

**Social Media and Suicidal Ideation among  
Students Pursuing Higher Education:  
A Study Based in Lucknow (U.P.)**

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**2020**

*To my Parents*

*I am feeling proud in dedicating this  
Research Work to my dear mother  
Dr. (Mrs.) Neerja Agrawal and to my  
Beloved father Late Mr. Sunil Agrawal*

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# DECLARATION

I, **Kritika Agrawal**, do hereby declare that the thesis entitled “**Social Media and Suicidal Ideation among Students Pursuing Higher Education: A Study Based in Lucknow (U.P.)**”, is my own work conducted under the supervision of Prof. Gopal Singh in the Department of Mass Communication and Journalism, at Babasaheb Bhimrao Ambedkar University, Vidya Vihar, Raebareli Road, Lucknow, and is also approved by Department Research Committee (DRC).

I further declare that to the best of my knowledge, the thesis does not contain any part of work, which has been submitted for the award of any other degree either in this University/Deemed University without proper citation. I also undertake that the thesis is essentially free from all kinds of plagiarism.

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# CERTIFICATE

This is to certify that the thesis titled “**Social Media and Suicidal Ideation among Students Pursuing Higher Education: A Study Based in Lucknow (U.P.)**” submitted by Ms. Kritika Agrawal is an original research work and has not been previously submitted in part or full for the award of any other degree or diploma to this or any other university.

The thesis submitted to Babasaheb Bhimrao Ambedkar University Lucknow satisfies all the requirements as stipulated in the *Doctor of Philosophy (Ph.D) regulations-1999 as amended in 2008/2010/2013* and it is fit for submission and evaluation for the award of the degree of Doctor of Philosophy of the University.

Date:

Supervisor

Head of the Department

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*Pursuing a Ph.D is like an odyssey, a seemingly long journey to a destination. Finally the time has arrived to look back on silhouettes of memories and to recall all those with whom I interacted and shared ups and downs of my research work.*

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\*\*\*\*\*

# PREFACE

There has been enormous interest among social scientists to find out the impact of social media on youngsters. This has resulted in number of researches related to it. However, less researchers have worked towards finding the impact of use of social media on the psychology of youngsters, or its association with suicidal ideations among them in the Indian context. According to National Crime Records Bureau (NCRB, 2015) one student commits suicide in India every hour. India has the highest suicide rate in the world among the youth standing at 35.5 per 100,000 people for 2012 (Foundation, 2017). The soaring suicidal rate and fast penetration of internet in the country has raised concerns if there is any association between the two.

With invention of internet, today, communication has become fast pace. Messages can reach to large group of audiences in real time and can generate changes in tendencies. Technology has the ability to connect and unite people. Even little knowledge about information technology can enable anyone to access internet and its tools. While technology can be put to good or bad use, depending on the user, many researchers today are worried about its negative impact on the youngsters. The youngsters pursuing their higher studies use social media for various purposes. Some use it to make new connections, while some use it to maintain the network of their contacts; some use it as a platform to express their thoughts and feelings, while some use it to satisfy their emotional needs. It has been seen that many a times social networking sites have been used to set an agenda by the political parties and also for youth protests.

Social networking sites like Facebook, Twitter and Instagram etc. are being extensively used to communicate with each other. It is a kind of virtual set up where

people can share their interests, meet new people and form a relationship online. It is said that online partners feel greater intimacy with and attraction for one another rather than when they actually meet one another personally, face-to-face (Ramirez & Zhang, 2007). Too much of pomp and show about the personal life by the users of social networking sites tends to develop depressive tendency among other users who are emotionally weak and lack coping mechanism.

Here in our research we are serious about finding out if there is any association between use of social media and suicidal ideations among the youngsters. We have also tried to examine the impact of social media on interpersonal communication skills of youngsters; and finding the association between use of social media and psychological distress among youngsters.

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# **Chapter 1**

## **Introduction**

### **Overview**

*This chapter starts with an introductory section on information related to various sub parts of the title. The chapter contains several sub titles. To understand the association between use of social media and suicidal ideations (and psychological distress) among youngsters, the researcher has done an empirical study. The chapter concludes with research questions of the study.*

### **1.1 Introduction**

Since its inception new media or in common terms digital media has given us a variety of mediated places like blogs, communities and Social Networking Sites (SNS), thereby attracting millions of users. Many of these users have integrated these sites into their daily practices. “What’s app me”, “contact to me on Facebook or Instagram” are the buzz words of today’s generation. Social media is a term none of us is unaware about today. Having a social networking account and to be connected with people globally has become a common feature. As of now there are hundreds of SNSs with different technological affordance, catering to wide range of interests and practices around the globe.

Some of the most common social networking sites are Facebook, Twitter and Instagram. While SNS Facebook is used by majority of countrymen irrespective of

their age group and other demographics, Twitter is mostly used by the intellectuals, and Instagram being more popular among the younger population. SNSs are virtual communities where users can create their personal accounts in the public domain. Social networking sites are web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (Boyd & Ellison, 2007, p. 211). It is worth noting here that the public display of connections is a crucial component of SNSs. Each profile of users contains links to the profile of their connection that is visible and sometimes even accessible to people in their friend list. This sometimes distresses individuals by hindering their privacy.

“Social media appeal to human’s basic need-which is the desire to socially connect with each other.”

-Evan Williams, founder of Twitter

According to an article published in Hindi daily Navbharat Times, people spent 2 hours and 22 minutes on internet world wide in 2018. While in 2017 the time spent by netizens on social media was 2 hours and 15 minutes (Times N. B., 2019). Meanwhile, according to the report released by research firm Global Web Index, Facebook is the most used online platform for social networking. It is used by 85% of total online population, while 79% of the users use it daily. The report suggests that Facebook is the top favourite among the online active users, followed by YouTube. It was found that most people use social media to collect information or read about current affairs. While, netizens in Philippines use social media the most, India stand at the thirteen place with Indians spending 2 hours and 25 minutes daily (Index, 2019).

The penetration of new communication technologies in the society and the increased convergence of media (known as new media) have given way to radical transformation of interpersonal communication. In the last few years we have witnessed a change in the ways interpersonal communication is enacted and experienced. Polymedia emerged precisely out of such a need to not only describe but also to understand the emerging environment of proliferating communication opportunities and its consequences for interpersonal communication (Madianou & Miller, 2012, p. 170). The researchers here proposed a new theory for polymedia, where *poly* (a Greek word) means many or several.

On one hand while it is becoming an individuals' choice to take on to social media as a communication tool, on the other hand it is being heavily used as a marketing tool. Customer's responses, interaction and brand awareness is the reason behind why it is being used by companies across the globe. The multiple roles being played by social media apart from its core role of mere communication information or networking is the reason leading to its popularity. Social media is being used by different brands to build communities for interaction and marketing. Not just individuals but every organisation, big or small has its online presence on social networking sites, which is an easy place to interact with masses virtually.

Social networking sites have several affordances for promoting participation, particularly protest behaviour among the youth. They facilitate access to a large number of contacts, thereby enabling social movements to reach critical mass (Marwell & Oliver, 1993). By allowing multiple channels for interpersonal feedback, peer acceptance, and reinforcement of group norms, these sites also promote the construction of personal and group identities that are key antecedents of protest behaviour (Dalton, Sickle, & Weldon, 2009). Functioning as information hubs, social

networking sites allow users to remain in contact. They also enable the user to exchange updates regarding their activities with others, who share the same interest. This helps people belonging to social movements and political groups to build relationships and networks with one another. Also, social media are effective means for social interaction. Finding a basis for conversation and social communication, connecting with family, friends and society, and gaining insight into the circumstances of other- all these factors can instill in young people interest in collective issues (Valenzuela, Kim, & Gil de Zuniga, 2011). In the past several studies relating to the 'youth protest activity in Chile' or 'Egypt's Tahrir Square Protests' have been conducted. Some of these studies suggested that social media, especially Facebook plays crucial role in providing new sources of information that is not easy to control and is crucial in shaping how users make individual decisions about participating in the any protest. Macafee and Simone examined the relationship between young people's information and expressive uses of four social media- Facebook, YouTube, Twitter, and Blogs- and their offline protest engagement. The study found that although college students use social media to obtain information, only expressive users related to offline protest engagement (Macafee & Simone, 2012).

In the past years, say a decade, technological advances have reached to almost all segments of the population across the globe. In olden days youth used to stay connected through face-to-face interaction or the use of the landline telephones. However, the growing reach of internet and invention of smart phones has supposedly lured the youngsters to access virtual online world. Researches in the past have shown an inclination of researchers towards the effects of the Internet on youth concerning potential risks to safety, well-being, and skill development (Selfhout et al., 2009).

Few studies conducted in the recent past have shown that communication technology is increasing exponentially with each generation and is having a strong hold within our society (Mishna et al., 2009).

The influence of social media on students pursuing higher education is of particular importance in the contemporary scenario, not just because this group of youngsters (youth<sup>1</sup>), aged between 18-24years, is developmentally vulnerable but also because they are among the heaviest users of social networking. A survey conducted by TCS in year 2013, suggests that about 75 percent of India's youth prefers social media over phone calls to communicate, with more students using the internet for school-related tasks, thereby exploiting the power of internet (India's youth prefer communicating through social networks:Report, 2013).

Social media is not just confined to common man, whereas it is being used in political galleries as well. Social networking sites, especially Twitter are being widely used by politicians. Now a days different governmental policy, strategies are reached out to common man through social media. Anna Hazare's social media campaign against corruption and Prime Minister Narendra Modi's youth engagement stunts on social media are some of the common examples. It is being said that social media would be stronger and more persuasive than television in future. Social media is interactive tool that provides useful information about the opinions and inclinations of people around the globe. This helps politicians and ministers to get an idea about what people want and how they react on any issue. Parashar analysed role of new media in mass movements with reference to Anna Hazare's campaign and found that new media help

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Notes: <sup>1</sup>The Unites Nations, for statistical consistency across regions, defines 'youth', as those persons between the ages of 15 and 24 years (Source: unesco.org).

propagate the world outside India and draw global attention thus making any movement 'need of the hour' (Parashar, 2012).

Giddens analysed that the degree of fragmentation and globalisation in our modern society are increased by the Internet and mobile communication technology (Giddens, 1990). In the present time an individual is not fixed to one point for communicating to someone at a particular point of time. Infact modern communities have become more flexible as a whole. They are not limited to their member being physically present at the same time. We are simultaneously connected online with group of friends, family and various online networks. This clearly indicates that our way of living today consists of mix of both online and offline activities. This makes it interesting to understand the ontology of online words which means taking into account the relation between the offline and online communication.

Social media is one place that can help anyone who is nobody shot to fame or vise-versa just in a matter of seconds. A article published in 'Times Life', Sunday supplement of English daily, The Times of India states that "social media has made being 'internet' famous a full-time career option. Now YouTubers, Instagrammers, bloggers, SnapChatters are actual designations, and being an influencer is a coveted posts" (Amarnath, 2018). The article suggests that today netizens are generally aware about the day to day activity of their favourite social media celebrity or influencer. This information can include anything from what they had for breakfast, where they are travelling to what health issue bothers them. Social media fame is apparently easy to court, but not easy to manage. Meanwhile, in an interview to English newspaper The Times of India, activist and writer Gurmehar Kaur said that the internet is a place that can do wonders if one knows how to make it work in their favour. "It can be the

worst if you don't know how to work around it. It depends on how to work around it. It depends on how you react," she said.

An article published in Times Life magazine of English newspaper, The Times of India suggests that the world uploads some 1.8 billion photos each day. However, it doesn't mean that each picture has true-worthy moments. Instead picture insists others to look at the person, the place where they eat and travel. Today the life depends more on the photo-worthiness rather than the moments (Walia, The Times of India, 2019). In the article, photographer Tarun Khiwal says "We have gone too far with the obsession of capturing each moment of our lives, and sharing it with the world. We don't know how to really live in the moment anymore. Instead of living it for ourselves, we are capturing on camera to show it to other people. Rather than finding our own happiness, we have started asking people for validation of our happiness." The article suggests a new mind set of people, that if no one 'liked' the picture it is considered to be a not really good moment. This means that the success of a moment is now decided by the likability of its picture on the social networking sites.

With the increasing dependency on social networking for maintaining relations, the netizens seem to share a lot of pictures on their social media accounts. People are taking photographs everywhere, right from the places they visit to what they eat to with whom they hang out, what they wear etc. The findings by a memory test research project at Fairfield University, Connecticut, US highlights key differences between people's memory and the camera's memory. The study suggests that the photographed objects are not remembered as well as those that are simply observed (Henkel, 2013). "Despite the added time or attention required to angle the camera, adjust the lens to capture the best shot, the act of photographing made people dismiss the object from memory. But the ones who observed without taking the picture didn't

miss out on all the small details and they stayed longer in their memory,” Henkel said in her research.

On one hand while the penetration of internet has increased the interest of people in social networking sites, it is being said that social media fame is easy to court but hard to manage. Social media can raise anyone to fame and do the exact opposite of it to anyone. It is a place that can make a commoner a celebrity in just a matter few hours. ‘Dancing Uncle’ Sanjeev Srivastava became the online sensation over night. This assistant professor from Madhya Pradesh rose to internet fame all thanks to a *shaadi* video of him grooving with his wife. He later started a Twitter account to connect with the fans. However, this instant shot of success is apparently difficult to handle. In an interview to English daily, The Time of India, activist and writer Gurmehar Kaur said “The internet can be the greatest space if you know how to make it work in your favour. It can be the worst if you don’t know how to work around it. It all depends on how you react.”

## **1.2 Brief History of Social Media**

Living in groups and communicating with each other to get connected has always been one of the basic needs of mankind. Even before the advancement of technology and its instruments, people used to use different modes of communication to keep in touch with each other. Be it pigeons, post (snail mail), telegram or telephone, man has found his various means of communication all the way through stone age. Earlier distance was the deciding factor for the survival of a relationship. Long distance relationships were difficult to hold on to because of long response hours.

Communication has been growing constantly in terms of upgradation, identification and discovery of new, fast and more reliable and efficient ways.

Social networking sites evolved with a boom post the 21<sup>th</sup> century. According to website [historycooperative.org](http://historycooperative.org), the first social media site Six Degrees was launched in 1997. It was named after the ‘six degrees of separation theory’ and lasted till 2001. The website came with a unique feature. It allowed not just its users but also those who didn’t register their account to connect with people and confirm their friendship. After the launch of Six Degrees, the internet entered the era of blogging and instant messaging. By the start of year 2000, people had already become use to the internet and they began to engage socially online. The first social media surge came after the launch of website MySpace in the early 2000’s. Even though MySpace didn’t become as popular as other social networking sites like Facebook, it is said that it was the original social media profile website that inspired big SNSs.

In the year 2002 website named as Friendster was launched in the quest to compete with a profitable online dating site, Match.com. Friendster was designed to help friends-of-friends meet, based on the assumption that friends-of-friends would make better romantic partners when compared with complete strangers (Abrams, 2003). In 2004, Mark Zuckerberg along with his fellows from Harvard College launched social networking site Facebook, which was initially limited to Harvard students only. Later it was expanded to higher education institutions in the Boston area, the Ivy League schools and Stanford University. After its public launch in 2012, Facebook became the social media giant with time. Currently it is the number one social media website and boasts over a billion users globally (Wikipedia, Facebook). Today, there are a number of social networking sites that are being used by many. Some these include Twitter, Instagram, YouTube etc. These websites are a platform where individuals can

actually reach out to maximum number of people without actually sacrificing the intimacy of person-to-person communication.

### **1.3 Different types of Social Media Platforms**

Social media has become a very familiar term for today's generation. People of all age groups are actively participating in social media activities worldwide. Trend of talking personally, or over phone or even sending greetings by posts or through emails has become obsolete in the present times. Instead people are preferring interaction through online live chat, status and image updates and video sharing etc. on social networking platforms like Facebook, Twitter, YouTube etc. Social media enables media consumers to gather, analyse and disseminate any sort of news, information or idea. In the era of rapid development, the social media takes the forefront. Social media can be categorised as: social networking sites, blogs, content community, collaborative projects, virtual game worlds, and virtual social worlds (Kaplan & Haenlein, 2010).

‘What is Social Media?’ the book written by Antony Mayfield, shares insight knowledge on the basics of social media. The book is a beginners guide, which contains some of the basic vocabulary and famous abbreviations that is popular in the users of social media. The book helps make a new user familiar with the use of social media. The book suggests “social media is best understood as a group of new kinds of online media, which share most or all of the characteristics including: participation, openness, conversation, community and connectedness.” Also, the book suggests that there are basically six kinds of social media that include: social networks, blogs, wikis, podcasts, forums, content communities and microblogging. Defining social

media, the book quotes “a good way to think about social media is that all of this is actually just about being human beings. Sharing ideas, cooperating to create art, thinking and commerce, vigorous debate and discourse, finding people who might be good friends, allies and lovers-it’s what our species has built several civilisations on. That’s why it is spreading so quickly, not because it’s great shiny, whizzy new technology, but because it lets us be ourselves- only more so” (Mayfield, 2008).

**Social Networking Sites:** These sites are virtual communication spaces that help build relations, connect to different people whom they might or may not know otherwise and share opinions. Through social networking sites people can easily get in touch with their known friends and befriends even with some unknown individuals, thereby increasing their circuit of pals. Not just making connections, buy social networking sites like Facebook, Instagram etc. also help people to express themselves on the public forum in the form of text comments or photographs and videos.

