ADDICTION OF INDIAN YOUTH TO SOCIAL MEDIA TECHNOLOGY : A REVIEW

Assignment Submitted to:

Mr. Abhisek Dutta (Assistant Professor)

NIIT University, Neemrana

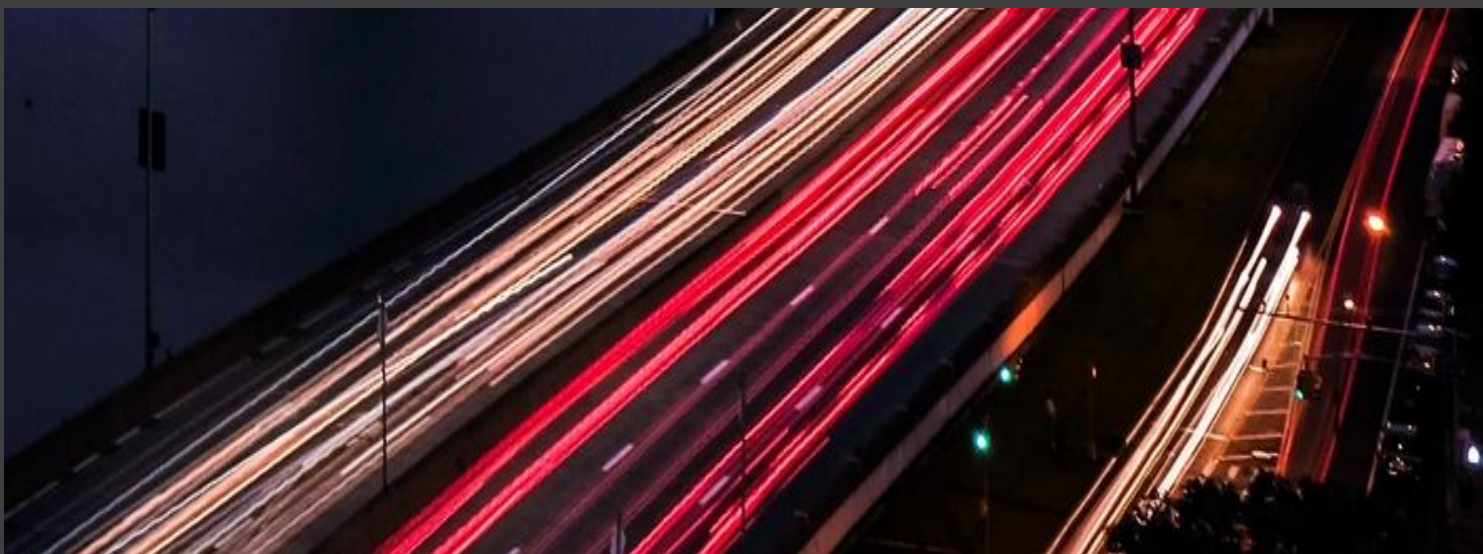By Siddharth Swain (M.Tech GIS, 2nd Year)

NIIT University, Neemrana

TABLE OF CONTENTS

1. INTRODUCTION

Social media is a popular term for a wide variety of web applications that enable users to form content and interact with each other [1]. It can take several forms; however, a few common forms of interaction include public updates to a profile, viewing, sharing and commenting on posts, photos, updates, videos, and links shared by friends on social networking sites on current activities and even adding location data these days.

It was in the 20th century that technology began to change very rapidly and the 1940s saw the development of supercomputers as well as networks between those computers which later lead to the birth of the internet. In the subsequent decades, home computers became more common and social media was becoming more advanced. The first ever social media site called 'Six Degrees' was created in 1997 which allowed users to upload their profile and make friends with other users. From this phase, the internet moved into the era where instant messaging and blogging were in fashion.

By 2000, more than over 100 million people were using the internet and social engagement online became quite common. Although it was only a hobby for most people, chat rooms for making friends, dating and discussing topics were frequently used.

Social media flourished with the launch of social media websites such as 'MySpace' which later lead to inspiring websites like Facebook where users could create their profile and make new friends. LinkedIn was another beginning in the era of Social Media although it was designed specifically for the purpose of professional networking.

As of 2017, there are several thousands of social media platforms, few of which are more popular than others but it is interesting to note that each has an interesting quality that differentiates it from the rest of the SNS. For example, Instagram is perfect for those who communicate through photographs and YouTube caters to an audience which loves to view video-based content. Like many buzzwords, the meaning of social media is an ever-changing concept according to what the person uses it for.

Compulsive behaviour that leads to negative effects can be termed as an addiction [2]. "In most addictions, people feel compelled to do certain activities so often that they become a harmful habit, which then interferes with other important activities such as work or school. In that context, a social networking addict could be considered someone with a compulsion to use social media to excess -- constantly checking Facebook [3] status updates or "stalking" people's profiles on Facebook, for example, for hours on end".

Fig. 1 Findings of the Social Media Addiction Study (University of Maryland)

But it's hard to tell when fondness for an activity becomes a dependency and crosses the line into a damaging habit or addiction. Does spending three hours a day on Twitter reading random tweets from strangers mean you're addicted to Twitter? How about five hours? You could argue you were just reading headline news or needed to stay current in your field for work, right?

Researchers at Chicago University concluded that social media addiction can be stronger than addiction to cigarettes and booze [4] following an experiment in which they recorded the cravings of several hundred people for several weeks. Media cravings ranked ahead of cravings for cigarettes and alcohol.

And at Harvard University, researchers actually hooked people up to functional MRI machines to scan their brains and see what happens when they talk about themselves, which is a key part of what people do in social media. They found that self-disclosure [5] communication stimulates the brain's pleasure centres much like sex and food do.

Plenty of clinicians have observed symptoms of anxiety, depression and some psychological disorders in people who spend too much time online [6], but little hard evidence has been found proving that social media or Internet use caused the symptoms. There's a similar lack of data about social networking addiction.

There are reasons why people are regarding social media addiction as a type of disorder, just like addiction to a cell phone, the internet, and even alcohol.

