that compared to other forms of using internet, visiting chat rooms and playing internet games tend to be more and has a direct impact on relationships of adolescents.

Marsh (2010) explored the relationship between play and technology and the tensions surrounding it. This study made an attempt to give an overview about the virtual world, targeting young children and to identify the nature of play in this environment. 175 children participated in an online survey out of which 15 children took part in group interviews to explore virtual world. Results indicated opening of wide range opportunities for play for children using virtual world. The types of play the children engage in, are closely related to offline play. After reviewing this study
we come to know that how children are tend to play online and offline games and how they will be away from real world and create their own virtual world by playing games.

After reviewing available empirical studies we found that health issues can be seen in children who are addicted to electronic media. McCurdy, Winterbottom, Mehta and Robert (2010) found the association between outdoor activities and time spent on natural environment and its benefit on mental and physical health. Children who are addicted to social networking site usage and also playing online games are affected with their health which is contributing to diseases like ADHD, obesity asthma and vitamin D deficiency, which have already affected 12.5 million American children.

Visser, Antheunis, & Schouten (2013) found that there is no direct effect between playing WoW and adolescent’s social competence and loneliness. Results also showed an indirect effect via variety of communication partners leading to an increase of social competence and a decrease in loneliness. Rossi (2010) speaks about SNSs which act as a base for other games and change the gaming practices and offer new directions for unexplored games and also for game designers and to SNSs.. It also describes about Playfish’s games, its categories based on networking of friends. Network of friends has two groups on (a) skills/knowledge and (b) truly social games. Skills/knowledge based games (like geochallenge or Who Has The Biggest Brain?) uses the actual network of people who are linked to the player as a list of potential challengers. This leads to use the game in already existing within group for group related purposes, challenging each other, and be on top of all your friends. This type of gaming helps in building relationship; rather game itself. It is common to move from one type of gaming to another if one gets bored. Recently the use of social network sites have emerged as one of the important as well as time
consuming online activities. Face book has emerged as one of the important site. Playfish a gaming scene in Face book has registered more than 50 million players and has become the leading position in UK Company. This present study analysed five games starting from Playfish, how face book games use the social network and social relationships between players, which acts as a core element for game experience. In SNSs several contacts between friends, colleagues, relatives, and schoolmates seems to exist. This paper views on how the new environment can be used for gaming and how gaming activities change when they enter the collapsed context of SNSs.

An article report from BBC (2005) revealed that the extent of online gaming addition of a South Korean man, who died in internet cafe after 50 hours continuously. Chappell et al., (2006) showed many such incidents of online game adductors who refused to use restroom and use bottle to pass urine, consuming Jung food in front of computer just because to stay online and play games.

Stertina et al. (2011) study on male MMORPG players had low self-esteem and these players were emotionally and socially attached to computers. Hussain and Griffiths‘ (2009) administered an online questionnaire to know the behaviour pattern of MMORPGs and found that those who are addicted to MMORPGS exhibited psychological and behavioural dependency towards games.

Thomas and Martin (2010) analysed the behaviour pattern of online game adductors at Tasmania and found that those who were spending too much of time in online games were spending very little time towards their family and friends, were getting low grades in their school and colleges, it was further found that these children were addicted to online game in order to escape from the problems and not for not achieving good marks in their academics. Thus it’s clear that emotional dependency is
also one of the component due to which adolescents develop addictive behaviour towards computer games. Hou (2011) focused on three dimensions of game play like frequency, duration and engagement on pleasure and gratification principles on social networking site users. Social aspect to social games was identified reflecting their social networking characteristics.

Many research reviews suggested that online computer gaming addiction had negative impact on their life such as developing addictive behaviour, getting low grades, (e.g. May, 1994; Griffiths & Hunt, 1998; Greenberg, Lewis, & Dodd, 1999; Salguero & Moran, 2002), the consequence of playing aggressive game (e.g. Anderson & Morrow, 1995; Griffiths, 1998; Anderson & Bushman, 2001) and the physical and psychosocial health issues (e.g. Funk, 1993; Griffiths, 1997; Anderson & Bushman 2001).

Not many studies have been carried out in terms of outdoor play activity among the social network site users. In the present study more emphasis is given to outdoor play activities because among SNS users online (indoor) game is very much common.

**Sum-Up**

This chapter introduced a theoretical overview of the important initiations of the study i.e. SNS, Emotional Maturity, Academic performance, Play activities and Creativity. It discussed rationale of the study, problem statement, operational definitions of key terms used in the study, objectives and hypotheses of the study. The next chapter concerned with the literature review related to core components of this
study which are recent reports, SNS usage pattern, Emotional Maturity, Academic performance, Play activities and Creativity of adolescents.

**Need for the present study**

1. Social network sites emerged recently, more than 50% of the Indian population, more than 90% of US population and nearly ½ % of world’s population is addicted.

2. Review of literature on the variable play activity suggest that, there are many studies related to online game addiction or indoor play activity by internet user.

3. But not much study was found in terms of outdoor play activities among internet users. So this variable needs to be concentrated.

4. Not much study has been done on social network in relation to creative thinking, so focus on this topic is very much necessary.

5. Review of literature suggests that there are contradictory findings in relation to social network and emotional maturity, in order to get specific findings more research is needed in this topic.

6. More research is in needed to offer suggestion and strategies for social network site addicts.

7. Not many studies are done on Indian population, so research on social network influence on Indian population is needed.

Considering the current scenario of social network use in adolescents and its impact on their life activities, the researcher understood the need for understanding and describing the phenomena and taken up the present study which is aimed at examining the impact of social network sites use on emotional maturity, academic performance, play activities and creativity among adolescents.
Statement of the problem

To study the impact of social network sites usage on academic performance, creativity, emotional maturity and play activities among adolescents.

Objectives of the study

- To evaluation the impact of social networking sites on academic performance among adolescents.
- To evaluation the impact of social networking sites on creativity among adolescents.
- To evaluation the impact of social networking sites on emotional maturity among adolescents.
- To evaluation the impact of social network sites on play activities among adolescents.

Hypotheses

H1. There is no impact of social network sites use on academic performance among adolescents.

H2. There is no impact of social network sites use on creative thinking among adolescents.

H3. There is no impact of social network sites use on emotional maturity among adolescents.

H4. There is no influence of social network sites use on play activities among adolescents

A) Indoor Play activities
B) Outdoor play activities
C) Online play activities