Researchers have described the features of social networking sites and propose a comprehensive definition. The researchers present a perspective on the history of social networking sites and have discussed key changes and developments of the same. The researchers have defined social networking sites as “web-based services that allow individuals to construct a public or semi-public profile within a bounded system; articulate a list of other users with whom they share a connection; and view and traverse their list of connections and those made by other within the system. The nature and nomenclature of these connections may vary from site to site.” The authors suggests that social networking sites are unique because they not only allow individuals to meet strangers but rather they enable users to articulate and make

visible their social networks. The backbone of social networking sites consists of visible profiles that display an articulated list of ‘friends’ who themselves are users of the system (Boyd & Ellison, 2007).

The first recognizable social network site was launched in 1997. SixDegrees.com enabled its users to create profiles, list their friends and beginning in 1998 surf the friends lists (Boyd & Ellison, 2007). Meanwhile, classmates.com allowed people to affiliate with their high school or college and surf the network for others who were also affiliated. However, the users were allowed to create profile or friends list until years later. It is worth mentioning here that SixDegrees was the first to combine these features all together. Between 1997 and 2001, a number of community tools began supporting various combinations of profiles. AsianAvenue, BlackPlanet, and MiGente allowed users to create personal, professional, and dating profiles. Users could identify Friends on their personal profiles without seeking approval for those connections (O. Wasow, August 16, 2007). The launch of Ryze.com in 2001 helped people leverage their business networks. The people behind Ryze, Tribe.net, LinkedIn, and Friendster were entwined personally and professionally. They believed that they could support each other without competing, (Festa, 2003). The launch of MySpace in 2003 attracted majority of media attention in the U.S. and abroad. This happened when social networking sites were proliferating and growing in popularity worldwide. Friendster gained traction in the Pacific Islands, Orkut became the premier SNS in Brazil before growing rapidly in India (Madhavan, 2007). The rise of social networking sites shifted the organisation of online communities. Different types of social networking sites are as mentioned below.

**Blogs:** According to Kaplan and Haenlein, blogs are websites that allow users to share insights on a particular area like travelling, food, personal care and health etc (Kaplan & Haenlein, 2010). People who regularly post updates on their blogs are called as bloggers. These can be based on texts, images, videos or audios. A blog is a personal space which is owned by a blogger for exchanging information and ideas.

**Content community:** As the name suggests, these sites are designed to share material which is different from original work. The content shared can be in the form of text, presentation slides, photos and videos. Content community is different from social networking sites because one doesn't need to create a personal account to use the shared content.

**Collaborative projects:** with an aim to cumulate community intelligence, these sites depend on their users for content updation. These can be further classified into two types: social bookmarking sites and wikis. Social bookmarking sites help individuals to store and manage a collection of links that can be shared with others. While wikis are sites that allows its users to modify and edit, thereby enhancing the quality of its content (Kaplan & Haenlein, 2010).

**Virtual Game Worlds:** According to Wikipedia, a virtual world is a computer-based simulated environment which may be populated by many users who can create a personal avatar, and simultaneously and independently explore the virtual world, participate in its activities and communicate with other (Wikipedia).

**Virtual Worlds:** Represented by a customised human-like character or a picture, these are applications that resemble the real world. Individuals could interact with each other in a virtual space (Chan and Guillet, 2011).

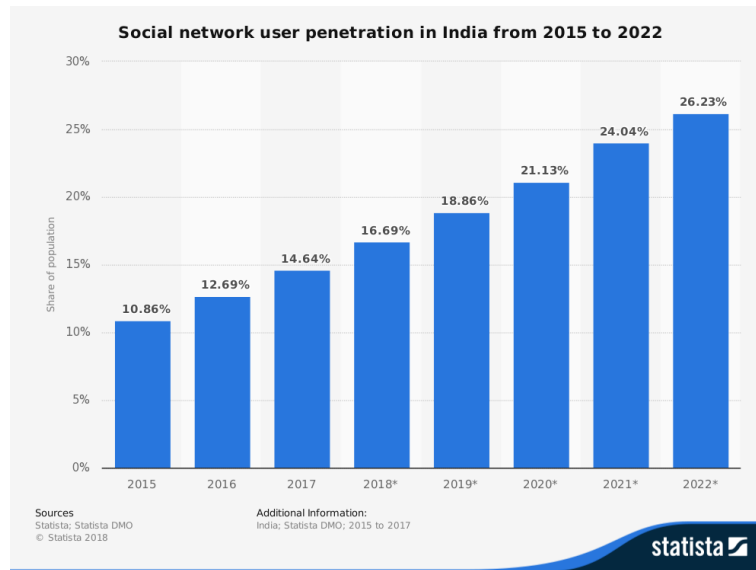
Social networking sites provide rich sources of naturalistic behavioural data. Profile and linkage data from social networking sites can be gathered through the use of automated collection techniques or through datasets provided directly from the company. This data can be used by network analysis researchers to explore large-scale patterns of friending, usage and other indicators. It can also be used to analyse the trend that started with examinations of blogs and other websites. For example Golder, Wilkinson, and Huberman (2007) examined an anonymized dataset consisting of 362 million messages exchanged by over four million Facebook users for insight into Friending and messaging activities.

#### **1.4 Use of Social Media in India**

World is growing at a fast pace. The word social media has grabbed attention in India and the country has observed phenomenal growth in terms of its users. Easy availability of internet, its prompt access and focus on digitalization are the key factors that have contributed to the growth on internet in the country. Further, the increased rate of mobile use has intensified the access of internet in both rural and urban India. According to Statistical Portal, Statista.com, India is the second largest online market in the world after China. As per the website, China had 772 million internet users in December 2017, while India followed it with 462.12 million users in

total. The data also suggests that India is ahead of developed countries like United States of America (312.32 million users) and United Kingdom (63.06 million users). It won't be wrong here to say that the number will increase in the coming years. According to another set of data on the website, India is expected to have about 635.8 million internet users by 2021. The continuous increase in the number of internet users in the country is supposedly a matter of concern. While internet undoubtedly has a number of benefits, its negative impacts cannot be ignored completely.

Over the past decade social media has become extremely popular tool to access news, for entertainment and other related activities among people over traditional forms of media like television, radio, newspaper etc. One important aspect of social media is social networking. Sites like Facebook, Instagram, Twitter etc. provides its users an opportunity to interact with 'n' number of people worldwide. They have become an important tool of expression and self presentation for the new generation, infact for all tech savvy people, irrespective of which generation they belong too. Its users can freely communicate their thoughts, like or comment on others' posts and can sometimes even vent out their anger through the online platform. Some SNSs' accommodate distinct viewers, while others attract people based on similarities like language, religion, nationality-based identities etc. However, the main aim of social networking sites is to encourage new ways to communicate and share information (Al-Jubayer, 2013). According to data from Statista.com, 26.23% of the total Indian population will be using social networking sites by year 2022. While the current social network user penetration in India is 16.69% it is expected that more population of the country will be having their social media accounts in the coming years.



**Figure1.1: Social network user penetration in India from 2015-2022**

Since the popularity and use of SNSs is increasing rapidly, it is important to understand that its impact on a person’s psychology cannot be ignored. The most popular among the online social networking sites catering to a broad range of undergraduate users is ‘Facebook.com’. The website claims to have hundreds of millions of registered users (Suwannatthachote & Tantrarungroj, 2012). The increasing users of Facebook make it interesting to study its negative implications. Studies in the past have yield mixed results in terms of association between social media and its impact on the psychology of an individual. Some studies suggest frequent use of social media might be associated with decline in subjective well-being and life satisfaction (Kross & Verduyn, et al., 2013). While other studies indicate that social media helps its users to receive perceived social support and life satisfaction, thereby decreasing their risk of being depressed (Valenzuela, Park, & F.Kee, 2009).

The use of internet is growing at a steady stage and there seem to be a narrowing gap between use of television and online platforms (Zenith, 2018). There isn't any doubt about the fact that the rapid spread of mobile devices and mobile data networks has transformed global media consumption in the recent year. A recent report by Zenith Media Consumption Forecast 2018 suggests that the gap in daily consumption between online and TV was 27 minutes in 2017, shrunk to 13 minutes in 2018 and is expected to vanish by 2019. It has been estimated that the average person will spend 492 minutes a day consuming media in 2020. Meanwhile, it is worth mentioning here that India tops the lists of countries using internet on mobile phones with the percentage being 89%. Also, it was found that Indians spend 90% of their online time on a phone compared to the global average of 30%. "Television and radio have also lost out, though not on the same scale. It is estimated that time spent watching television shrank by 3% between 2011 and 2018, while time spent listening to radio shrank by 8%. Again, television channels and radio station have gained audiences online at the same time as they have lost them offline, but they have faced stiff competition from native digital platforms such as YouTube and Spotify," the report stated.

According to a statistical report released by App Annie, an independent agency that collates data on apps, India had the fastest growth in app downloads among major countries between year 2016 and 2018. The country saw a surge in downloads in food delivery apps and finance apps. It also saw the fastest growth in the hours spent on video streaming apps (Sydow, January 2019). The report suggested that India saw session growth in food and drink apps in 2018, up 120% from 2016. India saw more than 200% growth in downloads of finance apps while countries including US and Germany did just over 50%. "Growth in sessions of top fitness apps indicate the

stickiness of these services and their ability to become weekly-even daily-habits that slot into existing preferences like checking the stock markets and shopping,” the report stated. Also, the report estimated that the hours spent on the top five video streaming apps in India soared by 185%, South Korea grew by 155% and Brazil by 130 %. Also, it was found that Indians spent over 45 billion hours on video streaming apps.

## **1.5 Internet and Higher Education**

Gone are the days when institutional libraries were seen filled with students stuck to their book like bookworm. The digital text available on the internet has apparently replaced the hard copy education both with respect to school education as well as higher education. The internet has not only been able to alter the media consumption pattern by opting for digital platform through convergence but also it has been able to change the practice of accessing knowledge sources by the students pursuing their higher studies. “Now a pure screen, a switching centres for all networks of influences” Baudrillard (1988). Although the hard copies of books and academic journals still look upon to students’ attention, the day is not far when the encapsulated habits of the students to stick to digital platforms for knowledge will replace the bookshelves. Internet has been steadily spreading its tentacles in higher education, specifically among the young students of colleges and universities from the past few years. It has become common to come across stories of students cracking the competitive and other examination by learning and gaining knowledge through e-resources. Youngsters have become more techno-savvy in the contemporary new media environment. From Gutenberg era to the age of electronic communication like

radio and television broadcasting, the medium of communication have converged to new digital medium through networking. This new medium along with telecommunication and information technologies has witnessed a revolutionary progress in bringing a paradigm shift in techno-cultural discourse in society. It won't be wrong here to say that convergence of various media into one medium have given a way to new media environment where the communication has become easier, faster, interactive instantaneous. It has enabled millions of users to across to globe to connect together or to a knowledgeable source all at the same time.

Internet usage pattern and behaviour is a complex phenomenon. Accessing internet has become a necessity rather than a luxury among the college students. Ruggiero (2009) outlined three major features of new media technologies which were not associated with conventional media. The identified attributes are 'Interactivity', 'Demassification' and 'Asynchronicity'. Interactivity profoundly upgrades the tenets of Uses and Gratification approach like active user undermining the notion of passive user (ibid). When compared to conventional mass media, new media or online media offers large variety of choiceable features which let the individual to select a particular form of media from an array of options as per their needs and preferences. One can simply send or receive messages at their own convenience. Internet enables its users to store, send, transfer and receive messages through online webpage to and from another person.

## **1.6 Suicide and Suicidal Ideations**

Suicide is a human problem that is as old as humanity itself. An animal can die out of some deadly disease, disaster or by any accidental activity by an outside agency,

however, by far it is known that only a human being can will his death and kill himself intentionally. Even though it is a personal action that a man can take, studies on suicide illustrates that several other factors like interaction with individuals and other social ambitions and desires can influence his decision of taking the action. In the contemporary world, high occupational mobility, desires to achieve high standard of living, competition with the counterparts etc is supposedly leading to high incidence of suicidal deaths worldwide. Now a days, attempted suicide and well successful suicide cases have become a common practice.

The word suicide was first coined by Sir Thomas Browne in his 'Religio Medici' in 1642 and subsequently by Walter Charleton in 1651 (Rastogi & Kochar, 2010). Suicide can be defines as "self-inflicted death in which a person makes an intentional, direct and conscious effort to end one's life" (Comer, 2002). However, according to Edwin Schheidman, suicide is "the conscious act of himself included destruction, commonly understood as a different dimensional despair of a needful individual action which describes an issue in which the action is adopted as a better solution" (Shneidman, 1985). Meanwhile, Durkheim (1917) defined suicide as "death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result. This however excludes those who survive the attempt (Durkheim, 1917).

Talking about suicidal ideation, it is evident that it is the thought process, which occurs before committing of suicide, where people think to end their own lives (Schlebusch, 2005). Suicide ideation is considered to be an important precursor to later attempted and complete suicide (Brent, et al., January 1993). Any self-reported thoughts of engaging in suicide related behaviour can be called as suicidal ideation. This may result from individual's capacity to deal with emotional pain and coping

strategies. It was found that adults aged between 18-24 had the highest incidence of reported suicide ideation (Crosby, Cheltenham, & Sacks, 1994). The researchers used a random-digit-dialed telephone survey among U.S. adults. This was done to estimate the 12-month incidence of suicidal ideation, planning and attempts made by the respondents. It was found that suicidal behaviours are not uncommon and occur along a continuum ranging from ideation to complete act of suicides. A rapid increase in the suicide rate at the beginning of age of 15 years has been observed. Mood disorders, schizophrenia and drug abuse are said to be major risk factors of suicide in all age groups (Shaffer, et al., 1996).

### **1.6.1 Prevalence of Suicide:**

Suicidal behaviour is a major problem worldwide. Suicide by large is a personal tragedy that prematurely takes the life of an individual, leaving behind his badly affected family, friends and communities. Suicide has globally become the second leading cause of death for individuals between the age of 15-29 years. More than 800,000 people die by successfully committing suicide every year with one person dying every 40 seconds (WHO, 2014). Social, personal, psychological, cultural, biological, environmental and other external factors contribute in engaging a person into suicidal behaviour.

In recent times, occurrence of suicidal ideation and suicide rate has increased among youngsters by a large extent. According to the World Health Organisation (WHO), every year around 800 000 people die by committing suicide. In 1998, WHO ranked suicide as the twelfth leading cause of death worldwide (Staff, 2006). However, the 2016 reports by WHO suggests that suicide has become the second leading cause of

death among 15-29 years old with 79% of global suicides occurring in low and middle-income countries. Suicide does not just occur in high-income countries, but is a global phenomenon in all regions of the world (Organisation, 2018). WHO data indicates an annual global age-standardization suicide rate of 10.5 per 100,000 population. The organisation advises that suicides are preventable and therefore, measures should be taken to at population, sub-population and individual levels to prevent suicide and suicide attempts.

Suicide attempts seem to be higher among adolescents. In western countries, the ratio of suicide attempts versus completed suicide was found to be higher among adolescents than in any other group (King, 1997). Past researches suggest suicide as one of the main causes of injury death for teenagers in the United States (Holinger, Offer, Barter, & Bell, 1994). Suicide is a leading cause of death in the United States with suicide rates increased in every state increased from 1999 through 2016 (Center for Disease Control and Prevention, 2018). Lack of diagnoses of mental health condition is suggested to be a reason behind the attempt of suicide. In a developing country like India, mental health issues are still not talked about and are considered as a taboo. People tend to ignore prolong mental issues like depression and anxiety thereby mishandling it which results in suicide. Other problems that often contribute to suicide include issues with relationships, jobs, substance use, physical health and other social factors. However, with effective evidence-based interventions and timely treatment and support it is possible to prevent both suicide and suicide attempts. The report by Centre for Disease Control and Prevention suggests that effective prevention strategies are needed to promote awareness of suicide and encourage a commitment to social change.

A study conducted by Indian Council of Medical Research (ICMR), Public Health Foundation of India (PHFI) and Institute for Health Metrics and Evaluation (IHME) in collaboration with the Ministry of Health and Family Welfare along with other health experts and stakeholder, states that suicide is the leading cause of death among the 15-39-year age group (Times, 2018). The study suggests that 37% of the total global suicide deaths among women are from India itself. Also, it was found that women make more suicide attempts, but it is men who die more. Meanwhile, according to the National Crime Records Bureau's (NCRB) recent data, the number of suicides in the country during the 2004-2014 has increased by 15.8%. Maharashtra recorded the highest number of suicides with 16,307 cases, while Tamil Nadu followed it with 16,122 cases, both in 2014. All India Rate of suicides was found to be 10.6 during year 2014. Puducherry reported the highest rate of suicide, 40.4; followed by Sikkim, 38.4. it is worth mentioning here that the Government of India relies on its NCRB data for national estimates and here the data clearly indicates that increasing suicide rates in the country is a matter of concern. A study published in Lancet (2012) estimates that the number of suicide in India in 2010 was 187,000, which indeed is an alarming number (Lancet, 2012). Suicide death rates in India are among the highest in the world with people between age 15-29 years being most vulnerable (Patel, Ramasundarahettige, Vijayakumar, Thakur, Gajalakshmi, & Gururaj, 2012). The report titled "Preventing Suicide: A Global Imperative" released by WHO in 2014, has claimed India as the suicide capital of the world.