Every once in a while, when you check updates on social media [7], or after you have posted something, you want to know who will react to your post. And whenever people give you a "like" or commented something on your post, it makes you feel great. You will feel that you are not alone, you are being connected and someone cares about you.

More importantly, if people "like" or "share" what you have posted, you feel happy as if people agree with what you have posted and they like it. When this happens, your brain cells stimulate dopamine, a chemical released by your neurons to signal other nerve cells that will make you feel good and happy.
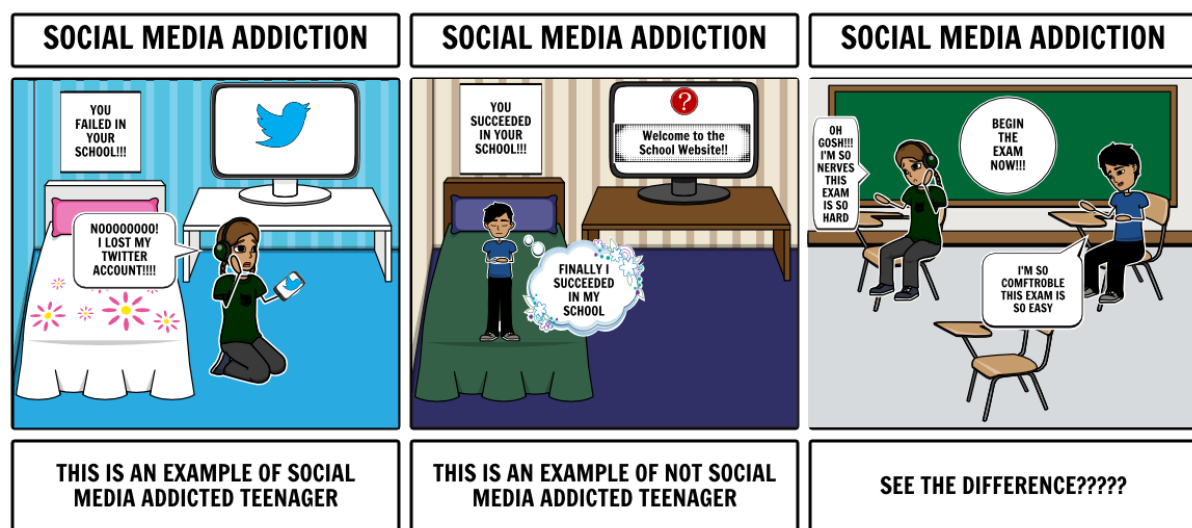

Fig. 2 A storyboard on Social Media Addiction

This is one of the core reasons causing the addiction. These rewards and the pleasure you receive from using social media will condition and program your mind to crave for more. If it continues over the long term, it will quickly become your habit and the disorder will eventually take place.

To date, the scientific literature addressing the addictive qualities of SNS on the Internet is scarce. Therefore, with this literature review, it is intended to provide insight into the emerging phenomenon of SNS usage and potential addiction by (a) outlining SNS usage patterns, (b) motivations of SNS usage, (c) examining negative consequences of SNSs, and (d) exploring potential SNS addiction.

2. METHODOLOGY

An extensive literature search was conducted using academic databases such as Academia, ResearchGate, as well as Google Scholar. The following search terms, as well as their derivatives, were entered: social networking sites, social media addiction, compulsive, excessive, use, abuse, motivation, negative consequences, and related problems. Studies were included if they: (i) included surveyed data, (ii) made reference to usage patterns, (iii) motivations for usage, (iv) negative consequences of use, (v) addiction or referred to social networking addiction in general. A total of 50 empirical studies were identified from the literature, most of which specifically assessed SNS addiction.