The official suicide rate for 2015 published by the National Crime Records Bureau (NCRB) of India was 10.6 per 100,000 population in India, similar to the global average of 11.4 per 100,000 population (NCRB, 2015). According to the article 'Suicide in India: a complex public health tragedy in need of a plan' (Lancet, 2018),

“Southeast Asia accounts for roughly 40% of the estimated 800 000 annual suicide deaths globally, and is the frontline for delivering on the aspirational Sustainable Development Goal (SDG) of a one-third reduction in the suicide death rate (SDR) by 2030.” A study by Rakhi Dandona found that deaths from suicide in India increased from 164404 in 1990 to 230314 in 2016. This means an increase of 40.1% in the gap of 16 years (Dandona, 2018). The country’s contribution to global suicide deaths increased from 25.3% in 1990 to 36.6% in 2016 among women, and from 18.7% to 24.3% among men. The study suggested an alarming fact that the suicide rate among women was 2.1 times higher in India than the global average in 2016. Also, Dandona found that suicide was the leading cause of death in India in 2016 for the people belonging to 15-39 years of age. Around 71.2% of suicide deaths among women and 57.7% among men were reported in this age group. As per the National Health Profile 2018 report, published by Central Bureau of Health Intelligence, suicide rates are increasing significantly for young adults including male, females and transgenders in a wider population. “Maximum number of suicide cases (44,593) is reported between the age group 30-45 years” (CBHI, 2018).

Suicidal behaviour is a complex process that is influenced by several interacting factors. While the act of suicide is widely associated with mental disorder, it is important to broadly generalize the risk factors. Emile Duekheim (1966) has called suicide as one of the crudest expressions of social phenomenon. It is important to understand that feeling suicidal is not the nature of a person, instead it is just a state of mind. But, the act of deliberately ending one’s own life is growing among the youngsters and hence is a public health concern. Even though deaths due to suicide are preventable, the stigma attached to mental disorders and suicides hinders many

people to seek help. Raising community awareness can help break down taboos and prevent suicides.

Depression is said to be the strongest risk factor of suicide (Brent, et al., 1988; McGlashan, 1986; Friedman, et al., 1983; Yen, et al., 2003). Several researchers have found that mood disorder is the most associated factor with suicidal ideation (Chioqueta and Stiles, 2003; Hawton, 1987). Also, a number of previous researches have suggested that psychiatric disorders were associated with suicide (Asnis, et al., 1993; Isometsa, et al., 1996).

### **1.7 Suicidal Stories on Social Media**

Social media is a platform where anyone can freely create an account and use it to vent out his/her anger or frustration. Lot of suicidal stories get viral on social media. Be it of the known personality, or anyone's else. Unlike past decades people have now started posting their suicide notes or pictures taken before committing suicide, which is very devastating not only for the family members but also for any one going through it. The study will try to find out if such stories tend to motivate the people who are vulnerable to committing suicide.

### **1.8 Social Media and Psychological Distress among Youngsters**

College students often use internet for accessing social networking sites, most commonly Facebook and Twitter. It won't be wrong here to say that even Youtube and Instagram are being frequently used by the internet active population. However, their contextual motives behind using these sites may be different. Some may use it to

strengthen different facet of their offline connections (Subrahmanyam, Reich, Waechter, & Espinoza, November-December 2008). Youth today is so lost in the unrealistic virtual world of internet that it possibly misses out on critical social skills development like verbal communication, face-to-face interaction etc. They prefer spending majority of their free time interacting with their peers, family members and sometimes even unknown people through an online screen. It is a common sight to see, for example, four people sitting in a room and constantly busy on their phones rather than talking to each other. This scenario is in contradiction to how it used to be in olden days when evening talks with friends and family was a routine activity. While it is a well known fact that face-to-face communication is important for healthy living, it won't be wrong here to say that not doing so and constant engagement in the offline world might lead to isolation, depression, anxiety, irritation and emotional distress.

There is a surge in use of digital technology, and one may wonder if the use of social media or the social networking sites create stress among its users. There is more information flowing into people's life now than ever, much of which can be distressing. There are chances that stress might develop in users from maintaining a large network of Facebook friends, demand of replying to text messages, having to keep up with status updates etc., these technologies are said to takeover people's lives. And this social pressure might put people at the negative psychological health effects. The current study, a representative study of Indian youngsters based in Lucknow, explores relationship between digital technology use and psychological stress.

An article published in English daily, The Times of India, suggests that 'seasonal depression' has become a regular phenomenon among the people. Netizens sharing their happy pictures during the festivals tend to give depression to those who lack

friends, suffering emotional breakups or have no plans during the festive season. Consultant Psychiatrist at Fortis Hospital, Delhi suggests that people pin too much hope for occasions like New Year and when it doesn't happen they tend to show depressive symptoms. "They hope that something new may be coming, but it doesn't always. This leads to disappointment and feelings of loneliness," he says (Ganesan, Desai, & Dhar, 2018). The article suggests that the most vulnerable lot to feel emotionally low on such occasions is youngsters and lonely senior citizens struggling with feelings of being left out. Arun John, executive director of Vandrevala Foundation- providing 24X7 suicide and depression helpline, says "women recovering from caesarean deliveries and young accident victims are also among the people who feel depressed during the festive season." Teenagers who aren't allowed to go out or stay out late also call the counselling helpline for help.

### **1.8.1 Psychological Distress**

The term psychological distress can be described as the unpleasant feeling or emotions often characterized by symptoms of depression like lost interest, sadness etc.; and anxiety like restlessness (Mirowsky & Ross., 2002). Researchers usually describe Psychological distress as a non-specific mental health problem (Dohrenwend & Dohrenwend, 1982). However, according to Wheaton's study, psychological distress is clearly characterized by depression and anxiety symptoms (Wheaton, 2007). Drapeau and his colleagues, in their research provided a critical review of prevalence of psychological distress among general population and found that risk and protective factor are split in three categories: (1) socio-demographic factors; (2) stress-related factors; and (3) personal resources (Drapeau et al., 2012). For mental

health screening in population surveys Professor Ronald C. Kessler from Harvard University developed a psychological distress scale popularly known as Kessler scale. This is a nonspecific scale based on 10 questions about the level of anxiety and depressive symptoms a person may have experienced in the past 4 weeks (Andrews & Slade, 2011). There are evidences from past researches that digital technology creates stress. Overflow of information on internet and availability of too many social networking sites is said to be creating social pressures that put people at risk for not only physical health but also psychological health (Hampton, Rainie, Lu, Shin, & Purcell, January 2015).

### **1.8.2 Depression and Anxiety**

According to American Psychological Association (APA), *Anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. It is said that people suffering from anxiety disorders usually have recurring intrusive thoughts or concerns* (Association, 2018).

Meanwhile, explaining the meaning of word depression, World Health Organisation suggests that *it is a common mental order, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness and poor concentration* (World Health Organisation, 2012).

### **1.8.3 Social Networking Sites and Psychological Distress**

Some anecdotal case studies suggest that addiction to online social networks may even put some users on potential mental health risk. Some studies suggest that lot of social media involvement of youth results in their online harassment. A review study

from Nottingham Trent University suggests that social networking sites are mostly used for the maintenance of established offline networks. Negative impact of social networking sites include the decrease in real life social community participation and academic achievement, as well as relationship problems (Kuss & Griffiths, 2011). There is a possibility that people using different social media platforms end up multitasking. Like for example they may frequently switch between different social networking sites or engage in social media on multiple devices. Studies in the past have shown that online multitasking is associated with poor attention, cognition and mood (Primack, Shensa, Barrett, & Sidani, 2016). Though there have been researches in the past on the usage of internet, hours spent on the net and its impact of youngsters in India, the studies addressing the psychological impact of online social networks on youth in the Indian context is scarce.

Some of the researches did not find any evidence supporting the association between 'use of social networking sites' and depression in an older adolescent sample. Using Experience Sample Method (ESM) approach (Jelenchich et al., 2013) conducted an online survey on 190 older adolescent university students. (Undergraduate university students between the ages of 18 and 23 years were categorized as older adolescents). The study that used a real-time assessment of internet use and a collaborative clinical screening instrument for depression, didn't find any link between social networking sites and depression among its sample. It is suggested that college students commonly display symptoms of depression on social networking sites like Facebook. Students who receive online support from their pals are more likely to discuss their depressive symptoms publicly on Facebook (Moreno et al., 2011). Also, the researchers asserted that social networking sites can be an avenue for identifying students at risk for depression or fighting stigma related to

mental health conditions. It has been observed that the level of mood loneliness after online chat is sometimes higher than that in face-to-face interaction among the individuals (Mu, 2009).

A recent article published in leading English daily, The Times of India, suggests that people often tend to compare their lives with others on social media and feel worthless about their own life. Quoting social psychologist Thomas Gilovich the article says that people hold a pessimistic view about their own lives because they under-rate their own social profiles while overestimating others' profiles (Walia, 2018).

A study by the researchers at the University College London (UCL), Britain found that teenage girls who spend lot of time on social media suffer from depression when compared to their male counterparts (London, January 2019). "Girls are twice as likely to show signs of depressive symptoms linked to social media use compared to boys at age 14," the UCL research suggested. It was found that only 4% of girls reported not using social media compared to 10% of boys. The study found that the most common reasons for social media use leading to depressive symptoms were poor sleep and online harassment. Also, social media use leads to less sleep, taking more time to fall asleep and more disruptions during sleep.

## **1.9 Social Media and Interpersonal Communication**

### **1.9.1 What is Interpersonal Communication?**

Communication is the basis to humanity. We do it daily. Practically, existence of human race is not possible sans communication. Communication is a process involving the deliberate or accidental transfer of meaning. One person does or says

something, thereby engaging in symbolic behaviour, while others observe what was done or said and attribute meaning to it. Giving meaning to behaviour can be summarized as communication (Gamble & Gamble, 2014, p. 2). Humans build connections to satisfy their social needs. Being in a good relationship is apparently a prerequisite of physical and psychological well being (Wright, Sparks, & O'Hair, 2007). Interpersonal communication helps enhance one's own self. Through interactions with others people tend to learn new things and develop self-awareness thereby maintaining sense for self. Communication theorist Thomas Hora said, "To understand oneself, one needs to be understood by another. To be understood by another, one needs to understand the other (Watzlawick, Bavelas, & Jackson, 1967). Interpersonal communication helps start and sustain relationships.

Communication can be classified into different types: Intrapersonal, Interpersonal, Group or Mass Communication etc. The classification is based on the number of people involved in the process of communication. For example, intrapersonal communication requires only one communicator, i.e. your own self. Similarly, interpersonal communication occurs when two people are communicating with each other forming a dyad. This means that whenever we communicate with some other person be it a friend, relative or parent, we are communicating interpersonally. Such relationships are dynamic systems that change continuously. In fact, verbal and non-verbal communication can both be considered as a part of interpersonal skills as both types involve exchange of thoughts and ideas through words or gestures. Also, listening and interpreting both verbal and non-verbal messages is also a part of interpersonal communication, which is an important aspect of creating a successful relationship. Relationships have a beginning, a life span and an end. They tend to grow and improve gradually. In such systems, people get to know each other and

become emotionally closer. But if people drift apart, move on in their lives or connect with new people, the relationship tends to deteriorate gradually (Levinger, 1983).

With proliferation of new media technologies, and increased convergence of media, people today can easily communicate with one another as and when required. Individuals create interpersonal bonds with others within their social network, however these bonds are “in some unspecified way causally connected with the actions of these persons with the social institutions of their society” (Barnes, 1954). There is no denial about the fact that new media that included social networking sites triggers online interpersonal communication, while cutting across boundaries such as neighbourhood, workplace, kinship or class. The digital communication technologies, especially the social networking sites contribute to new ideas and experiences of intimacy and friendship through new forms of social interactions. Some researchers looked into the impersonal, interpersonal and hyperpersonal interaction aspect of computer-mediated communication. The study by Walther offers contrasting images regarding the interpersonal character of this technology. It contends that impersonality was an effect of the lack of nonverbal cues and, at times, the reduced interactivity of e-mail and computer conferencing systems (Walther, 1996).

### **1.9.2 Need for Interpersonal Relationships**

William Schutz’s model of group development suggests that there are three basic interpersonal needs: inclusion, control and affection (Schutz, 1958). The Harvard scientist asserts that interpersonal needs are much important just as the core psychological needs of an individual and helps motivate behaviour. Every individual deals with their interpersonal needs differently. Some may try to meet up with their

needs and engage them with people, while others may find it difficult to satisfy their needs directly and might ignore it totally. Interpersonal communication helps an individual to improve their power of expression and self management skills. It also helps one to become accountable of his/her actions and improves emotional quotient. It has been observed that communicating with others and expressing oneself helps release stress. Therefore, it won't be wrong here to say that interpersonal communication helps win over stress.

Communication is an important tool for maintaining relations with family, friends and other individuals on this planet. Man is a social animal and cannot live in isolation. We need to interact with each other and build relations to justify our existence. Since, communication plays a critical role in personal relationships, which are assessed by the communication skills of others (Burlison, 2003), impairment in the ability to communicate effectively may hinder the relational development in the youth. This may further influence other life areas such as family relationships, socialization, performance in college, and employment to say the least (Drussell, 2012). Nancy (Baym, 2010) states that face-to-face communication is superior to mediated communication. In the present scenario, youth simultaneously lives in two worlds, one is the on-line world and the other is the off-line world. Even though both real and virtual platforms of communication can be used for building relations there psychological impacts are different.

According to Schutz's theory, there are three basic interpersonal needs- inclusion, control and affection. In his theory Schutz say that people need people. The philosopher defines interpersonal need as something which is satisfied only when one has attained a fulfilling relationship with another individual. This means that need for inclusion, control and affection can be met by having a fulfilling relation with another

person. schutz states that an under social person is an introvert, who tries to avoid interactions in the fear of projection rejections. However, such a person who is socially withdrawn unconsciously wishes to be among the social group. Meanwhile, the over-social person is one who desires to be centre of attraction and gives an impression of meeting the need of inclusion in the society. This is how society maintains its state of equilibrium (Schutz W. , 1966).

### **1.9.3 Different stages of Interpersonal Relationships**

“Solitude, isolation, are painful things and beyond human endurance.”

-Jules Verne

Communication is as old as man himself. Existence without communication is next to impossible. Communication makes the man different. He is known for his communication skills. It is said that man cannot survive without building relationship with each other which is not possible without his ability to communicate. Communication between two individuals is known as interpersonal communication.

There are different stages of interpersonal relationships.

The acquaintance stage: This is the first and initial stage of any interpersonal relationship. In this, individuals involved in the communication develop first impressions of themselves on each other. Here the communicators decide whether they want to build a connection or not.

The Build-up stage: The second stage of any interpersonal relationship involves building of trust and compatibility factor among the communicators. This stage is often characterized by two individuals coming together.

The Continuation stage: Here individuals establish a mutual commitment, thereby aspiring for an indefinite relation of happiness and understanding. This is when the relationship between the two communicators grows into lasting commitments.

Deterioration: This is the stage of boredom, resentment and dissatisfaction. This then results in less communication, loss of trust, betrayal and hurt. A stage where individuals lack sense of trust and respect towards each other results in deterioration of the relationship.

Termination: This is the final stage of an interpersonal relationship. When the stage of deterioration is high, then the relationship enters into its final stage, i.e the stage of termination of the relationship.

Interpersonal relationships are basically strong, deep or close associations between individuals who share common interests and same goals. The association may be based on inference, solidarity, love or support, or some other type of social connection like for business interactions etc. A sense of loyalty, trust, respect and commitment can bloom the relationship, but lack of these can lead to misunderstanding and conflicts leading to end of the connection. Interpersonal relationships can be of different types like friendship, romantic relationships and larger social group. Here larger social groups involve clique- three to ten members who maintain moderately stable relationships; crowd- large loose-knit social group who share common interests and attitudes; sub culture-larger social group that resists dominant ways of culture and

forms own norms of behaviour; and lastly Gangs- a cohesive social group that initiates things.

#### **1.9.4 Social Media and Interpersonal Communication:**

In the contemporary scenario, interacting through digital media is also a form of interpersonal communication. This is because we get message across to one another through texting, messaging, tweeting, e-mailing or social media posts. Interpersonal communication is a dynamic process which is continuous and is in a state of constant flux. Late critic and communication theorist Marshal McLuhan once said that “the medium is the message”. By saying this McLuhan meant that channel (medium) of message effect both sending and reception of the message. It won't be wrong here to say that same message would have different meaning when conveyed face-to-face or through an online media. Almost five decades ago, McLuhan predicted that the introduction of new technologies would transform our world into a mobile global village (McLuhan, 1964). The prediction seems to have become true now. Technology enables us to meet people living around the world and be in touch with them continuously by just sitting inside our homes. Technology is apparently altering our sense of self, our measurements of happiness, success, failures and even our interpersonal options. Social networking sites like Facebook, Twitter and Instagram etc. are being extensively used to communicate with each other. It is a kind of virtual set up where people can share their interests, meet new people and form a relationship online. It is said that online partners feel greater intimacy with and attraction for one another rather than when they actually meet one another personally, face-to-face (Ramirez & Zhang, 2007).

Advances in technology have changed how we converse in person and also via computers or smartphones. For some of us talking face-to-face or on mobile phones is passé. People prefer texting sometimes even when the person they are texting is the part of the same environment as they are in. It is observed that for some reason person texting us is given more priority over the person we are with, in the real world. Face-to-face communication seems to be in jeopardy as some of us may be throwing away the verbal communication. Surveys conducted by the Pew Research Center have found that teenagers now prefer to communicate through a text message (Lenhart, 2012). Before the popularisation of computer-mediated communication or online-communication, most of us used to be aware of whom we were talking with. Certain barriers of communication used to act during the conversation and the person was supposedly conscious of their words and gestures. However, while in online communication, a person tends to pour out his heart without any kind of friction. Also, technology makes us a multitasker. A person can participate in multiple conversations simultaneously. Multitasking might be hurting people both socially and emotionally. Teenagers are a most vulnerable lot. Meanwhile, face-to-face communication is related with higher levels of social confidence (Pea, et al., 2012).

In the past years, say a decade, technological advances have reached to almost all segments of the population across the globe. In olden days youth used to stay connected through face-to-face interaction or the use of the landline telephones. However, the growing reach of internet and invention of smartphones has supposedly lured the youngsters to access virtual online world. Researches in the past have shown an inclination of researchers towards the effects of the Internet on youth concerning potential risks to safety, well-being, and skill development (Selfhout, Branje, Delsing,

Bogt, & Meeus, 2009). Few studies conducted in the recent past have shown that communication technology is increasing exponentially with each generation and is having a strong hold within our society (Mishna, McLuckie, & Saint, 2009).

Today generation Y is easily acquiring 'digital literacy' and growing its circle of friends online. In his research Tapscott talks about how the youth, which he referred to as the -Net Generation, grow up in a digital environment. He claimed that kids today are socializing in a hybrid virtual space, learning in innovative ways while creating a new language for themselves and practicing multicultural values (Tapscott, 1999).

### **1.10 Origin of Research Problem**

As stated above, the World Health Organisation has called India to be the suicide capital of the world. With 187,000 suicides reported in 2010, India tops the list for number of suicides in year when compared to other countries around the globe. National Crime Records Bureau (NCRB, 2015) stated that one student commits suicide in India every hour. India has the highest suicide rate in the world among the youth standing at 35.5 per 100,000 people for 2012 (Foundation, 2017). Also, the National Health Profile mentions that the suicide rates are increasingly significant for young adults, calling for concern (CBHI, 2018).

Meanwhile, according to the data collected by statistica.com- an online statistics, market research and business intelligence portal, India is the second largest (only behind China) online market in the world with over 460 million internet users. It is expected that the number of internet users in India will increase to about 635.8 million by 2021 (Statistica). A report titled 'Mobile Internet in India 2017' by Internet and

Mobile Association of India (IAMAI), as published in the Times of India's online portal claims that youngsters are predominant users of online services. With 46 percent of urban users and 57 percent of rural users, most of the young online population is below the age of 25 years (TimesofIndia, 2018). The increasing penetration of smartphones and affordable access to internet data has resulted in increasing online population in India. According to a report by Google, as published in The Business Standard, 80 percent of internet users across all age-groups in the country are accessing YouTube- Google's video platform. Also, India has around 225 million monthly active users on mobile alone (Google, 2018).

The researcher found that above two aspects about India to be alarming and wishes to see if there is any association between the two, i.e if use of social media is any how related to suicidal ideation among the college goers of the country. It was interesting to see how the hours spend on social networking sites like Facebook, Twitter and Instagram (only these three were taken into consideration) and activities involved in it was linked to the stress levels among the students pursuing their higher education.

### **1.11 Statement of the Problem**

While social networking does help in broadening social connections and learning technical skills, its risk cannot be ignored. It is a platform that gives youngsters an opportunity to express themselves without any rules and regulations. The social networking sites create a virtual environment for youngsters, where they can make 'n' number of friends as per their choices, involve in personal relations and are free to do whatever they like to, taking them far from actual reality of life. For instance, Sheeks and Birchmeier (2007) found that people who are shy but wish to be social were able to develop a closer and more satisfactory relationship with others online, compared to

those who are characterized by high shyness/low sociability, low shyness/high sociability or low shyness. The lack or difficulty in self-regulation and susceptibility to peer pressure makes adolescents vulnerable to ills such as Facebook depression, sexting, and cyberbullying, which can be considered as realistic threats (Ramasubbu, 2015). Other problems such as Internet addiction, psychological distress and suicidal ideation are issues that continue to be under intense scrutiny of researchers in various studies.

The current study investigates if there is any association between use of social media, specifically social networking sites, and suicidal ideations among the students pursuing higher education.

## **1.12 Need and Scope of Study**

While social networking does help in broadening social connections and learning technical skills, its risk cannot be ignored. It is a platform that gives youngsters an opportunity to express themselves without any rules and regulations. The social networking sites create a virtual environment for youngsters, where they can make ‘n’ number of friends as per their choices, involve in personal relations and are free to do whatever they like to, taking them far from actual reality of life. For instance, Sheeks and Birchmeier (2007) found that people who are shy but wish to be social were able to develop a closer and more satisfactory relationship with others online, compared to those who are characterized by high shyness/low sociability, low shyness/high sociability or low shyness. The lack or difficulty in self-regulation and susceptibility to peer pressure makes adolescents vulnerable to ills such as Facebook depression, sexting and cyberbullying which can be considered as realistic threats (Ramasubbu,

2015). Other problems such as Internet addiction, psychological distress and suicidal ideation are issues that continue to be under intense scrutiny of researchers in various studies.

Though there have been some studies on the impact of social media on youngsters, its association with the suicidal tendency and their psyche in Indian context remains unexplored. With the goal of providing relevant data about the psychological impact of social media on youngsters, the study will help in parents of youngsters, NGOs, government and society as a whole to work towards framing policies related to use of social networking sites by the youngsters. Proactive steps can be taken by mental health professionals, doctors and counsellors to reach out to people to manage suicidal tendencies.

### **1.13 Objectives of Study**

The study will examine how use of social networking sites impacts adolescents' psyche and social development. The major objectives of the study are:

- 1) To find out association (if any) between social media and suicidal ideation among the youngsters.
- 2) To ascertain relationship between use of social networking sites and psychological distress among youngsters.
- 3) To study the impact of social media on interpersonal communication of youngsters.

## 1.14 Research Questions

Several studies in the past have suggested that there has been a rise in the number of suicidal cases among the youngsters of the country. According to the 2014 report of World Health Organization (WHO), India has the highest suicide rate in the world for the 15-to-29 age group.

Therefore, the study conducted in relation to these points will try to answer:

- Is suicidal ideation among the Indian youth is in anyway associated with the use of social media by them?
- Is online media hampering the face-to-face interpersonal skills of youngsters pursuing higher education?
- Is there any relationship between the use of social networking sites and psychological distress among the Indian youth?

Social media refers to the means of interactions among people in which they create, share, and exchange information and ideas in virtual communities and networks (Ahlqvist, & Halonen, 2008). In the virtual world, youth is living a virtual life rather than virtuous life (Bala, 2014). Indian youth between the age of 18-23 years is taken because it is considered ideal for calculating the Gross Enrolment Ratio (GER) in higher education in India by the central government.

## **Chapter 2**

### **Literature Review**

#### **Overview**

*Like other segments of the research, review of literature related to the research topic is an essential part of any study. Reviewing past researches, which have been conducted both abroad and in India, helps the researcher to get a deep insight and clear perspective of the field of research. It is a critical phase in a research and helps limit the risk of rejection of topic, trial and errors and risk of dead ends. Infact, it provides better understanding of research problem and aspects related to it and help find the gap and trends in the research area. Replication of a study is a major mistake a researcher can make in his career. Reviewing previous researches helps avoid any kind of duplication.*

*Apart from providing the detailed information about the problem, reviewing literature gives the researcher a better understanding of the research methodology that will be utmost suitable to conduct the desired study. In the discipline like social science, a single research problem can be catered through different approaches of research. One researcher can plan to use survey method, while other can think of using scheduled interview to solve the same problem or issue. Therefore, it becomes very important that the researcher has a clear understanding of the methodology that he/she plans to use. By reading others' studies, the researcher gets an idea about the research tools and instruments that have been used by other researchers and can prove to be promising to the future study. The researcher also gets to know about the*

*latest and most commonly used methods. Reading the related literature also provides an insight into the statistical methods that helps validate the results.*

*In the current study, an attempt has been made to use relevant literature that has direct link to the research topic. The studies which were under review during the process are bifurcated under different heads. The list is as follows:*

*Impact of Social Media on Youngsters`*

*Social Media and Suicidal Ideation*

*Social Media and Psychological Distress*

*Social Media and Interpersonal Communication*

## **2.1 Literature Review**

### **2.1.1 Impact of Social Media on Youngsters**

Internet is being widely used around the globe by teenagers. Social media's unique feature – ability to interact with others (networking)- provides powerful ways for teens to navigate their social environments. A research on effect of social network sites on adolescents' social and academic development suggested that the technical features and infrastructure of a particular SNS community impacts user behaviour. The research suggested that the social informatics of SNS-the interaction of technology, culture, and communication- may explain the social effects of the online communities, and that future casual studies must attempt to model these interactions to develop more fine theories related to communication and youth development in social network site environments (June Ahn, 2011).

Social media can prove to be a tool for advance teaching techniques. It can provide advance teaching platforms and other teaching resources that can help in effective teaching among pupils. The advance education concept will be help to educators as it will promote the development of the education reform (He & He, 2015).

A study on effects of demographic variables on success of social media (Mohammadreza, 2012) found that success of social media is more important among female students when compared to their male counterparts. The results of the study showed that social media is more important to married people than the single ones and also to the older respondents which included the students enrolled in different fields in governmental university of Tehran, Iran in the year 2011.

A study revealed that Facebook use by small to medium size enterprises (SMEs) is an important tool for marketing communications when considering the perception of the brand. The study (Behan, 2014) found that Facebook by SME does help in maintaining and sometimes even increasing the perception of the brand in a positive way. Facebook turned out to be a positive tool in terms of marketing tool.

Based on the study 'The Impact of Social Media on College Students', (Mastrodicasa & Metellus, 2013) made few recommendations for students affairs professionals. The researchers said that it is on the students to make decision on how much role social media will play in maintaining their personal and professional life. Also the study suggested that social networking site, Twitter, can be used as a tool for professional and academic interactions. The study recommended that social media can be used for engagement and involvement of students in different activities.

Another study analysed the change and development of communication process. It also discussed how the change in approach to communication will impact the education reform in terms of media choice of teaching strategies and teaching effectiveness. The researchers of the study asserted that the more advanced a medium is, the richer is the amount of information it can carry, this in return changes the way of communication and ways of thinking too. The medium revolution tends to provide advance teaching platform and rich teaching resources for the teaching. It can also provide technical guidance to learners and help teachers strategise teaching with new learning styles. Therefore, technical advancements of ways of communication can lead to development of the education reform (He & He, 2015).

A study explored the effect of social media on mental health among its users. The researchers reviewed the available literature and past researches and analysed the data. It was found that the younger generation is more vulnerable to social media use and is at high risk of serious mental health problem. The researchers suggested that there is a need for more research in order to understand more deeply how social media is affecting mental health of present younger generation. This will in turn help illuminate the connections which are at play among these variables of young generation (Bashir & Bhat, 2017).

Through their study, Moreno, et al. (2013) evaluated Facebook displayed depression references and their association with depression and peer perception. The researchers used the mixed method approach to their study that included logistic regression and qualitative analysis. The first-year college students' Facebook profiles were categorized as Depression Displayers or Non-Displayers. The respondents were asked to complete a depression screen and were also interviewed regarding Facebook displayed depression references. The study found that depression references were

viewed as support-seeking or attention-seeking. Also, it was found that displayed depression references were associated with depression (Moreno, Jelenchick, & Kota, 2013).

Social networking sites (SNSs) which are said to be altering the way an individual communicates attracts Indian students in their mid-adolescence. A study found that use of SNS by the adolescents depends on various factors including “gender, nature of family and working parents”. Most of the participants were found to access SNS during the night hours, interact with the opposite sex, use SNS mostly secretly and tend to feel frustrated in its absence (Bhola & Mahakud, March 2014).

Arvind Singhal and fellow researchers in the book ‘India’s Information Revolution’ talked about the impact of new technologies on both urban and rural populations in India. The authors have discussed the role of technology with respect to social change and technological determinism. The book suggests that technology is the sole cause of societal change in contemporary society and that communication technology, along with other factors like government policies, is one of the important causes of social change in India. Further, the authors mentioned about the shortfalls or limitations of new media, stating that new media creates inequalities and information gaps in society. The authors argued that the impacts of the computers on the social class structure of Indian society are difficult to predict. In the third world countries, computers have the potential to replace labor in manufacturing plants like textile factories, thereby increasing the unemployment rates (Arvind Singhal, et al., 1989).

Nicholas Michael Cummings gave the term ‘second life’ to an online environment or climate where millions of online users across the globe work together as a team or partnership, socialize and interact in different manner. The researcher also used the

term 'avatar' defining it as 'the character a player controls in a game or the personification of a player in a game's world'. This means that any player-controlled character can be referred to as 'avatar'. It is believed that the young people are more inclined towards the online gaming environment and other online activities such as participating in social media etc. (Cummings, 2008).

A study by Dor and Weimann-Saks suggested the need for regulation and guidance for parents towards the safe and responsible use of the internet by their children. The study indicates that parents don't have much awareness (moderate to low level) and involvement in their children's Facebook usage. However it was also found that mothers expressed less positive attitudes towards Facebook and suggested greater need for guidance than their male counterparts-fathers (Dor and Weimann-Saks, June 2013).

Another research tried to unveil 'communicative potentials' to understand uneven internet use behaviour. The study identifies three sets of communicative potentials as resources, utility values and literacy which were found to be responsible for individuals' access to internet. The researchers analysed data from Shanghai survey that demonstrated structured inequalities in their society which are intertwined or entrenched in the distributional characteristics of internet use. In the study, researchers also figured out structural constraints on the growth, development of new media and its all round utilization for knowing the contexts in systematic use of internet. The researchers applied statistical application factor analysis to reach to the result (Zhongdang Pan et al., 2011).

A duo of researchers studied an individual's intention behind using social media in their study titled 'A theoretical model of intentional social action in online social

networks.’ The study conceptualized the use of online social network as intentional social action. Also, the relative impact of the three modes of social influence processes: compliance, internalization and identification, on intentional social action of use (collective intention) were examined. The empirical study of 389 Facebook users found that “collective intention to use a social networking site is determined by both subjective norm and social identity.” The study found social identity to be a second-order latent construct comprised of cognitive, evaluative and affective components (Cheung and Lee, 2009).

Another study aimed the purpose of using social networking sites by international students. The research put an attempt to address three questions namely: What social networking sites do international students prefer and why? Which sites do they use to socialise and which they use to gather and distribute information? And, how can libraries leverage this information to enhance the international student experience? The data on social networking preferences and usage was gathered from 13 percent of the students at Bond University via an online survey. The study found that some international student populations, social networking preferences differentiated between the domestic students’ preferences. Further, it was found that Facebook lead the choice of both the domestic and international students. However, the study suggests that social networking sites like Twitter and youTube is being considered by libraries as a way to engage by both the types of students. The study connects the findings to practical implications for academic library use of social networking sites (Saw, et al., 2012).

Researchers studied the impact of social media on college students from different perspectives. With the aim to find out how social media affects college students, the descriptive and exploratory study administered a student perception questionnaire to

random sample of 48 males and 26 females. Various parameters like the most popular media, average time spent on social media etc. were included in the study. The main purpose of the research was to explore the relationship between the effects of social networking and students' study efficiency and to determine whether social media affects students' academic performance. It was found that 45% of the respondents spent 6-8 hours per day checking social media, while 23% spent more than 8 hours. The study suggests that most college students use social media and spend many hours on it. Also, a negative aspect to college students was found to be associated with use of social media (Wang, et al., 2011).

A study conducted to study the impact of students' immersion in social networking on their academic performance. A sample of 400 students of Sweden and Tunisia were considered for this study. The study suggests that extraverted and conscious students experience different effects. Further, the results indicate that "exceedingly cognitively absorbed, extraverted Swedish and conscious Tunisian students tend to underperform on their studies. However, socializing on these networks did not have a significant impact on conscious Swedish students or extraverted Tunisian students. The following group comparison tried to analyse whether this impact can be justified by differences in personality traits or differences in cultures, considering that the young generation culture in Sweden is different from the youth culture in Tunisia" (Rouis, et al., 2011).

The review paper by Mahmood, Sariyati Binti Firduas, & Bin Mohd Adnan revolves around the use of social media for political purpose. The study suggests that the consumption of social media for news stimulates political debates among the users which further leads them to find solutions of their political concerns. The study suggests that using the social media to get news, discuss political issues and other

public affairs ultimately leads to protest behavior among its users. “Disintermediation of social media and its anti-hegemonic nature make it more appealing as a global agenda setter for the users to highlight their disquiets at international level,” the research further elaborates (Mahmood et al., 2016).

Kim, Yoo-Lee, & Sin conducted a survey study to investigate what kinds social media are used as information and why. The study, which surveyed 446 undergraduate university students, also aimed to examine what kind of actions users take to evaluate the trustworthiness of information provided by social media sources. The online based survey questionnaire was divided into two parts. The first part evaluated the use of social media sources, while the other part was to evaluate the user characteristics. The study found that social networking sites like Facebook, online encyclopedia Wikipedia and online user reviews were among those frequently used for finding information. It was also found that Wikipedia, YouTube and Q&A sites were used by the users to seek information in both everyday-life and academic/ course-related contexts. “The study also revealed that strategies for evaluating the trustworthiness of information vary depending on sources (Kim, et al., 2012).