3. RESULTS & DISCUSSIONS

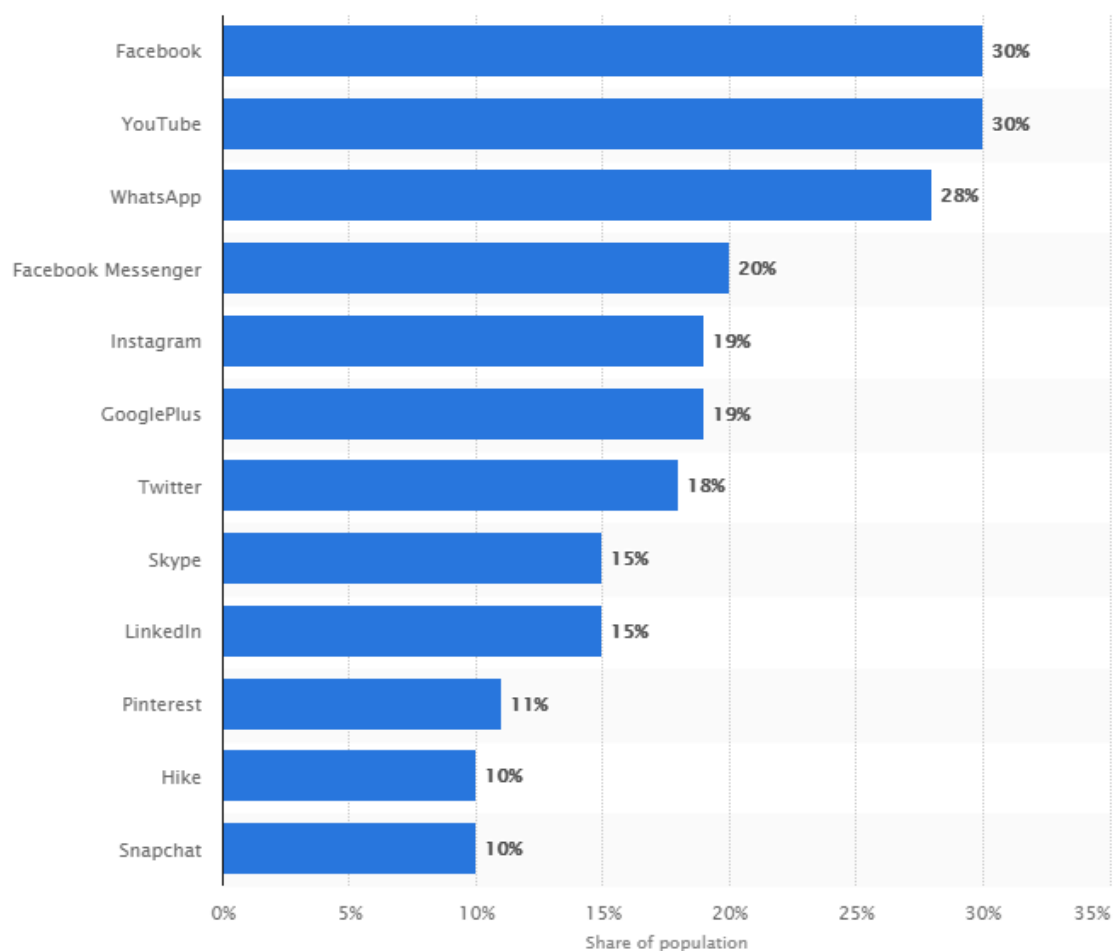### 3.1 Usage of Social Networking Sites

Fig. 3 Penetration of leading social networking sites in India as of 3d quarter 2017

This statistic presents the social network penetration in India [8]. As of the third quarter of 2017, the most popular social networks was YouTube and Facebook with a 30 percent penetration rate each. WhatsApp was ranked third with 28 percent reach. India ranks second among countries with the most Facebook users, accounting for 11 percent of global Facebook audiences in April 2017. Several studies have been carried out to find SNS usage among the youth of India.

100 college students from IIS University and SKIT University were surveyed [9] to investigate the use of SNS by adolescents. It was found that a college student visits his/her profile at least four to ten times a day and this is due to the ease of access to SNS through gadgets such as smartphones, iPads and notebooks. No significant difference was found in use of SNS with respect to gender. 65% of students believed that SNS helped them in staying in touch with friends, parents, teachers and other family members.

Several 16 to 22-year-old students were interviewed by Kavita [10] through websites, email, personal and telephonic interviews. They were heavy users of SNS and also early adopters of new information technology-based applications. 97 % of the sample were members of one or more SNS such as Facebook, Linkedin, Twitter, MySpace, etc. 78 % and 18.2 % of respondents used it for less than an hour and between 1-2 hours each day respectively.

Usage of SNSs has also been found to differ with regards to age group. In a study conducted in MDU Rohtak [11], more than 50 % of the users were aged lesser than 20 and 30 % of them were aged between 20 and 30. There were 58.3 % male and 41.7 % female users respectively. 66 %, 10 % and 13.3 % of the respondents used SNS due to their friends, family, and teachers respectively.

Data were obtained from 556 high schools and higher secondary students [12] of class 8th to 12th in the city of Trivandrum, the capital of Kerala. It was found that females preferably use laptops and males use their mobile phones to go online. Facebook has been the favourite time pass for 32.7 % of the students. Around 35 % of the students spend more than 2 hours on SNS per day. 15.5 % of girls spend more than 4 hours daily on SNS whereas only 10.6 % of boys spend equal time on such sites. Almost 40 % of teenagers were new to using SNS, whereas 7 % have been using it either for 4 to 5 years or more than 5 years. The most used SNS in the decreasing order of priority was found to be Facebook, YouTube and Google+.

With regards to how people react to using SNSs, a recent study [13] using psychophysiological measures (skin conductance and facial electromyography) found that social searching (i.e., extracting information from friends' profiles), was more pleasurable than social browsing (i.e., passively reading newsfeeds) [13]. This finding indicates that the goal-directed activity of social searching may activate

the appetitive system, which is related to pleasurable experience, relative to the aversive system [14]. On a neuroanatomical level, the appetitive system has been found to be activated in Internet game over users and addicts [15,16], which may be linked back to a genetic deficiency in the addicts' neurochemical reward system [17]. Therefore, the activation of the appetitive system in social network users who engage in social searching concurs with the activation of that system in people found to suffer from behavioural addictions. In order to establish this link for SNS specifically, further neurobiological research is required.

The findings of the presented studies indicate that teenagers and students make the most use of SNSs compared to the general public by utilizing the inherent features of Web 2.0. It is clear that in overall, the regular SNS usage has substantially increased over the last few years. There appear to be gender differences in usage but it varies and further investigation is required in this regard. SNS's tend to be mostly used for social purposes of which extracting further information from friends' pages appears particularly pleasurable. This, in turn, may be linked to the activation of the appetitive system, which indicates that engaging in this particular activity may stimulate the neurological pathways known to be related to addiction experience.

3.2 Motivations of Social Networking Sites usage

Most people use social media nowadays. The question is no longer if we use it, but why. Apparently,

Fig. 4 Main reasons why people use Social Media according to GlobalWebIndex Q3 2017

most of us use them to stay in touch with others, but also to stay updated on what is going on in the world around us. It is very interesting how most of the top reasons are all linked to what we call "passive networking" [18] – that means users who come to social media to consume content rather than actively contributing to the stories. A growing trend is to utilize social media platforms to research new products to buy and that's why brands still have a huge role to play.

Manjunatha S. [19] surveyed 500 students in various colleges and universities throughout India. Among the respondents, 48 %, 19 % and 3 % of the students stated that they use SNS to maintain existing friends/relationships, find new friends and for dating respectively. It was also found that 12% used it for business networking and activity partners, which is also an impending danger since there is an uncertainty of the nature of the purpose of the individual, reliability, accountability and anonymity which can lead to grave consequences. The main purpose of SNS usage was for messaging (38 %) and chatting (36 %) respectively because it was a convenient method to have an intimate interpersonal relationship with people with a higher degree of privacy.

Hundred 15 to 20-year olds from the Delhi NCR region [20] were surveyed to understand their SNS usage. 37 %, 31 %, 23 % and 9 % of the respondents used SNS to get updates from family/friends, for entertainment purposes, derive information about general awareness and to search for job-related information. The data evidently shows the inclination of the youth to know what goes around in their near and dear one's lives. Although SNS keeps them connected, it simultaneously leads to a loss of focus towards their own goals. 74 % of the students believed that SNS helped them build relationships both personally and professionally. A huge portion of the respondents spent more than 2 hours a day on SNS justifying the reason to have hampered nearly 66 % of their social gatherings.