### **2.1.2. Social Media and Suicidal Ideations**

A study aimed at finding whether internet and social media influence poses a significant risk to the public found that certain video-sharing and even other websites provide information related to suicide and self-harm videos that may cause disinhibition. It was found that even social media may pose hazard to vulnerable people who are part of virtual “extreme communities”. The study suggested that while internet and social media may introduce new threats to the public, it can also provide

new opportunities for assistance and prevention and social media can be used proactively to increase public awareness (Luxton, June, & Fairall, May 2012).

Another study was conducted to examine the relationship between internet addiction and depression and suicidal ideations. The study employed using a correlational survey design, did not found any link between prevalence of internet addiction and gender. The study found that the levels of depression and suicide ideation were highest in the internet-addicts group. It was found that ‘high internet-addiction’ was not significantly correlated with the depression score, however the correlations with the ‘suicide-ideation’ were four and three times stronger than those of ‘nonaddicts’ and ‘possible internet addicts’ (Kim, et al., 2006).

A study found that social media acts as a platform for its users to access information, support and counselling and also to share their experiences. The review indicated that even though some people consider social media as an alternative to face-to-face communication, it is unlikely that this online support system will replace traditional therapeutic services. The review did not found studies that tested the effectiveness of delivering support/treatment via social media (Robinson, et al., July 2014).

Zhang, et al. (February 2019) in their study found that social networking site (SNS) users under ‘role stress’ use constructive strategies to invest in their remaining personal resources to obtain valued resources like interpersonal relationships in order to help them overcome stress. It was also found that ‘role stress’ is associated with self-presentation, which leads to higher level of ‘self disclosure’. The study indicates that SNS users maintain relationships online as a psychological coping mechanism for role stress. This helps them receive social support from their SNS online pals (Zhang, et al., 2019).

A study conducted to find the impact of social media on self-esteem found that approximately 88% people engage in making social comparisons on Facebook out of which most of the comparisons are upward social comparisons. The study found an inverse proportionality between social media and self-esteem, which means increase in social media usage causes the self-esteem of individuals to decrease (Jan, Soomro, & Ahmad, August 2017).

A study conducted on college students aged 20 years old found that the respondents tend to reference depression if they “averaged at least one online response from their friends to a status update disclosing depressive symptoms”. Also, it was found that college students commonly display symptoms of depression publicly on Facebook, after receiving reinforcement from their online friends. The study suggested that social networking sites could be an innovative avenue to fight the stigma surrounding mental health and also can be a platform for identifying students at risk for depression (Moreno, et al., June 2011).

### **2.1.3 Social Media and Psychological Distress**

Frequent use of social networks is believed to be linked with certain behavioural changes. The research investigated the association between social networking and depression indicators in adolescents. Using the structured questionnaire and Beck Depression Inventory (BDI), the researchers found that high school students spend an average of 1.86 hours on social networking sites, while their average sleep duration was 7.37 hours. The BDI score indicated minimal depression in majority of students, while some were found to have mild depression and very few fell under the moderate

depression category. The study found that a link between the online social networking and depression (Pantic, et al., 2012).

To investigate the association between depression and Facebook use researchers conducted an online survey and follow-up semi- structured interviews among the students of medium-sized Australian university. The study suggested no significant differences in Facebook use for at-risk versus not at-risk participants. Also, discrepancies in Facebook use reported in self-reported questionnaire and interview data were revealed. The study participants revealed a negative attitude towards others who were believed to be using a lot of Facebook, (Skues, et al., 2014).

A study interviewed 1501 regular internet users falling in age bar10-17 years, along with one of their parent and guardian. The characteristics were assessed by dividing the youth into four groups: 1) targets of aggression, 2) online aggressors 3) aggressor/targets 4) non-harassment involved youth. The study found 19% of young regular Internet users were involved in online aggression. The study suggested that “youth aggressor/targets are intense users of the internet who view themselves as capable web users.” It was found that this set of youth reported significant psychosocial challenge, including depressive symptomatology, problem behaviour, and targeting of traditional bullying. The study found that the respondents involved in internet aggression are likely to face challenges at various fronts, therefore it is important that schools or professionals interfacing with youth should be knowledgeable about the internet and also about the experiences young people are having online (Ybarra & Mitchell, 2004).

A study found that social networking sites have become an integral part of urban teenager’s life and also of school culture. It was found that with the increasing

popularity of social media, teenagers tend to devote a significant amount of time to social networking on websites and therefore are prone to get 'addicted' to them, which according to the researchers is a matter of concern. The study also suggested some precautionary safety measures that parents of teenagers, accessing social networking sites, should take (Meena, et al., 2012).

In another study researcher surveyed adults aged between 19 to 32 years to assess depression and social media use across multiple social media platforms in a large, representative sample. The researchers found a significant association between the use of social media and increased depression. The researchers suggested that social media platform may be a useful tool to identify individuals at risk for depression (Lin, et al., 2016).

A study found that students in general spend 2-3 hours daily on social media that has negative effect on their academic pursuits. Spending time on social media also inspires improper behaviour among the students which may include riot/demonstration, gossips, terrorism and disorderly behaviours. It also provides the youth a platform for immoral acts. Which means that the "friendship struck in social media have a potential for anti-social conduct" (Ijeoma & Burke, 2013).

Dr. Robert Zhenge, et al. (2008) in their research articulated deficiencies from past researches on 'personality traits', 'aloneness' and 'age identity gratifications' along with motives for internet use. The researchers in their study looked upon the role of internet in mediated social support. Using survey as the method of research, they also examined the role of psychological variables that affect online social communication and behaviour. The researchers identified 17 motivational items using 5-point Likert scale for preparing the questionnaire. Further, they applied factor analysis and

principal component method with Varimax rotation for measuring the items. The study found that personality traits significantly influence the motives for Internet use for social compensation and mood management (Zhenge, et al., 2008).

A study that aimed to find out the issues among the Bangladeshi teenagers and use of Facebook, found that most of the teenagers consider the social networking site as an important part of their life. It was found that most teenagers are online during late night hours and spend more than 10 hours on it in a week. Majority of the respondents in the study revealed that accessing Facebook doesn't affect their ability to complete their homework (Al-Jubayer, March 2013).

The study found that social media forms have altered the way youth socialize and learn. Also, it has raised concern a new set of issues for educators, parents, researchers and policymakers. The study stated that adults can help teens understand the consequences of participating in the socially networked world (Carroll & Kirkpatrick, August 2011).

A study found that negative self-esteem is the culprit behind psychiatric difficulties and depressive symptoms among the adolescents. The literature shed light on the relation of low self-esteem with depressive disorder and suicidal behaviour which is widely examined in the study (Garber et al., 1997).

#### **2.1.4 Social Media and Interpersonal Communication**

Baym, Zhang and Lin (2004) studied college students' interpersonal interaction on different social media platforms including online, face-to-face and on the telephone. The trio found that even though internet was integrated into college students' social

lives, face-to-face communication dominated their mode of interaction and were found to be rich and deep. However, face-to-face communication was slightly less common in long-distance relationships than the internet. It was also found that college goers use internet as often as the telephone (Baym, 2004).

A study examined the influences of mass media, interpersonal channels, and self-efficacy on risk judgment. The researcher used the data from a sample of New York State residents. It was found that communication channels exert different influences, depending on the risk dimension, while demographics and efficacy have been kept controlled. She examined health risks including heart disease, AIDS, smoking and hazards from drinking water, household radon, chemicals on food, household chemicals, and low-level radioactive waste. It was found that mass media channels influence personal level risk to some extent. This apparently means that mass media and interpersonal channels influence how one thinks about risks (Coleman, 1993).

A study examined the different characters- including impersonal, interpersonal and hyperpersonal interaction- of computer-mediated communication (CMC). The researcher found that CMC provides opportunities for selective self-presentation, idealization and reciprocation. It was found that people involved in CMC may select and express communication behaviours that are “more stereotypically desirable in achieving their social goals and transmit messages free of the ‘noise’ that otherwise comes with unintended appearance or behaviour features.” The study suggested that with the help of CMC one can communicate as desired (Walther, 1996).

A study tried to explore how new media is redefining social roles that are comparatively more vulnerable to dissolution as interpersonal communication takes place in public platforms. The researcher found that even though social media helps

its users to strengthen their social networks, its usage results in weakening of interpersonal relations. This new kind of social disorder is a matter of concern for the public. Also, degradation of ethics was found to be a major concern for social media users (Bala, 2014).

The study based on use of social networking sites by emerging adults found that college students often use the social networking sites to connect and reconnect with their pals and family members. This results in an overlap between online relations and offline networks. It was found that emerging adults may use online platforms in different contexts one of which is to strengthen different aspects of their offline connections (Subrahmanyam, M. Reich, Waechter, & Espinoza, August 2008).

A study examined how different type of users are influenced by using large social networking site, in terms of their social capital. The researchers examined how direct communication with pals, updating status and reading other's posts predict changes in users' social capital. It was examined how people varying in self-esteem and social communication skill engage in these activities and how their use differently affects their social capital. The study found that person-to-person (one kind of social engagement provided by SNS) was associated with increase in bridging social capital. It was found that though undirected broadcasts and passive consumption on social media may affect knowledge of friends' resources, they do not directly help build relationships, infact it doesn't even allow acquaintances to call on each other for help (Burke, Kraut, & Marlow, 2011).

Caplan integrated research on social skill and self-presentation into the cognitive-behavioral theory of generalised problematic internet use. By using structural equation modelling analysis techniques, Caplan proposed a model that predicted that

individuals who lack self-presentation skills are likely to prefer online social interaction over face-to-face communication. Also, it was found that preference for online social interaction promotes compulsive Internet use which leads to negative outcomes (Caplan, December 2005).

Another study examined the use of world's largest social network-Facebook by children. The study basically aimed to focus on parental awareness, attitudes and behaviour towards children's use of Facebook. It was found that "parents have moderate to low levels of awareness, involvement, and monitoring in their children's Facebook usage." It was found that it was mothers who felt the need of guiding their children for using the internet more than their fathers. The study's findings highlighted the need for usage of regulation and for guidance for parents so that they can direct their children to use internet safely with responsibility (Dor & Weimann-Saks, 2013).

## **2.2 Theoretical Aspect**

Theories play an important part in the understanding of any study. This section reviews major theoretical frameworks which may be applicable to the study. Theories related to suicide, related to diverse perspective like biological, cognitive-behaviour, developmental/systems etiologies and psychodynamic etc have been proposed in this section. Also theories related to social media have been mentioned here. The mass media effect theories play a crucial in impacting human mind. It is believed that mass media effects individual and society. However, scholars today believe that the effects of mass communication generally are cumulative over time. Scholars differ on whether media-depicted violence triggers aggressive behaviour (Vivian, 2011). All

schools of theories and frameworks might contribute to the understanding of nature of social media, about the users, how they form relationships, and how opinion leaders are formed and also about the valuable social media content. Some of the effect theories include Bullet Theory, Minimalist Effects Theory and Cumulative Effects Theory.

### **2.2.1 Theories related to Social Networking**

**Bullet Theory:** The first generation of mass communication scholars assumed that the mass media has a power to insert the ideas into human minds just like the way hypodermic needle into body politic. This was called ‘bullet theory’. With the passage of time most scholars looked to long-term and cumulative media effects. Social commentator Walter Lippmann argued that the world we see is not reality but we see it as “pictures in our heads.” It was Lippmann’s argument that gave food for thought to the then scholars and paved a way to powerful effects theory. Yale psychologist, Harold Lasswell (who studied World War II propaganda) embodied the effects theory in his model of mass communication that states ‘Who says what, in which channel, to whom, with what effect.’ The powerful effects theory assumes that media could inject information , ideas and even propaganda into the public consciousness. The theory was explained in terms of a hypodermic needle model or bullet model.

**Minimalist Effects Theory:** The rethinking after the release of the Bullet Theory, gave way to the minimalist effect theories which included ‘Two-Step Flow Model, Status Conferral and Narcotizing Dysfunction Effect.

- **Two-Step Flow Model:** The model shows that the voters are motivated less by the mass media when compared with people they know and respect personally. Such people who influence other people are called opinion leaders. They can be anyone including clergy, teachers, friends or neighbours. The two-step flow model suggests that personal contact is more important than media contact. The model was later expanded to a multistep flow model to describe how the complex web of social relationships affects individuals.
- **Status Conferral:** The status conferral phenomenon acknowledges that media creates prominence for issues and people by giving them coverage. Agenda setting is related to this status conferral phenomenon. While explaining the agenda-setting phenomenon, its inventors Maxwell McCombs and Don Shaw said that the media do not tell people what to think but tell them what to think about. For example during the coverage of political campaign, the media choose which topics or issues to emphasize and which to keep hidden, thereby setting the agenda for the campaign. “This ability to affect cognitive change among individuals is one of the most important aspects of the power of mass communication,” said the professors.
- **Narcotizing Dysfunction:** There have been experts who said that media merely motivates people into action, like for example to energise them to go out to vote for a candidate during elections. These experts believe that media fill people into passivity. This effect was termed as ‘narcotizing dysfunction’. This effect was further explained stating that people are sometimes so involved in the news and information being catered to them that

they tend to withdraw from involvement in public issues. Narcotocizing dysfunction occurs when intellectual involvement of people becomes a substitute for active involvement.

**The Cultivation Theory:** Developed by Professor George Gerbner is one of the many theories of media effects. It states that the more time people spend living in the television world, the more likely they are to believe social reality portrayed on television. The theory talks about the influence that goes on to an extent that the view and perception of viewers start reflecting what they repeatedly see and hear on television. In this way television is considered to contribute to the way people perceive social reality. The theory suggests that the media is a reflection of the world that does not presents reality. It argues that television images are an exaggeration of actuality. Television offers its viewers with different ideas and a variety of social and cultural dynamics like race, gender etc. it is said that with time viewers absorb the ideas shown on the television and use it to relate with their life. This constant exposure to the media content cultivates specific values, beliefs, attitudes and desires in people. This results in building of viewer's perception of the world and also influence the way they perceive them. It is therefore said that people end up unconsciously shape their thought process and behaviour based on what they consume.

It is not wrong to say that Gerbner's Cultivation theory views television as a system of messages and tries to understand its function and consequences on the audience. Also, cultivation analysis focuses on the impact of long term exposure to television. The Cultivation theory has been widely used by different researchers to study of

violence in television. It has been used to explain how kids become violent after watching violent cartoons on their television sets. Over the years research in this field has diversified. It is said that exposure to television further strengthens the position that acts of violence are a natural response to situations of conflict. Cultivation theory is now applied to studies in different fields example health, religion, political orientations etc. Meanwhile, the 'Media Theory' by McLuhan argued that the media itself, rather the actual content of the media, will transform people and society. These theories will help the researcher in understanding how the viral suicidal stories of celebrities trending on social media impacts the young minds of students pursuing higher education.

**Psychological Ownership Theory and Perceived Control:** Historically, the advice that the tourism researchers have found from friends and relatives is the most frequently obtained and influential source of information used by consumers in their travel decision making (Crotts 1999; Perdue 1993). It is said that the information communicated by friends and relatives is considered to be more credible, honest and trustworthy when compared to the advice generated by the marketers. This is because the communicators are not compensated for the referral. With the invent of internet and development of web 2.0 technologies, consumers can now access personally meaningful critiques not only from their pals and family members but also from strangers, which include travel bloggers etc.

Psychological Ownership Theory has been used by many researchers in the past. Asatryan and Oh (2008) used it to explain why former guests are motivated to offer WOM feedbacks. While Mattila (2001) suggested that loyal guest would provide

positive feedback to others, directing their negative feedback to management. According to Pierce, Kostova and Dirks (2003), the desire by the consumer to control through such communications may result in feelings of efficacy, intrinsic pleasure and extrinsic satisfaction in providing such advice to others.

**Social Exchange Theory:** Social exchange theory is a sociological and psychological theory that talks about the social behaviour in the interaction of two parties. The theory, developed by sociologist George Homans, suggests that social behaviour is the result of an exchange process. The basic purpose behind this exchange is to maximize benefits while minimizing the cost. Also, the study suggests that people weigh the potential benefits and risks of social relationships. In other words, the theory states that individuals engage in behaviours which they find rewarding while avoiding the behaviour that have high cost. This means that all social behaviours are based on each actor's subjective assessment of the cost-benefit of contributing to a social exchange. At the time when we know that social media are dependent on users providing content, it appears fundamental to understand the motives of why individuals participate. Social exchange theory was originated from sociology studies exploring exchange between individuals or small groups (Emerson, 1976). The theory was

arguably best summarized by Homans (1958, p. 606) when he wrote:

*Social behavior is an exchange of goods, material goods but also non-material ones, such as the symbols of approval or prestige. Persons that give much to others try to get much from them, and persons that get much from others are under pressure to give much to them. This process of influence tends to work out*

*at equilibrium to a balance in the exchanges. For a person in an exchange, what he gives may be a cost to him, just as what he gets may be a reward, and his behavior changes less as the difference of the two, profit, tends to a maximum.*

We know that most relationships are based on give-and-take relation. Social exchange suggests that it is valuing of the benefits of each relationship that determines if a person chooses to continue a social association. The benefits of any relationship are fun, friendship, companionship and social support. After determining the value of the friendship, a person might decide that the benefits outweigh the potential costs. According to the social exchange theory, a person takes the benefits and subtract the cost in the quest to evaluate the worth of a particular relationship. Positive relationships are those in which the benefits outweigh the costs while negative relations are those where the costs are greater than the benefits. Cost-benefits analysis plays a major role in the social exchange process. The theory is applicable to different fields for example to firms, producers, consumers etc.

**Social Penetration Theory:** Developed by psychologist Irwin Altman and Dalmas Taylor, social penetration theory proposes that as relationships develop, interpersonal communication moves from relatively shallow, non-intimate levels to deeper, more intimate ones. Though it is said that social penetration theory is similar to social exchange theory, the former focuses more on the individual and dyadic levels while the latter one explains behaviour at organisational levels. When people establish relationships they tend to disclose simple, harmless facts through small talks. However, with the growth of relationship, it becomes increasingly intimate in nature. This intimate self-disclosure allows others to penetrate a person's public persona. In

the online social world where social networks are designed different layers of information are disclosed to the public. While private and semi-private information can be kept confidential, there are ways to determine the levels of relationships from the mode and frequencies of communication.

**Media Theory:** McLuhan, a Canadian philosopher and educator, who gave ‘Media Theory’ argued that the media itself, rather the actual content of the media, will transform people and society. The author is known for his famous quote “the media is the message”. The actual messages people are communicating won't be any different on the new media; the interactivity and frequency of new communication pattern will change our behavior forever. Thus, he argued that the media's effects on society are much greater than the content of the media (McLuhan 1995). The philosopher demarcates media into two segments, “cool” media and “hot” media. The initial one requires a viewers’ participation in understanding the content like television, seminars or cartoons. While the latter one typically refers to those media that enhance one sense, which results in less need to exert much effort, such as films, radio and photography.

McLuhan argued that mode of communication and not the content of social media will transform the users. Let us understand this by a simple example. Micro-blogging site Twitter has a limitation of 140 characters. Even though a user can perform all functions of Twitter through a blog service, it is its limiting factor that makes it more nimble and real-time. As a consumer users must understand the changing behaviour due to the usage of new social media services. This will help the users to adopt an attitude of acceptance towards the new technologies and behaviour.

**Biological perspective:** These theories suggest that suicidal behaviour is a result of dual presence of both biologically based diathesis and an activating psychosocial stressor. Studies suggest that even the level of cholesterol have an impact on the suicide attempts and ideation (Mann, 2003). Suicide attempts have also been related to aggression (Swogger & Conner, 2014).

**Hyperpersonal Communication:** Joseph Walther coined term ‘Hyperpersonal Communication’ to describe a particular type of communication which seems to take place in text-communication, where people sometimes develop intimacy among virtual strangers in cyberspace. Walther identified three types of communication which take place online: impersonal, interpersonal and Hyperpersonal. To understand, impersonal communication is communication which takes care of business. Interpersonal communication means communication that takes place online between both individuals with whom the person had a face-to-face relationship as well as with the whom the individual had never met in person. According to Walther, Hyperpersonal communication occurs when “users experience commonality and are self aware, physically separated, and communicating via a limited-cues channel that allows them to selectively still present and edit; to construct and reciprocate representations of their partners and relations without the interference of environmental reality” (Walther, 1996).

**‘Theory Of Technology Fluidity’:** Carolyn Lin’s ‘Theory Of Technology Fluidity’ is an extension of social presence theory that emphasizes the degree of physical “realism” in mediated social interaction, and media richness theory which focuses on

the degree of verbal and nonverbal information exchanged. The theory of technology fluidity looks at how the transmutability of a medium influences the audience's technology adoption decision. This theory suggests that when the technical attributes of a medium possess a greater capability to transmogrify between or simultaneously operate in multiple communication modalities or task platforms, the technology is a more fluid medium of communication. This provides not only multitasking functions, but a greater degree of presence of and virtual verbal/nonverbal interactions between communicators. The fluidity of a medium may also directly influence audience perceptions of media richness, as the medium's ability to concurrently deliver the communication content in multiple textual and audiovisual modes should enhance the audience perception of "information richness" (Lin, 2000).

**Signalling Theory:** This theory can be used to understand how individuals disclose information on their Social Network Sites profiles. Donath (2007) observes that, "Whether face-to-face or online, much of what people want to know is not directly observable" (para 10). Social networking sites provide a platform to organise and go through an egocentric social network. Increasing number of social ties are not just beneficial but also impose cognitive constraints in one's personal network. Signalling theory seeks to explain what keeps communication honest (Donath, in press; Maynard-Smith & Harper, 2003). Signalling theory talks about the relationship between signals and qualities. It shows why certain signals are reliable and others are not. It is said that for a signal to be reliable, the costs of deceptively producing the signal must outweigh the benefits. The core of signalling theory is its analysis of the types of signals and situations that bring this about (Donath, 2007).

**The social compensation hypothesis:** (McKenna, Green, & Gleason, 2002) suggests that adolescents who are uncomfortable interacting face-to-face with their peers are better at developing social networks and meet their social needs online where certain channels of communication, including voice tone, eye contact, and facial expressions, are not available.

The Internet makes it feasible for some adolescents to affiliate with other, likeminded individuals online when such opportunities may not be possible in face-to-face interaction. The Internet allows adolescents to make connections with persons like themselves, i.e., ethnic or sexual minority youth (Larson, Wilson, Brown, Furstenberg, & Verma, 2002), particularly if such affiliations are not available through local peer networks.

## 2.2.2 Theories related to Suicidal Ideations

**The Interpersonal Theory of Suicide:** The theory argues that the capability for suicidal behaviour emerges via habituation, which means that in order to enact lethal self-harm, an individual must have repeated exposure to painful provocative events and fear inducing experiences. The model introduced a framework by which suicidal ideation and the progression from ideation to attempts were treated as separate process (Van Orden, Witte, Cukrowicz, Braithwaite, Selby, & Joiner Jr., 2010). According to the interpersonal theory of suicide, “suicidal desire emerges when individuals experience intractable feelings of *perceived burdensomeness* and *thwarted belongingness* and that near-lethal or lethal suicidal behavior occurs in the presence of suicidal desire and *capability for suicide* (Carol Chu, et al., 2017). The interpersonal

theory is the first theory of suicide positioned within what would later be termed the *ideation-to-action* framework (Klonsky & May, 2014). A key concept of the interpersonal theory, and a development beyond previous theories of suicide, is its emphasis on providing an explanation for why the vast majority of individuals who think about suicide do not go on to make a suicide attempt.

**Fluid Vulnerability Model:** The fluid vulnerability of theory of suicide provides a working model for conceptualizing static versus dynamic aspects of suicide risk over time. The model given David Rudd (2006) suggests that suicidal episodes are limited to time and that the baseline risk varies from person to person. the theory focuses specifically on the risk assessment process and not on the treatment outcome. “The fluid vulnerability theory (FVT) provides a theoretical framework to understand and organise risk and protective factors of suicide in order to understand the process of suicide risk over time. FVT framework provides a robust model to understand not only who is at risk for suicide but also when suicide is likely to emerge (Wolfe-Clark & Bryan, 2017). Moreover, Rudd suggests that suicidal episodes are time-limited. Risk factors that both trigger a suicidal episode and determine the duration and severity of an episode are fluid. Also, the theory suggests that imminent risk cannot endure beyond periods of heightened arousal and baseline risk varied from person to person.

**Social Cognitive Theory:** Albert Bandura’s ‘Social Cognitive Theory’ stresses the importance of observational learning, imitation and modeling. The theory integrates a continuous interaction between behaviors, personal factors including cognition and

the environment referred to as reciprocal causation model, (Bandura, 1989). The theory basically talks about the observational learning in a physical environment. It is said that psychologist Bandura discovered the importance of behavioural models while he was working with patients with snake phobias. Bandura's social learning theory focuses on the importance of observational learning, imitation and modelling. Social cognitive theory (SCT) describes the influence of individual experiences, the actions of others and environmental factors on individual health behaviour. SCT initially started as the social learning theory in the 1960s by Bandura. The social cognitive theory talks about social influence and its emphasis on external and internal social reinforcement. The theory considers the unique way in which individuals acquire and maintain behaviour. It also considers the social environment in which individuals behave and takes into account a person's past experiences, which influences reinforcements, expectations, and expectancies. All of these past experiences are responsible for a person's specific behavior and are the reasons behind why a person engages in that behaviour.

**Cognitive Behaviour Theory:** Theories based on cognitive behaviour have suggested roles of hopelessness (Beck, Brown, Berchick, Stewart, & Steer, 1990), suicidal cognitive mode (Eck, 1966) and emotion dysregulation etc. (Linehan, 1993). Cognitive-behavioral is the hybrid of cognitive processes and behavioral strategies. It has the goal of achieving cognitive and behavioral change. All cognitive-behavioral theorists value the role that cognitions play in the development and maintenance of psychological problems (Kalodner, 2011). Foa and Kozak (1986) defined emotional processing as the activation and modification of the memory structure that underlies the fear. This process includes, first, creating access to the complete memory of the

event to reactivate the fear structure through the process of exposure (i.e., imaginal, in vivo, virtual reality) and, second, helping the individual access new information incompatible with the existing maladaptive information to modify the fear structure to engender a healthier response to the memory. Meanwhile, according to Bradley et al. (2005), commonly used exclusion criteria often include substance abuse or dependence, suicide risk, or other concurring conditions.

**Developmental/systems theories:** Durkheim in his book ‘Suicide: A study in Sociology’ (1897) has suggested that social factors have influence on the suicide rate. The book that was based on the first methodological study of a social fact in the context of society suggested that, when social conditions fail to provide people with the necessary social goals at appropriate levels, their socio-psychological health is impaired and most vulnerable people commit suicide (Durkheim, 1897). Durkheim in his book mentioned that “more socially integrated and connected a person is, the less likely he or she tends to commit suicide. This means that more a person is socially integrated there are more chances that the person will not commit suicide, and vice-versa is true as well. Durkheim also suggested relationship between suicide and religion, suicide and gender etc. Meanwhile, some studies have also posit casual roles of family systems (Richman, 1986).

**Psychodynamic Theories:** Psychodynamic theory is a view that explains personality in terms of conscious and unconscious forces. These include unconscious desires and beliefs. These studies propose that suicide is a result of unconscious drives, intense affective pain and desire for escape from psychological pain (Menninger, 1938) (Hendin, 1991) (Baumeister, 1990). Some studies have also suggested that existential

drives for meaning (Rogers, 2001) and disturbed attachment (Bowlby, 1973) are also causes for suicide. Psychodynamic theory is basically a collection of psychological theories whose main aim was to focus on the importance of drives and other forces in human functioning, mainly unconscious drives. It is worth mentioning here that psychodynamic theory originated in Freud's psychoanalytic theories and includes theories based on his ideas, including those by Anna Freud, Erik Erikson and Carl Jung. Strength of psychodynamic theory include its relevance in modern psychological thinking. The theory not just accounts for the impact of childhood on adult personality and mental health but also explores the innate drives that motivate behaviour. The theory points to how the unconscious mental processes people are born with influence their thoughts, feelings and behaviour. Also, the theory stressed on the influence of childhood relationships and experiences on future development. Psychodynamic theory explains personality in terms of unconscious psychological processes and contends that childhood experiences are crucial in shaping adult personality.

**The Three-Step Theory (3ST):** Researchers argue that an “ideation-to-action” framework should guide suicide theory, research and prevention. The three-step theory hypothesizes and found that suicidal ideation is the result of the combination of both pain (usually psychological) and hopelessness. The theory suggests that connectedness is a key protective factor against escalating suicidal ideation, among those experiencing both pain and hopelessness (the one who are at higher risk for ideation) (Klonsky & May, 2015). The authors argued that an ideation-to-action” framework should guide suicide theory, research, and prevention. From this

perspective, (a) the development of suicide ideation and (b) the progression from ideation to suicide attempts are distinct processes with distinct explanations.”

The theories proposed by McKenna et al, the Social Compensation Hypothesis , Joseph Walther’s Hyperpersonal Communication Theory, Carolyn Lin’s Theory of Technology Fluidity and Albert Bandura’s Social Cognitive Theory would help understand how social networking sites are associated with psychological distress among youngsters and also, how social media impacts the interpersonal skills of youngsters.

# **Chapter 3**

## **Methodology**

### **Overview**

*The salient features of research methodology such as research design, research method of the study, statistical analysis, primary data collection, secondary data collection and definitions are enumerated in this chapter.*

### **3.1 Introduction**

Suicidal ideations, self-harm and suicide are major public health problems among adolescents worldwide. The stimulant for such actions includes genetic vulnerability and psychiatric, psychological, familial, social and cultural factors. Lack of communication among the family members and friends also play a key role. With internet having an important role in the contemporary scenario, the effects of media, especially social media cannot be ignored. It won't be wrong here to say that prevention of suicidal ideations and actions of suicide needs both universal measures aimed at youngsters in general and targeted initiatives focused on high-risk groups. Restriction of access to means for suicide is also important here. This will be possible with the identification of successful prevention initiatives aimed at young people and the most vulnerable group. Social media is online tool that allows people to share or exchange information, ideas, pictures, audio and visuals through a particular network, thereby creating a virtual environment for people to interact. Use of social networking sites such as Facebook and Twitter has particularly increased among young adults.

Published studies done to find the association between social media use and psychological distress have yielded mixed results and some studies suggest that social media users may experience decreased depression while some studies suggest that too much use of social networking sites result in increased psychological distress among the youngsters. In this study, the researcher aimed to examine the association between the use of social media and suicidal ideations among youngsters. Understanding the relationship between social media and suicidal ideations could allow the development of interventions or preventative strategies for at-risk populations.

### **3.2 Study Design**

The major objective of the present study was to understand if there was an association between use of social media and suicidal ideations among youngsters; association between use of social media and psychological distress among youngsters; and impact of social media on the interpersonal skills of youngsters. The study was done using both qualitative and quantitative methods of data collection. In the first stage, the data was evaluated using descriptive statistics. In the second stage, a quantitative data was collected in order to find if there was any association between use of social media and psychological distress among youngsters. Appropriate scientific statistical analysis procedures were followed to ensure systematic data analysis and interpretation. The result was evaluated using inferential statistics. In the third stage, interview schedules were developed and perfected in order to collect authentic primary data from experts including psychologists and counsellors. Overall, the present study approached the problem through a systematic survey method and interview schedule method which fits into the context of the present investigation.

This study intended to examine if there was any association between the use of social media and suicidal ideations among the students pursuing higher education. On the basis of the data collected, the analysis was done for research work.

A mixed approach was adopted by the researcher to collect and analyse the data. Each objective of the research was treated using different methods as mentioned below:

Research Design for objective 1, i.e ‘Social Media and Interpersonal Communication Skill among the Students Pursuing Higher Education’: The research design that was used for this study to gather quantitative data was a cross sectional survey. The survey was a questionnaire consisting of closed ended questions that measured respondent attitudes and behaviours about social networking, such as using the sites like Facebook and Twitter. The survey was created by the researcher and was conducted online. The survey was purely on voluntary basis. Non-probability purposes sample of 200 respondents was collected. Descriptive statistics was used to analyse the result.

Research Design for Objective 2: ‘Social Media and Psychological Distress among the Students Pursuing Higher Education.’ The research design that was used for this study to gather quantitative data was a cross sectional survey. Probability sampling was done. Closed ended questionnaire was administered among 350 students selected randomly. The questionnaire measured respondent attitudes and behaviours about social networking, especially sites like Facebook and Twitter. Inferential statistics was used to analyse data. Non-parametric tests were applied to evaluate if there was any association between use of social media and stress among the respondents.

Research Design for Objective 3: ‘Social Media and Suicidal Ideation among the Students Pursuing Higher Education.’ In-depth Interview through interview schedule was conducted of five experts including psychologist, counsellor and motivational speaker as a part of qualitative technique in the triangular approach to the research. The data was collected and thereby analysed using narrative approach.

### **3.3 Method of the study**

Primary data were collected through structured, organized and standardized questionnaires and also interview schedules which were administered to the students pursuing their higher education, aged between 18-24 years. Around 500 respondents were administered the questionnaire at different stages of research.

### **3.4 Statistical Analysis**

In the first stage, descriptive statistics was used to evaluate the data collected using a cross-sectional survey method. While in the second stage, the data of the cross sectional survey was analysed using inferential statistics. Non-parametric chi-square was used. The interpretation of the chi-sqaure analysis justify the assumption of independence which was primary carried out at the 0.05% level of significance. A brief description of the statistical tests applied are given below. Also, in the third stage the interview schedule was evaluated.

### **a. Frequencies and Percentages**

The Frequencies procedure provides statistics which are useful for describing many types of variables. The primary data collected on impact of social media and interpersonal communication of youngsters; and to find an association between use of social networking sites and psychological distress among youngsters were analyzed by the researcher. The researcher found that the application of the frequencies procedure is an appropriate statistical test.

### **b. P-value**

In statistics, the  $p$ -value is a function of the observed sample results (a statistic) that is used for testing a statistical hypothesis. The  $p$ -test statistic typically follows a standard normal distribution when large sample sizes are used, and researchers use  $Z$ -tests to determine whether a hypothesis passes based on a specific significance level will be rejected. The larger the  $p$ -value in the  $p$ -test, the more likely the hypothesis is true. In statistics, the  $p$ -value is a function of the observed sample results (a statistic) that is used for *testing* a statistical hypothesis.

### **d. Chi-square Test**

The Chi-square test procedure tabulates a variable into categories and computes a chi-square statistics. This goodness-of-fit test compares the observed and expected frequencies in each category to test either that all categories contain the same proportion of values or that each category contains a user-specified proportion of

values. In the present study chi-square test was applied to find out the association between independent variable 'use of social media' and dependent variable 'stress score'. All the statistical calculations were done through SPSS for Windows software (Version 11.0).