Entertainment and surfing were two major reasons [21] for using SNS among 126 students (aged between 16 and 25 years) in pre and post-graduation colleges situated in Chandigarh. 67 %, 100 %, 77 %, 84 %, 92 % and 53 % of the total respondents used SNS for email, site surfing, chatting, social networking, entertainment purpose/music/movies/downloading content and blogging with social networking sites. It was interesting to note that 47 % and 29 % of the students spent 3 to 5 hours and more than 5 hours on SNS per day respectively. The majority of the youth exposed themselves to SNS for larger periods due to attractive offers made available by internet service providers such as Airtel, Jio, Idea, etc. at very low costs.

Dr M. Neelamalar [22] studied a sample size of 100 (school and college students) between the age group of 17 to 22 years. The top reasons given by students for using SNS were to maintain existing

friends/contacts (48.8 %) and to find new friends (19.5 %). Others stated reasons for registering in SNS such as contacting old friends, lost contacts in school, workplace and among family members.

Overall, the results of these studies indicate that SNSs are predominantly used for social purposes, mostly related to the maintenance of established offline networks, relative to individual ones. In line with this, people may feel compelled to maintaining their social networks on the Internet which may lead to using SNSs excessively. The maintenance of already established offline networks itself can, therefore, be seen as an attraction factor, which according to Sussman [23] is related to the etiologic of specific addictions.

3.3 Negative Impacts of Social Networking Sites usage

Some studies have highlighted a number of potential negative correlates of extensive SNS usage. W. Akram [24] has described the negative effects of SNS usage in detail. It has an adverse effect on health such as incorrect self-diagnosis and potential breach of privacy. In Business, Social Media isn't totally hazard free in light of the fact that a significant number of the fans and supporters are allowed to post their feeling on a specific association; due to which negative remarks can lead the association to disappointment. It is highly time-consuming, crowded with excessive content and mistakes made on SNS are hard to rectify.

Although SNS have helped students to communicate or share information quickly with each other, its prolonged use has several negative impacts too. Students are depending more on the information reachable easily on these social networking sites and the web. This reduces their learning and research capabilities. The additional time the students spend on these online networking destinations, the less time they will go through associating face to face with others. This decreases their relational abilities. They won't have the capacity to convey and mingle adequately face to face with others. The businesses are getting increasingly unsatisfied with the relational abilities of the new graduates because of this reason.

Students generally utilize slang words or abbreviated types of words on long range interpersonal communication locales. They begin depending on the PC language structure and spelling check highlights. This decreases their charge over the dialect and their experimental writing abilities. Sometimes students are not able to deliver their work in the specified time frame as their time is being wasted on SNS. The student's motivational level decreases because of the utilization of these long-range interpersonal communication locales. They depend on the virtual condition as opposed to increasing reasonable learning from this present reality.

The unnecessary use of these sites has an effect on the mental as well as physical health. Students do not take their meals on time and take proper rest. The abuse of these destinations once a day has many adverse impacts on the physical and psychological wellness of students making them lazy and unmotivated to make contact with the general population face to face. The guardians should check and adjust on their kids when they utilize the web. They ought to be suspicious whether they are utilizing it for a fitting time period or not. The companions and educators ought to likewise enable understudies to make them mindful of the negative impacts and clarify what they are losing in reality by adhering to these long-range interpersonal communication locales.

Harshit Lad [25] explains that teenagers spend several hours every day watching violent scenes on SNS. This becomes their reality and many of them are not able to distinguish between reality and fantasy. This makes violence 'normal' for them. Teenagers are just discovering their sexuality. It is very normal for them to be interested in everything sexual. But the amount of sex in media today can make a teenager confused. Sex without responsibility – that seems to be the message being beamed at teenagers. This can lead to irresponsible sexual behaviour and unwanted pregnancies. Happiness comes at a price. At least that's the message teenagers get through media. Their life would be perfect if only you'd buy them that hot new game, that happening dress. Advertisers target teenagers to ramp up their revenues. But teenagers fall prey to the idea of commercialization of happiness.

Teens who watch too much television have lower scores in exams. Also, such teens are not good readers as they spend more time in front of the television. A study reveals that individuals with high degree scores watch less television in their childhood and teenage. Another study reveals that different media affects school work differently. According to a report published by PewCenter.org, most of the children have become victims of cyber bullying over the past. Since anyone can create a fake account and do anything without being traced, it has become quite easy for anyone to bully on the Internet. Threats, intimidation messages and rumours can be sent to the masses to create discomfort and chaos in society.

Personal data and privacy can easily be hacked and shared on the Internet. Which can make financial losses and loss to personal life. Similarly, identity theft is another issue that can give financial losses to anyone by hacking their personal accounts. Several personal twitter and Facebook accounts have been hacked in the past and the hacker had posted materials that have affected the individual's personal lives. This is one of the dangerous disadvantages of social media and every user is advised to keep their personal data and accounts safe to avoid such accidents. The addictive part of social media is very bad and can disturb personal lives as well.

The teenagers are the most affected by the addiction of social media. They get involved very extensively and are eventually cut off from society. It can also waste individual time that could have been utilized by productive tasks and activities. Social media can easily ruin someone's reputation just by creating a false story and spreading across social media. Similarly, businesses can also suffer losses due to bad reputation being conveyed over the social media.

Ruchi [26] described how social networking sites are addictive and students end up wasting a lot of time on such sites. Most students are worried about non-friends seeing their personal information and using it against them. Sites such as Facebook, Twitter and Bebo are said to shorten attention spans, encourage instant gratification and make young people more self-centred. She also mentions a case study where hyper-networking (using SNS for more than three hours a day) and hyper-texting (sending more than 20 messages a day) has been correlated with unhealthy behaviour in teens such as drinking, smoking and sexual activity. It was also associated with depression, substance abuse, poor sleep patterns, suicide and poor academic performance.

Nusayba Kawsar [27] surveyed 300 students and found that 47 % of them neglected studies due to their SNS use. 46 % of them could not pass their day without using SNS. 70 % of respondents used SNS longer than intended. Other consequences were also reported such as difficulty to go to sleep (49 %) and being upset/mood issues (34 %) if SNS usage was cut down.

Peter [28] in his study showed that social media had negative effects on teenagers such as lack of privacy, a distraction from their academic work, taking most of their productive time, etc. Chi-Square analysis showed that exposure to social media networks had a significant influence on student's academic performance.

Akashdeep [29] has covered the negative aspects of SNS usage in detail. He explains how apps have access to public information of their users such as username, profile picture, friend list, birth date, favourite movies, books, etc. It is easy to add message posts on the user's behalf and access posts in their news feed, videos and posts. Social media makes it easier to copy content from the internet, for every 93 minutes over the average 106 minutes spent on Facebook daily, college student grades dropped significantly. Students going online scored 20 % lower on tests and 35 % of the admissions officers scanned potential candidate's social media blogs and posts that could affect their hiring in educational institutes. Online advertising policies are an invasion of privacy. If clicked 'like' for a brand, browser cookies give the company information and access about their personal information and preferences.

Overall, these studies show the negative correlation of excessive usage of social media technology by the youth. Although there are several disadvantages of excessive usage of social media, it also has benefits such as cultural development, building self − identity, developing relationships and acquisition of social, communication and technical skills. For future research, it is crucial to increase the sample size and select a better representative sample.

3.4 Social Networking Sites Addiction

Several studies have been conducted on Social Media Addiction [30] [31] [32] [33] [34] [35] [36] [37] [38] [39] [40] among students. There is absolutely no problem and nothing wrong with using social media. Some people use it to check updates from their friends and to stay connected. Some people use it for entertainment and to kill time.

The problem comes when someone becomes addicted to social media and overspends their time on those platforms, as a result, their bad habit serious affected their lives in a negative way. And this is obviously something that you want to avoid. Therefore, Social Media Addiction is a term that is often used to refer to someone who spends too much time on social media like Facebook and Twitter or other forms of social media. As a result, it affects a person's daily life.

Researchers have suggested that the excessive use of new technologies (and especially online social networking) may be particularly addictive to young people [41]. In accordance with the biopsychosocial framework for the aetiology of addictions [42] and the syndrome model of addiction [43], it is claimed that those people addicted to using SNSs experience symptoms similar to those experienced by those who suffer from addictions to substances or other behaviours [41].

It has also been observed that young vulnerable people with narcissistic tendencies are prone to engaging with SNSs in an addictive way [44]. To date, only three empirical studies have been conducted and published in peer-reviewed journals that have specifically assessed the addictive potential of SNSs [45,46,47].

In another study, Karaiskos et al. [47] reported the case of a 24-year old female who used SNS to such an extent that her behaviour significantly interfered with her professional and private life. As a consequence, she was referred to a psychiatric clinic. She used Facebook excessively for at least five hours a day and was dismissed from her job because she continuously checked her SNS instead of working.

Even during the clinical interview, she used her mobile phone to access Facebook. In addition to excessive use that led to significant impairment in a variety of areas in the woman's life, she developed anxiety symptoms as well as insomnia, which suggestively points to the clinical relevance of SNS addiction.

Such extreme cases have led to some researchers to conceptualize SNS addiction as Internet spectrum addiction disorder [47]. This indicates that first, SNS addiction can be classified within the larger framework of Internet addictions, and second, that it is a specific Internet addiction, alongside other addictive Internet applications such as Internet gaming addiction [48], Internet gambling addiction [49], and Internet sex addiction [50].

While there is no clear sign of telling if someone is a social media addict from the official medical standpoint, but there are plenty of signs and symptoms that clearly identify if a person is addicted to social media. Almost every addict will start their day with a morning routine of checking and pointlessly scrolling through what they have missed on social media after the long hours of sleep at night.

Most social media addicts feel like they have lost a lot of time and are outdated, thus, they want to check the status and see who has posted something new. Social Networking Sites is a big cause and also the motivator for procrastination. People can spend hours scrolling mindlessly reading news and updates that have no meaning at all. They can be a form of entertainment, but in reality, most of the things shared through on social media does not do any good to your life [51].

Studies show that a lot of people especially the youngsters [52], take out their smartphone to take a picture of their food, post on social media and check in the location before they eat. This can annoy those who are at the same table or people who are less privileged to enjoy the food. Checking notification can be a normal thing to do when your phone buzz. However, if the person is checking it all the time regardless of whether his/her phone buzzes, that would be a case of serious addiction.

People check their phone because they receive notifications, and most of the time, the notifications are from social media. Which means to say that these notifications are not really that important in their life. With the introduction of platforms such as Facebook, Twitter, and Snapchat, people may have chosen to contact each other using those platforms and avoiding any real physical contact.

If a person uses social media as the only means of contacting and talking to other people [53], the sign is clear that he/she is a social media addict. The reward of getting "likes" from a picture posted on Facebook means a lot to a social media addict. They are a form of acceptance and quickly become a habit to want to check who react to their post.

The problem grows deeper when the addict goes into double-figure likes on Instagram [54] or similar platforms. Social media addicts cannot live a life without internet, even for just a few hours. They will feel anxiety and choose to enter places with an internet connection. There are plenty of videos and photos that went viral showing someone involved in an accident, but the bystander did nothing besides taking photo or video for social media use instead of helping the ones in need.

This has become a serious issue and society condemns the ethical of the one who chooses to share the incident on social media than giving a helping hand. A clear sign of how social media becomes part of someone's life can be seen if that person has lost interest in other activities and responsibilities. They choose to scroll their phone instead of going out to exercise. They choose to waste time on Facebook rather than washing the dishes.