### **3.5 Definitions of the Term**

#### **3.5.1 Media**

The media institutions are regarded as the fourth estate of democracy. They are also informal universities which feed, guide and lead the mankind from the state of ignorance to the state of development. The media institutions sensitize the stakeholders of environment and development in modern times. The media institutions have been affected by the process of globalization both positively and negatively.

#### **3.5.2 Social Media**

Social media are interactive computer-mediated technologies that enables the users to create or share information, ideas, career interests in the audio-visual form. Social media can also be referred to the websites and application that are designed to allow people to share content at a fast pace, effectively and in real-time. There are variety of stand-alone and built-in social media services available that can be downloaded on the smartphone or tablet and can be used for communication around the globe.

### **3.5.3 Social Media and Society**

In the age of technology, the social media apparently sets the agenda for social and political development. The social media which was initially designed for communication purposes has prevailed into a policy maker that set agenda for social development, education, and also political agenda. This tendency has led to social unrest and conflicts in modern society. The social media provide a platform where people not only make new connections but also can express their feels and ideas. Some people also take over to social media to raise their voices or vent out anger.

### **3.5.4 Survey Research**

Survey research method is very popular in the field of Social Science. It is very widely used research technique for the purpose of conducting an empirical study. It is nothing but surveying the minds of the stakeholders who are responsible for achieving community development, organizational development and national development in modern times. It is a systematic and scientific research method which facilitates generation of comprehensive authentic data on the role of media in the different forms of communication. Primary data from about 500 respondents using social media in India was gathered on the basis of survey research methodology.

### **3.5.5 Primary Data**

Primary data basically represent the first hand experience of people who are directly associated with the system, process and practice. The present investigation was

carried out in Lucknow and Kanpur cities of Uttar Pradesh state to examine the association of social media with suicidal ideations among youngsters in India. Primary data was gathered from about 500 respondents in these two cities.

### **3.5.6 Secondary Data**

Secondary data basically represent the wisdom, experience and authority of the specialists in a particular field. Researchers, media scholars and newspaper articles contribute their writings and speeches on vital issues and concerns in a democratic society. The impact of social media on the psychology of youngsters has been examined by researchers both in India and abroad. The foundation chapters were drafted by the researcher on the basis of secondary data available in different forms.

### **3.5.7 Statistical Analysis**

The primary data were analyzed on the basis of percentage analysis, graphical representation, chi-square and cross-tabulation analysis. These statistical tests justify the assumption of independence which was primarily carried out at the 0.05% level of significance.

## **3.6 Summary**

Adequate investigations are carried out across the globe on the impact of social media on different aspects related to youngsters, their psychology and well-being. The subject of social media has gained an upper hand from research and development

points of view. The impact of social media on youngsters, adolescents and teenagers has been focused by the scholars across the globe. Scholars have examined the impact of social media on psychological distress among youngsters in other countries but to a limited extent in India. Surprisingly, not much scientific investigation has been carried out on the association of social media with suicidal ideations among youngsters with special reference to India. The primary data was gathered from 500 respondents who represented the young population of India pursuing their higher education. The respondents were selected on the basis of random and purposive sampling techniques. The present study approached the problem through a systematic survey method. Besides survey method, interview schedule was also used as another method to study the association between the use of social media and suicidal ideations among youngsters in India.

# **Chapter 4**

## **Data Analysis**

### **Overview**

*The analysis and interpretation of data is significant in research process. Analysis of data helps in getting meaningful picture of the data collected. In this step of research, the researcher organises data, applies statistical techniques, and descriptive and inferential statistics. Here, organisation of data includes classifying and tabulation of information. The analysis and interpretation of data represents the application of deductive or inductive logic to the research process. While, statistical analysis involves refinement of raw data for application of logical inferences. In order to achieve the objectives formulated for the present study, the data was statistically analysed.*

### **4.1 Impact of Social Media on Interpersonal Communication Skills of Youngsters**

One of the objectives of the research aimed at finding out if using social media impacts the interpersonal communication skills of youngsters pursuing higher education.

The research design that was used for this study to gather quantitative data was a cross sectional survey. The survey was a questionnaire consisting of closed ended questions that measured respondent attitudes and behaviours about social networking,

such as using the sites like Facebook and Twitter. The survey was created by the researcher and was conducted online. The survey was purely on voluntary basis.

College students pursuing higher studies enrolled in government institutions of Lucknow and Kanpur (Uttar Pradesh) were the target population for this research. Using a purposive and quota sampling method, students were selected from four different government universities based in these two cities of Uttar Pradesh. The students were chosen based on their practical access to social media and their likely experience of the research topic. Further, as adults the participants were free to choose filling the form without requiring parental permission and signed consent forms. Since, the goal of the study was to accurately represent social networking involvement and experiences in students pursuing higher studies the eligible age limit was set between 18-24 years. In the quest to capture the potential impact of social networking more genuinely, it was felt that it would be better to measure attitudes and practices of social networking. A total of 200 students pursuing their higher studies in different fields including Humanities, Medical, Engineering, Management and Agriculture from four different government universities based in Lucknow and Kanpur were administered with the questionnaire. 100 questionnaires (50percent of the total) were distributed among the students pursuing Humanities as their subject, while rest of the forms (n=100) were filled by students from medicine, engineering, management and agriculture field. Figure1 shows the participants from different streams of education.

The data collected was analyzed manually. The researcher used descriptive statistics to explain the results, while frequency distribution was used to report on variables such as gender of respondents, the amount of time spent on social networking sites

etc. The 5-point Likert scales were developed using two formats. One scale ranged from 'Strongly Disagree' to 'Strongly Agree' and the other scale ranged from 'Never' to 'Always'. This helped in identifying youngsters' attitude towards social media, specifically social networking sites. While carrying out the descriptive analysis, the researcher has analysed the average value, received through the respondents' 5 point itemized rating scale, with more focus.

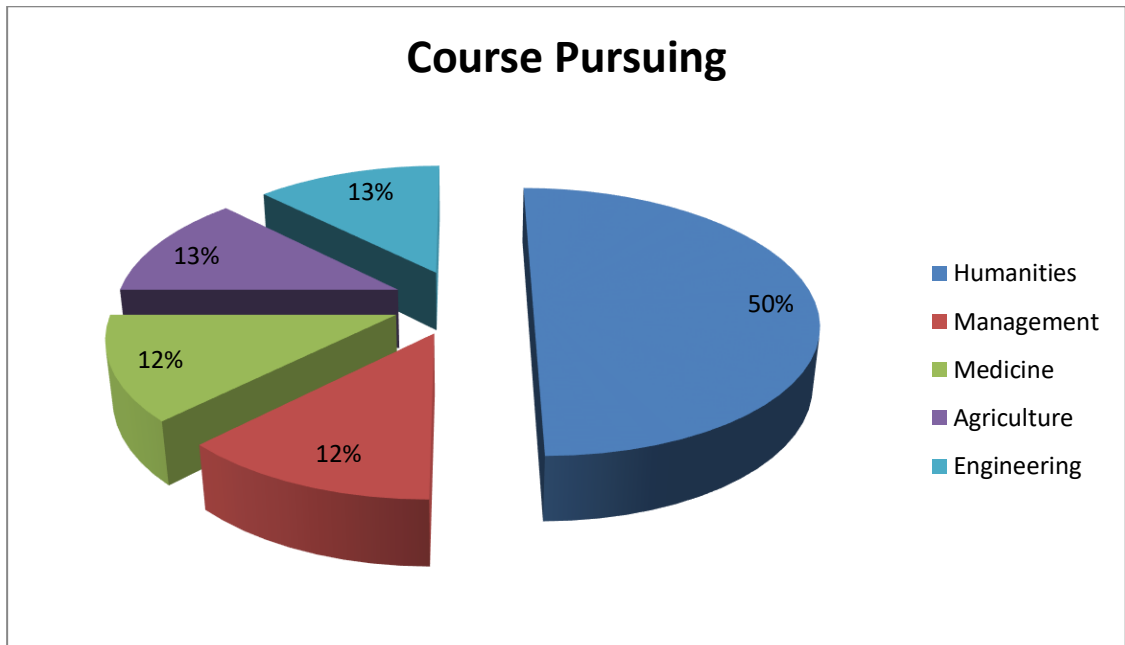
### **Graphical Analysis**

This is the basic analysis of the data collected. The purpose of graphical analysis is to understand how various respondents of research are proportionate. The researcher analysed the proportion of each variable that was considered for the research. As a research tool, the researcher has applied pie charts to understand the classifications and response of respondents.

### **Response Rate**

According to (Fowler, 2009) response rate in a research is the extent to which the collected set of data includes all sample numbers of the target population. It is calculated by dividing the number of questionnaires collected or the number of people with whom interviews are completed by the number of the entire sample. In this study, a total of 200 questionnaires were administered to respondents out of which 185 filled and returned it, out of which 52% were females while 48% were males. This represented 92.5% response rate. According to (Babbie, 2014) a response rate of

above 50% is adequate for analysis and therefore, 92.5% response rate, was considered as being good enough for analysis of data.



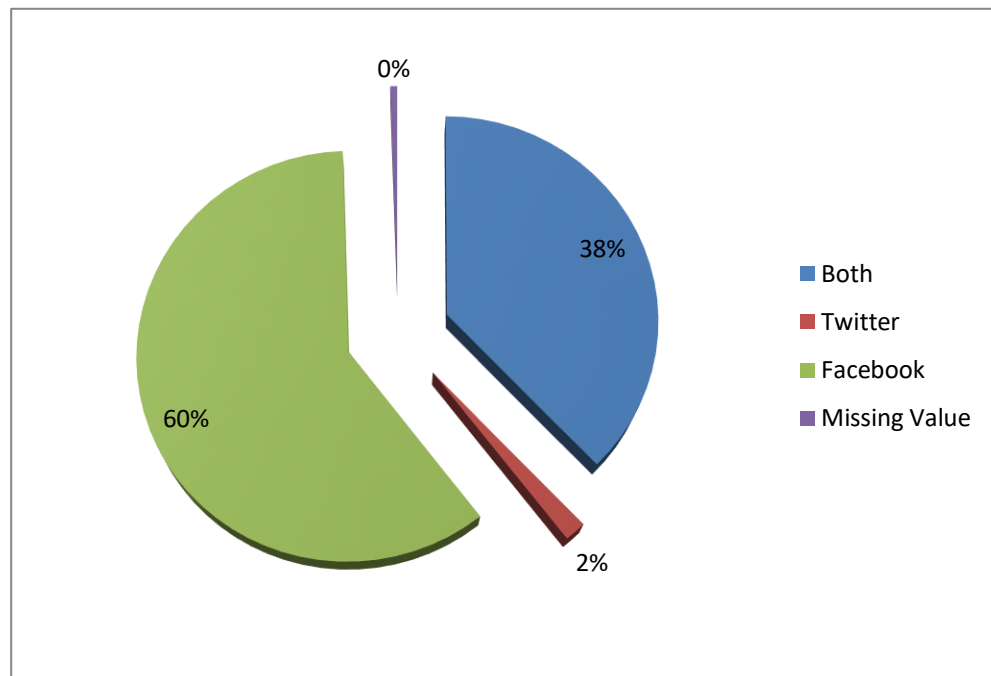
**Figure 4.1: Showing respondents pursuing different course in higher education**

Out of the total 200 questionnaires, 100 were administered to students pursuing their studies in humanities. While 25-25 each were filled by students pursuing courses related to management, medicine, engineering and agriculture.

### **Social Networking Accessibility**

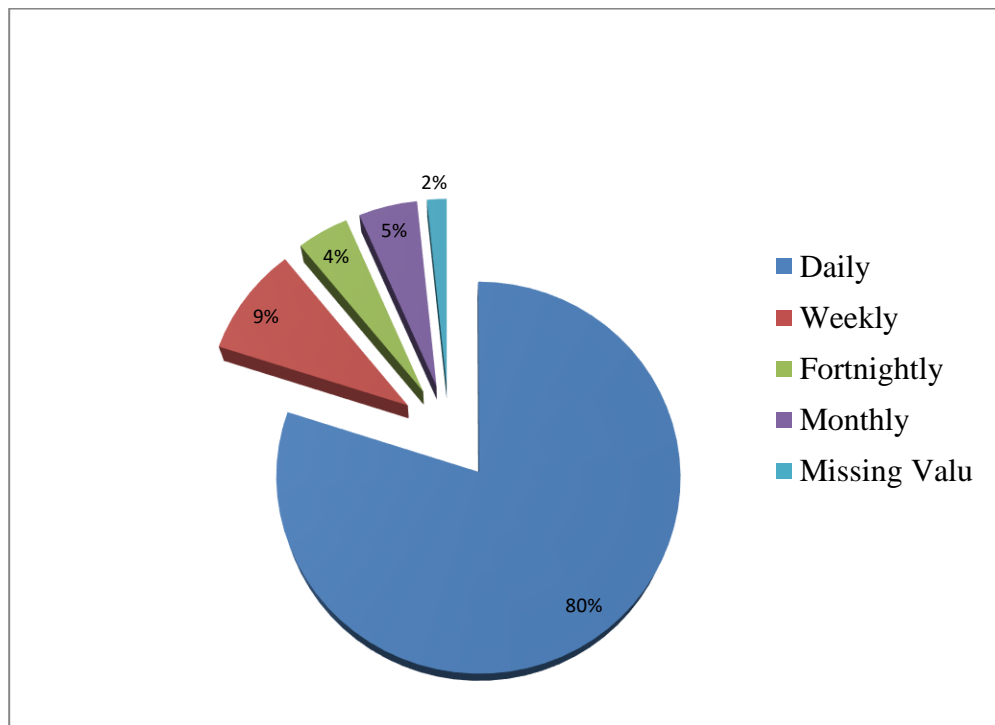
Respondents were asked three closed ended questions regarding access of social networking sites through computers/ laptops or smartphones.

To know whether the respondents, who were administered with the questionnaire, is active on social media or not, they were initially asked if they have profile on social networking website like Facebook or Twitter. A total of 60% of the respondents said that they had profile only on Facebook, while 38% said they had profiles on both Facebook and Twitter. Just 2% said that they had profile on Twitter only.



**Figure 4.2: Showing use of different social networking sites by respondents**

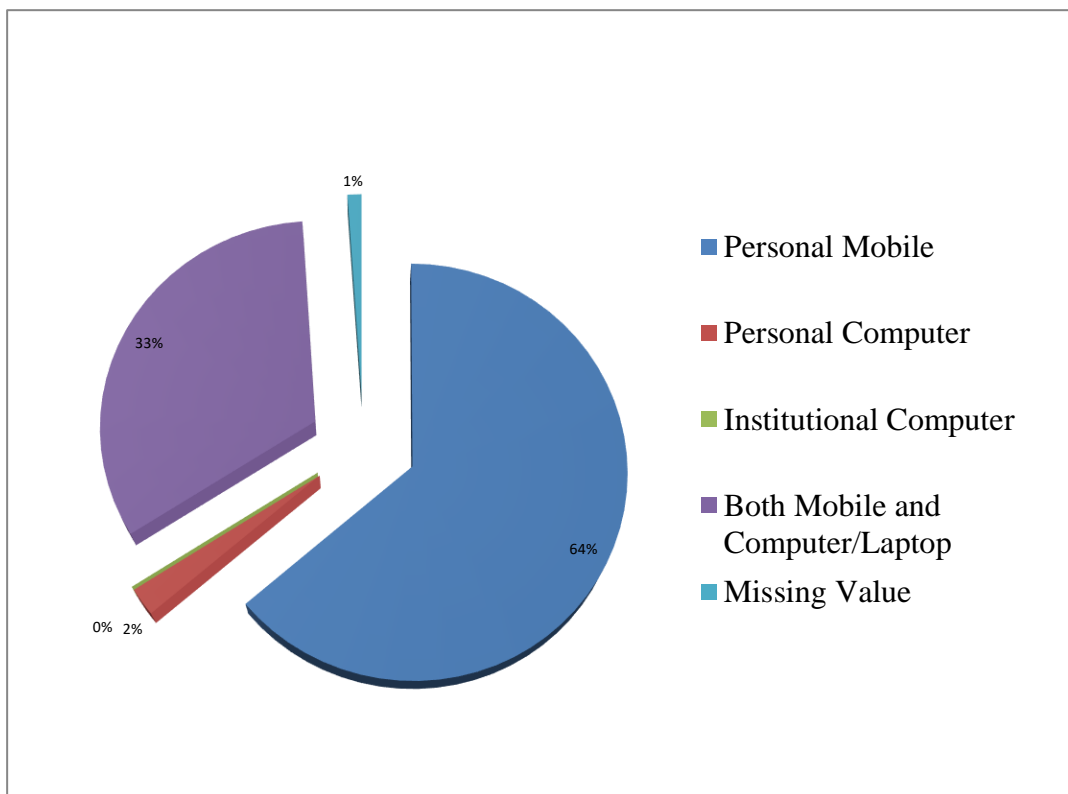
When respondents were asked whether they access their social media profiles daily, weekly, fortnightly or monthly. A total of 80% of the respondents said that they access their social networking sites daily. While around 64% said that they access it through their mobile phones.



**Figure 4.3: Showing frequency of visiting social networking sites by respondents**

The respondents were then asked about what medium they prefer to access their social media profiles. They were given choices as: Personal mobile, Institutional Computer, Personal computer/Laptop, Both mobile and computer/Laptop.