While social media does provide the convenience to connect with others, one cannot fully neglect the need for physical and face-to-face interaction with other humans [55]. The more time people spend on social media, the more socially isolated they will be. And this can make a person, experience less happiness and less satisfaction. Studies have found that most people admit that seeing other people travel and having a great vacation or showing material possessions are envy-inducing. This can make social media the ground for invidious feelings. The jealousy feeling can make a person want to make his or her own life look better, and post jealousy-inducing posts of their own. Apart from that, the feeling of jealousy can trigger depression too.

In short, people who are addicted to Social Networking Sites will never sit idly whenever they are free. They will always take out their smartphone or check on updates from their computer regularly. This, in the long run, can lead to several issues such as anxiety, worry or depression. This happens primarily because social media addicts depend too much on Social Networking Sites to kill their time, for entertainment or to satisfy their own negative behaviour cravings. There are also other negative effects that will affect the overall well-being of the person who cannot get rid of social media.

4. CONCLUSION

The aim of this literature review was to present an overview of the emergent empirical research relating to the addiction of the youth to social networks on the Internet. We discussed the extent to which Social Networking Sites have penetrated among the youth of our country, usage patterns among the youth, their motivations for usage, what the negative consequences of prolonged use of Social Networking Sites were and also explored potential social networking site addiction.

Like other problems, there are cures and solutions to social media addiction too such as getting rid of notifications, limiting time spent on social media, deleting social networking apps (which would cure youngsters desire to use them), engaging in productive activities so that students have less free time to check on social media, creating your own reward system (helps training the brain that there is something better than spending time on platforms such as Facebook, Instagram or Twitter), disconnecting from the internet when not using it, avoiding using smartphones in the bedroom, making a public commitment to reduce social media usage, or even asking self-reflective questions that help you to understand if you are being productive and are moving forward.

Therefore, technology in itself is a great tool only if it is used in the right manner. Although it can be a great way to connect with people, youngsters should learn to control these platforms as a tool and not get addicted to it.

5. REFERENCES

[1] N. Akiva and M. Koppel, "Identifying Distinct Components of a Multiauthor Document," 2012 European Intelligence and Security Informatics Conference, Odense, 2012, pp. 205-209. [Online]. Available: https://www.techopedia.com/definition/4837/social-media

[2] Lifewire.com, 'What is Social Networking Addiction; How to tell if you're hooked', 2018. [Online]. Available: https://www.lifewire.com/what-is-social-networking-addiction-2655246

[3] Lifewire.com, 'Addicted to Facebook? How to Break Your Addiction', 2018. [Online]. Available: https://www.lifewire.com/tips-to-break-facebook-addiction-3485789

[4] Theguardian.com, 'Twitter is harder to resist than cigarettes and alcohol, study finds', 2012. [Online]. Available: https://www.theguardian.com/technology/2012/feb/03/twitter-resist-cigarettes-alcohol-study

[5] Lifewire.com, 'Study: Social Media Fires Up Brain's Pleasure Center', 2018. [Online]. Available: https://www.lifewire.com/social-media-stimulates-brain-pleasure-centers-2655245

[6] Lifewire.com, 'How Internet Browsing Negatively Impacts You', 2018. [Online]. Available: https://www.lifewire.com/internet-browsing-negative-physical-impact-3485886

[7] Thewisdompost.com, 'Social Media Addiction: Meaning, Symptoms, Causes Effects and Treatment', [Online]. Available: https://www.thewisdompost.com/essay/addiction/social-media-addiction/social-media-addiction-meaning-symptoms-causes-effects-treatment/1293

[8] statista.com, 'Penetration of leading social networks in India as of 3d quarter 2017', 2018. [Online]. Available: https://www.statista.com/statistics/284436/india-social-network-penetration/

[9] Archana Kumari; Jyotsna Verma. Impact of Social Networking Sites on Social Interaction – A Study of College Students. International Journal of Humanities and Social Sciences (IJHSS) ISSN(P): 2319-393X; ISSN(E): 2319-3948 Vol. 4, Issue 2, Mar 2015, 55-62. [Online]. Available: https://www.academia.edu/11997931/IMPACT_OF_SOCIAL_NETWORKING_SITES_ON_SOCIAL_INTERACTION_A_STUDY_OF_COLLEGE_STUDENTS

[10] Kavita. The Influence of Social Media on Indian Students and Teenagers. International Journal of Advance Research in Science and Engineering, IJARSE, Vol. No. 4, Special Issue (01), April 2015. [Online]. Available: http://www.ijarse.com/images/fullpdf/401.pdf

[11] Ms. Reshma. Impact of Social Networking Sites on Youth: A Case Study of MDU Rohtak. International Journal of Current Research Vol. 6, Issue, 11, pp.9906-9908, November, 2014. [Online]. Available: http://www.journalcra.com/article/impact-social-networking-sites-youth-case-study-mdu-rohtak

[12] Titto Varghese; Dr. D Nivedhitha; Dr. Pradeep Krishnatray. Teenagers Usage of Social Networking Media in a South Indian State. International Journal of Scientific & Engineering Research, Volume 4, Issue 12, December-2013 (ISSN 2229-5518). [Online]. Available: https://www.researchgate.net/publication/280931108_Teenagers'_Usage_of_Social_Networking_Media_in_a_South_Indian_State

[13] Wise, K.; Alhabash, S.; Park. H. Emotional responses during social information seeking on Facebook. Cyberpsychol. Behav. Soc. Network. 2010, 13, 555-562. [Online]. Available: https://www.ncbi.nlm.nih.gov/pubmed/20950180

[14] Lang, A.; Potter, R.F.; Bolls, P.D. Where psychophysiology meets the media: Taking the effects out of mass communication research. In Media Effects: Advances in Theory and Research; Bryant, J., Oliver, M.B., Eds.; Routledge Taylor and Francis Group: New York, NY, USA, 2009. [Online]. Available: www.researchgate.net/publication/285864779_Where_psychophysiology_meets_the_media_Taking_the_effects_out_of_mass_media_research

[15] Park, H.S.; Kim, S.H.; Bang, S.A.; Yoon, E.J.; Cho, S.S.; Kim, S.E. Altered regional cerebral glucose metabolism in Internet game overusers: A F-18-fluorodeoxyglucose Positron Emission Tomography study. CNS Spectr. 2010, 15, 159-166. [Online]. Available: https://www.ncbi.nlm.nih.gov/pubmed/20414165

[16] Ko, C.H.; Liu, G.C.; Hsiao, S.M.; Yen, J.Y.; Yang, M.J.; Lin, W.C.; Yen, C.F.; Chen, C.S. Brain activities associated with gaming urge of online gaming addiction. J. Psychiat. Res. 2009, 43, 739-747. [Online]. Available: https://www.ncbi.nlm.nih.gov/pubmed/18996542

[17] Comings, D.E.; Blum, K. Reward deficiency syndrome: Genetic aspects of behavioral disorders. In Cognition, Emotion and Autonomic Responses: The Integrative Role of the Prefrontal Cortex and Limbic Structures; Uylings, H.B.M., VanEden, C.G., DeBruin, J.P.C., Feenstra, M.G.P., Pennartz, C.M.A., Eds.; Elsevier Science: Amsterdam, The Netherlands, 2000; Vol. 126, pp. 325-341. [Online]. Available: https://www.elsevier.com/books/cognition-emotion-and-autonomic-responses-the-integrative-role-of-the-prefrontal-cortex-and-limbic-structures/uylings/978-0-444-50332-9

[18] wersm.com, 'The 10 Top Reasons Why We Use Social Networks [Updated]', 2018. [Online]. Available: https://wersm.com/the-10-top-reasons-why-we-use-social-networks/

[19] Manjunatha S. The Usage of Social Networking Sites among the College Students in India. International Research Journal of Social Sciences (ISSN 2319-3565), Vol. 2(5), 15-21, May 2013. [Online]. Available: http://www.isca.in/IJSS/Archive/v2/i5/3.ISCA-IRJSS-2013-065.pdf

[20] Khurana N. The Impact of Social Networking Sites on the Youth. Mass Communication Journalism, 2015, 5:12, Volume 5, Issue 12. [Online]. Available: https://www.omicsonline.org/open-access/the-impact-of-social-networking-sites-on-the-youth-2165-7912-1000285.php?aid=65365

[21] Monica Munjial Singh; Mohammad Amiri; Sherry Sabbarwal. Social Media Usage: Positive and Negative Effects on the Life Style of Indian Youth. Iranian Journal of Social Sciences and Humanities Research, 123-127, 2017. [Online]. Available: https://www.researchgate.net/publication/321724019_SOCIAL_MEDIA_USAGE_POSITIVE_AND_NEGATIVE_EFFECTS_ON_THE_LIFE_STYLE_OF_INDIAN_YOUTH

[22] Dr. M. Neelamalar; Ms. P. Chitra. New Media and Society: A Study on the impact of social networking sites on the Indian Youth. New Media and Society. [Online]. Available: http://www.ec.ubi.pt/ec/06/pdf/neelamalar-new-media.pdf

[23] Sussman, S.; Leventhal, A.; Bluthenthal, R.N.; Freimuth, M.; Forster, M.; Ames, S.L. A framework for specificity of the addictions. Int. J. Environ. Res. Public Health 2011, 8, 3399-3415. [Online]. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3166750/

[24] W. Akram; R. Kumar. A Study on Positive and Negative Effects of Social Media on Society. International Journal of Computer Sciences and Engineering, Vol.5 (10), Oct 2017, E-ISSN: 2347-2693. [Online]. Available: https://www.researchgate.net/publication/323903323_A_Study_on_Positive_and_Negative_Effects _of_Social_Media_on_Society

[25] Harshit Lad. The Positive and Negative Impact of Social Media on "Education, Teenagers, Business and Society". International Journal of Innovative Research in Science, Engineering and Technology, Vol. 6, Issue 10, Oct 2017. [Online]. Available: https://www.ijirset.com/upload/2017/october/72_THE.pdf

[26] Ruchi Sachdev. Impact of Social Networking Sites (SNS) on the Youth of India: A Bird's Eye View. [Online]. Available: http://aujournals.ipublisher.in/a/55545

[27] Nusayba Kawsar. A Survey on Social Media Use, Engagement and Addiction as Predictors of Academic Performance. Submitted to the Department of Pharmacy, East West University, Bangladesh. 2017.[Online]. Available: http://dspace.ewubd.edu/bitstream/handle/123456789/2650/Nusayba_Kawsar.pdf?sequence=1&is Allowed=y

[28] Osharive Peter. Social Media and Academic Performance of Students in the University of Lagos. Submitted to the Department of Educational Administration, Faculty of Education, University of Lagos. [Online]. Available: https://www.researchgate.net/publication/273145941_SOCIAL_MEDIA_AND_ACADEMIC_PERFORM ANCE_OF_THE_STUDENTS_IN_UNIVERSITIES_IN_LAGOS_STATE

[29] Akashdeep Bharadwaj; Vinay Avasthi; Sam Goundar. Impact of Social Networking on Indian Youth – A Survey. I.J. of Electronics and Information Engineering, Vol.7, No.1, PP.41-51, Sept. 2017 (DOI: 10.6636/IJEIE.201709.7(1).05). [Online]. Available: http://ijeie.jalaxy.com.tw/contents/ijeie-v7-n1/ijeie-2017-v7-n1-p41-51.pdf

[30] Jamal J. Al-Menayes. Dimensions of Social Media Addiction among University Students in Kuwait. Psychology and Behavioral Sciences, 2015; 4(1); 23-28, ISSN: 2328-7837. [Online]. Available: http://article.sciencepublishinggroup.com/pdf/10.11648.j.pbs.20150401.14.pdf

[31] Aida Abdulahi; Behrang Samadi; Behrooz Gharleghi. A Study on the Negative Effects of Social Networking Sites Such as Facebook among Asia Pacific University Scholars in Malaysia. International Journal of Business and Social Science Vol. 5, No. 10; September 2014. [Online]. Available: http://ijbssnet.com/journals/Vol_5_No_10_September_2014/18.pdf

[32] Abdulwahaab Alsaif. Investigation of the Impact of Social Media on Students. Submitted to the Department of Computing and Information Systems, Cardiff School of Management, Cardiff Metropolitan University. April 2016. [Online]. Available: https://repository.cardiffmet.ac.uk/bitstream/handle/10369/8338/10303_Abdulwahaab_Saif_S_Als aif_Investigate_The_Impact_of_Social_Media_on_Students_108005_1416924025.pdf?sequence=1& isAllowed=y

[33] Audrey Poh Choo Cheak; Gerald Guan Gan Goh; Tai Sook Chin. Online Social Networking Addiction among University Students in Malaysia. International Journal on Social Science Economics and Art,

Vol. 2 (2012) No. 4, ISSN: 2088-5342. [Online]. Available: https://www.researchgate.net/publication/268266226_Online_Social_Networking_Addiction_among_University_Students_in_Malaysia

[34] M. Owusu-Acheaw; Agatha Gifty Larson. Use of Social Media and its Impact on Academic Performance of Tertiary Institution Students: A Study of Students of Koforidua Polytechnic, Ghana. Journal of Education and Practice ISSN 2222-1735 (Paper) Vol.6, No.6, 2015 ISSN 2222-288X. [Online]. Available: https://files.eric.ed.gov/fulltext/EJ1083595.pdf

[35] Al-Menayes. Social Media Addiction among University Students (Dimensions). Psychology and Behavioral Sciences, 2015; 4(1); 23-28, ISSN: 2328-7837. [Online]. Available: http://article.sciencepublishinggroup.com/pdf/10.11648.j.pbs.20150401.14.pdf

[36] Dr Shinde Vijaykumar; Mr Dhame Ganesh. Impact of Social Networking Addiction on Adolescents Health. The International Journal of Indian Psychology ISSN 2348-5396 (e) | ISSN: 2349-3429 (p) Volume 6, Issue 2, DIP: 18.01.216/20180602 DOI: 10.25215/0602.216. [Online]. Available: https://www.ijip.in/Archive/v6i2/18.01.216.20180602.pdf

[37] Dr. Ashwini Veronica; Dr. A. Umesh Samuel. Social Media Addiction among Adolescents with Special Reference to Facebook Addiction. IOSR Journal Of Humanities And Social Science (IOSR-JHSS) e-ISSN: 2279-0837, pp. 72-76. [Online]. Available: http://www.iosrjournals.org/iosr-jhss/papers/Conf.17004/Volume-4/15.%2072-76.pdf

[38] Elizabeth Dany Araujo Robles. Indicators of Social Networking Addiction in College Students from Lima. [Online]. Available: http://www.scielo.org.pe/pdf/ridu/v10n2/en_a05v10n2.pdf

[39] Daria J. Kuss; Mark D. Griffiths. Online Social Networking and Addiction—A Review of the Psychological Literature. Int. J. Environ. Res. Public Health 2011, 8, 3528-3552; doi:10.3390/ijerph8093528. [Online]. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3194102/

[40] Karim Al-Yafi, Mazen El-Masri, Ray Tsai, (2018) "The effects of using social network sites on academic performance: the case of Qatar", Journal of Enterprise Information Management, Vol. 31 Issue: 3, pp.446-462, https://doi.org/10.1108/JEIM-08-2017-0118. [Online]. Available: https://www.emeraldinsight.com/doi/10.1108/JEIM-08-2017-0118

[41] Echeburua, E.; de Corral, P. Addiction to new technologies and to online social networking in young people: A new challenge. Adicciones 2010, 22, 91-95. [Online]. Available: https://www.ncbi.nlm.nih.gov/pubmed/20549142

[42] Griffiths, M.D. A "components" model of addiction within a biopsychosocial framework. J. Subst. Use 2005, 10, 191-197. [Online]. Available: https://www.tandfonline.com/doi/abs/10.1080/14659890500114359

[43] Shaffer HJ, LaPlante DA, LaBrie RA, Kidman RC, Donato AN, Stanton MV. Toward a syndrome model of addiction: Multiple expressions, common etiology. Harvard Rev Psychiat. 2004;12:367–374. [Online]. Available: https://www.ncbi.nlm.nih.gov/pubmed/15764471

[44] La Barbera, D.; La Paglia, F.; Valsavoia, R. Social network and addiction. Cyberpsychol. Behav. 2009, 12, 628-629. [Online]. Available: https://www.ncbi.nlm.nih.gov/pubmed/19592725

[45] Wilson, K.; Fornasier, S.; White, K.M. Psychological predictors of young adults' use of social networking sites. Cyberpsychol. Behav. Soc. Network. 2010, 13, 173-177. [Online]. Available: https://www.ncbi.nlm.nih.gov/pubmed/20528274

[46] Pelling, E.L.; White, K.M. The theory of planned behavior applied to young people's use of social networkting web sites. CyberPsychol. Behav. 2009, 12, 755-759. [Online]. Available: https://www.ncbi.nlm.nih.gov/pubmed/19788377

[47] Karaiskos, D.; Tzavellas, E.; Balta, G.; Paparrigopoulos, T. Social network addiction: A new clinical disorder? Eur. Psychiat. 2010, 25, 855. [Online]. Available: http://brainblogger.com/2011/01/07/social-network-addiction-a-scientific-no-mans-land/

[48] Kuss, D.J.; Griffiths, M.D. Internet gaming addiction: A systematic review of empirical research. Int. J. Ment. Health Addict. 2011, in press. [Online]. Available: http://irep.ntu.ac.uk/16968/

[49] Kuss, D.J.; Griffiths, M.D. Internet gambling behavior. In Encyclopedia of Cyber Behavior; IGI Global: Hershey, PA, USA, 2011, in press. [Online]. Available: https://www.researchgate.net/profile/Mark_Griffiths2/publication/232708772_Internet_Gambling_Addiction/links/5502f9920cf2d60c0e64c376/Internet-Gambling-Addiction.pdf

[50] Kuss, D.J.; Griffiths, M.D. Internet sex addiction: A review of empirical research. Addict. Res. Theory 2011, in press. [Online]. Available: https://www.tandfonline.com/doi/abs/10.3109/16066359.2011.588351