A total of 64% said that they generally use personal computer to keep updated with their social media. Only 2% of the total respondents said that they use personal computer to check updates on their social media, while 33% said that they use both mobile and computer/laptop to do so.



**Figure 4.4: Showing mode of accessing social media sites by the respondents**

The result shows that social networking site Facebook is the favourite among the youngsters pursuing higher studies which they access on daily basis through their personal mobiles/smartphones.

## **Time Spent on Social Networking Sites**

In order to know about the number of hours the respondents spend on social media, they were asked about the duration they spent each day on these sites in general and specifically on texting. The respondents were asked to mention their response as hour and minute spend on social media. However, their responses were later categorized as 0-30 minutes, 31-60minutes, 61-90 minutes, 91-120 minutes, 121-150 minutes and 151 to 180 minutes.

Around 25% of the total respondents said that they spend as less as 0-30minutes accessing their Facebook or Twitter accounts each day. While 21% said they spend a maximum of 1 hour doing so. When the respondents were asked to specify the time they spend texting on these social media sites per day, a total of 45% of the respondents said that they spend 0-30minutes on texting on social networking sites Facebook and Twitter.

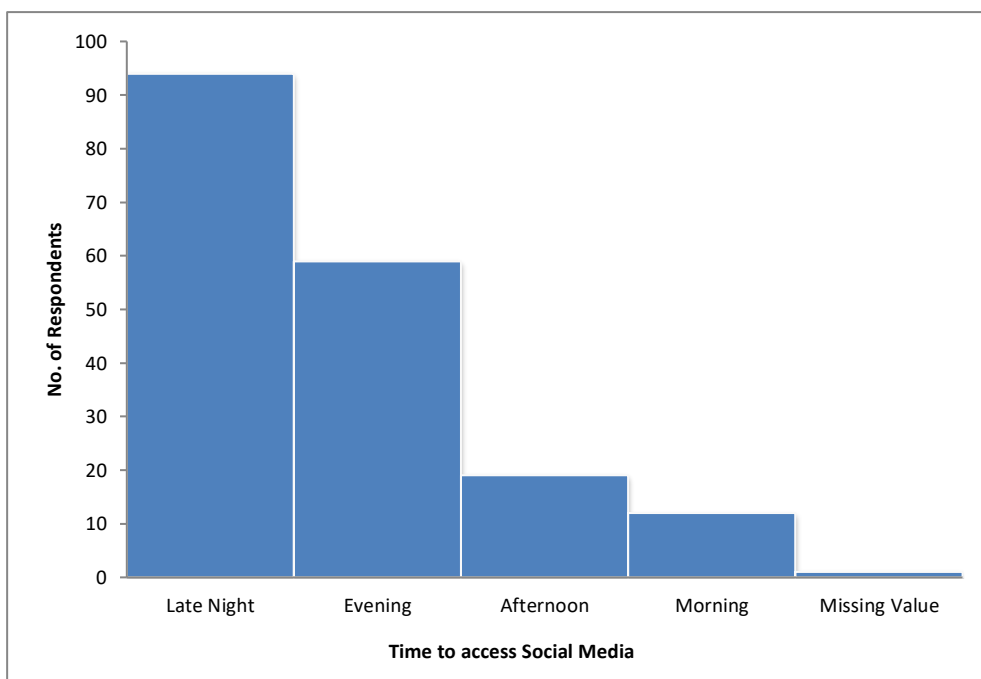
The survey also specified the time respondents spent on face-to-face interaction. The distinction was important to know in order to get the idea about their dependence on the social networking sites. When comparing the ranges of the three activities reported by the participants, the result shows that youngsters spent a large span of their daily time on surfing and texting on social networking sites. The data represented in Table 1. clearly shows that respondents generally spent 30minutes to more than 3 hours on social networking sites, while mostly text others for 0-60minutes each day. It was found that as many as 37% participants spent less than 30 minutes a day interacting face-to-face.

**Table 4.1: Showing average daily minutes spend on social networking and face-to-face communication**

Time spend on Facebook/Twitter in general			Time spend on texting on Facebook/Twitter			Time spend interacting face-to-face		
Minute s	Coun t	Percentag e (%)	Minute s	Coun t	Percentag e (%)	Minute s	Coun t	Percentag e (%)
0-30	46	24.5	0-30	83	45	0-30	68	37
31-60	38	21	31-60	54	29	31-60	22	12
61-90	13	7	61-90	4	2	61-90	10	5
91-120	25	14	91-120	10	5	91-120	16	9
121-150	17	9	121-150	7	4	121-150	4	2
151-180	9	5	151-180	8	4	151-180	8	4
181+	32	17	181+	16	9	181+	54	29
Missin g Value	5	2.5	Missin g Value	3	2	Missin g Value	3	2

The study suggests an interesting finding that youngsters spend atleast 5minutes in a day accessing social networking sites, while there are some who spend 10 hours daily surfing them. It was found that some students didn't use Facebook/Twitter for texting, however some spend as much as 12 hours a day chatting with their online contacts. Surprisingly, it was also found that there were students who didn't spend any time on face-to-face interaction. The study suggests that engineering students indulged least (33.33%) in face-to-face interpersonal communication with their friends and family, followed by medical students (24%) then management (20%) and agriculture (16.66%) respectively. It is worth mentioning here that only 5% respondents from humanities stream said that have nil face-to-face interaction in a day.

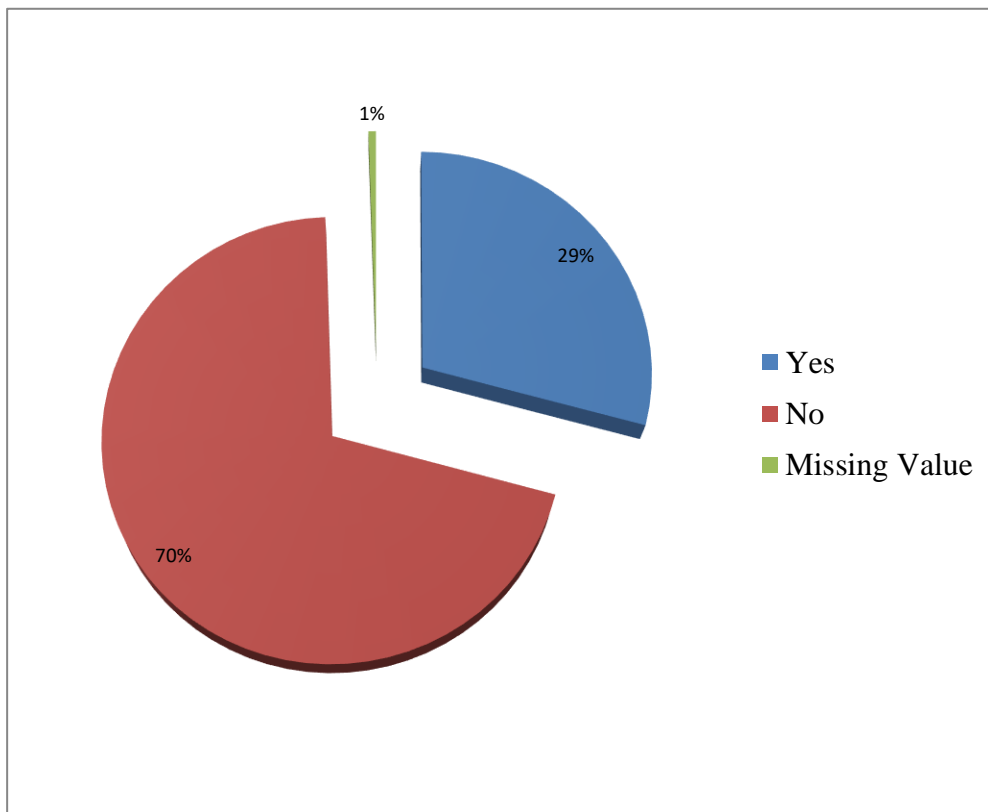
Next, the respondents were asked about their preference of accessing social media. The data collected revealed that majority of respondents preferred accessing social networking sites late night. A majority of 94 respondents said that they access their social media profiles late in night. While, 59 of the total said that they do so in the evening. On the contrary only 12 of the total number of respondents said that they access social networking sites in the morning.



**Figure 4.5: Showing duration of day for accessing social media**

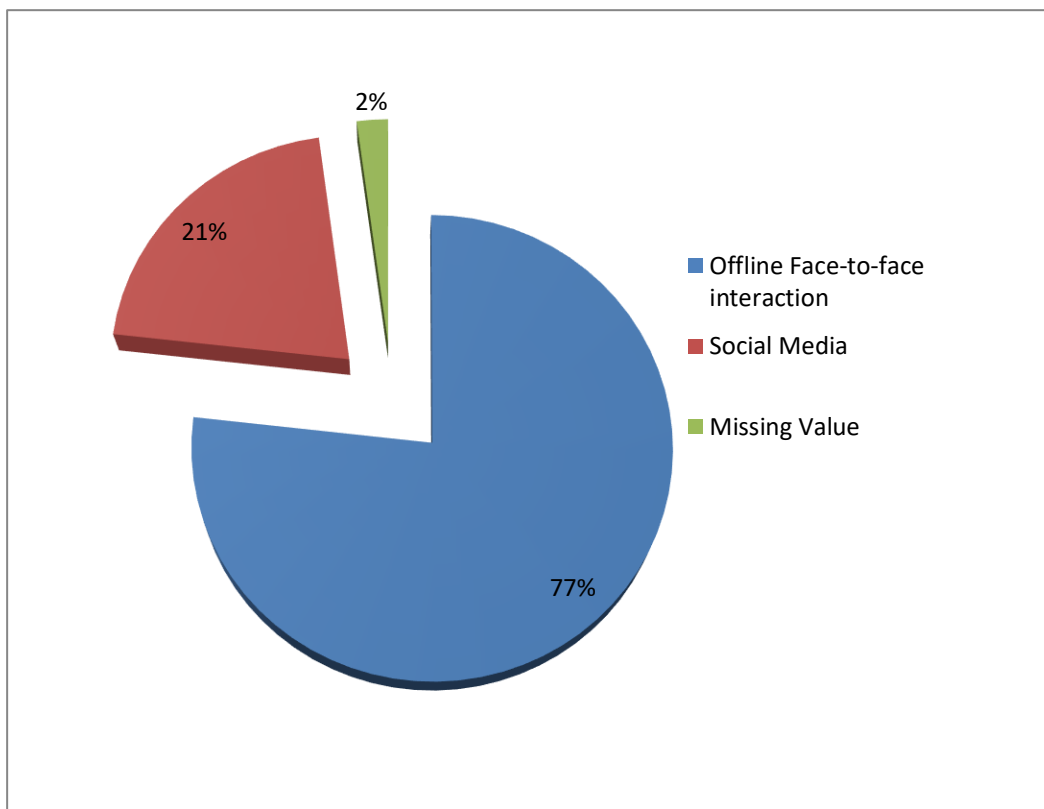
## Texting and Communication

In order to know about the communication pattern of respondents on social media, the respondents were asked 'if they like to share emotions in the form of posts on social media'. Around 70% of the total said No, they don't like to share. While a total of 29% of the respondents replied 'Yes' confirming that they do like to share emotions in the form of posts on social media. However, 1% didn't answer this question.



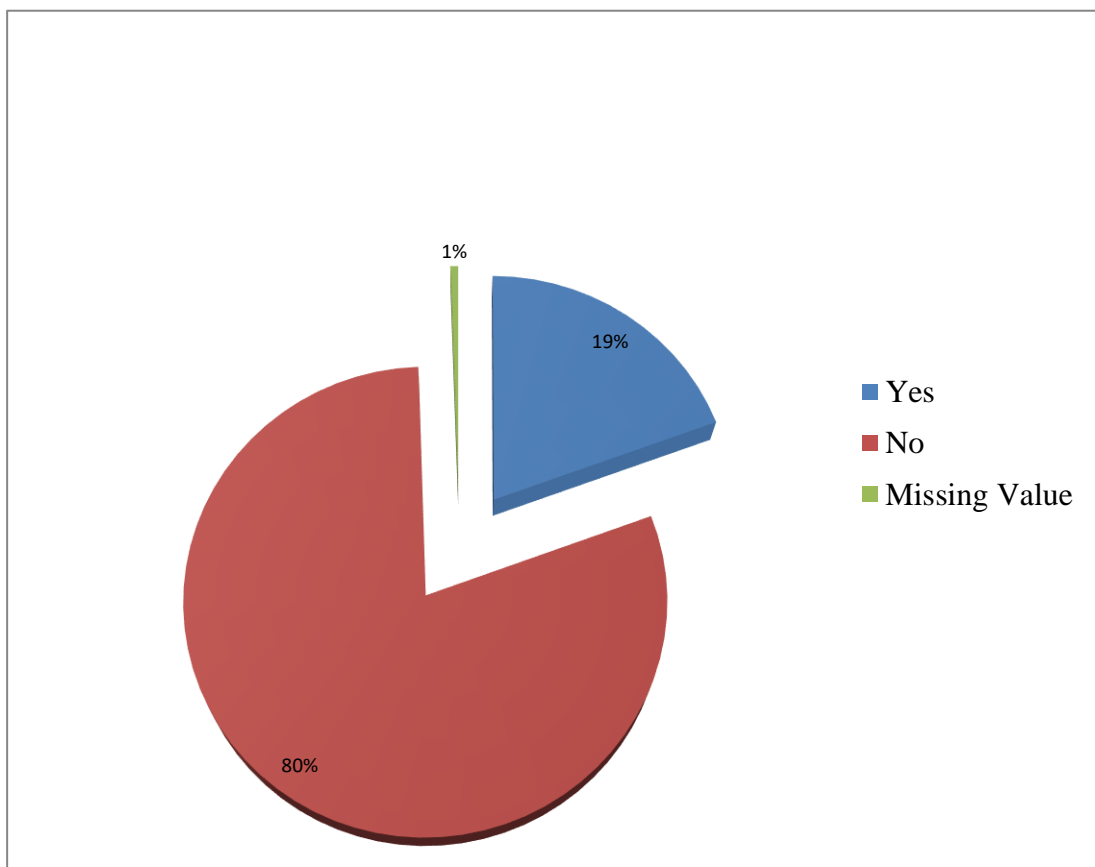
**Figure 4.6: Showing likability of respondents to share personal emotions on social media**

Next, when respondents were asked question ‘which platforms they feel comfortable sharing emotions’, around 77% of the total respondents said that they prefer offline face-to-face communication over social media communication. While 21% of the respondents said that they feel comfortable sharing emotions online on social media platforms. However, 2% of respondents didn’t answer the question.



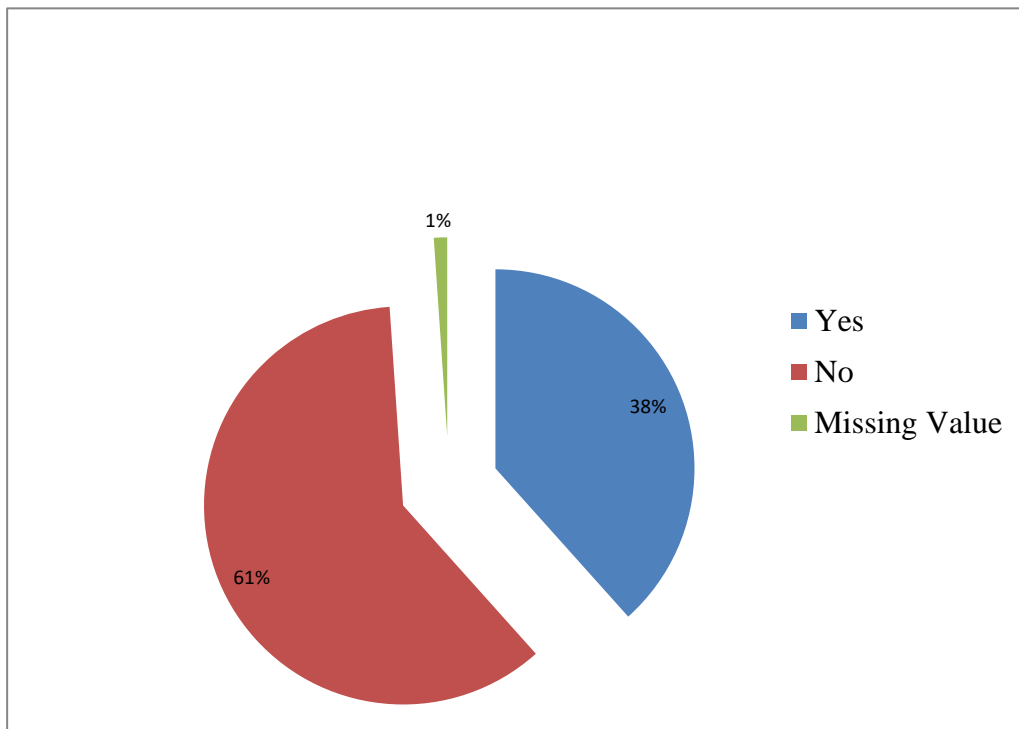
**Figure 4.7: Showing different platforms used by respondents to share ideas or emotions**

In response to another question, ‘do you find it more convenient to share feelings/emotions on social media (online) rather than discussing them face-to-face with your peers or family?’ 80% of the respondents said that they didn’t find it convenient to share their personal feelings/emotions on social media and would prefer discussing them face-to-face with their peers or family. While 19% of the total respondents contradicted the statement stating that they are still comfortable in sharing feelings/emotions on social media instead of doing so offline with family.



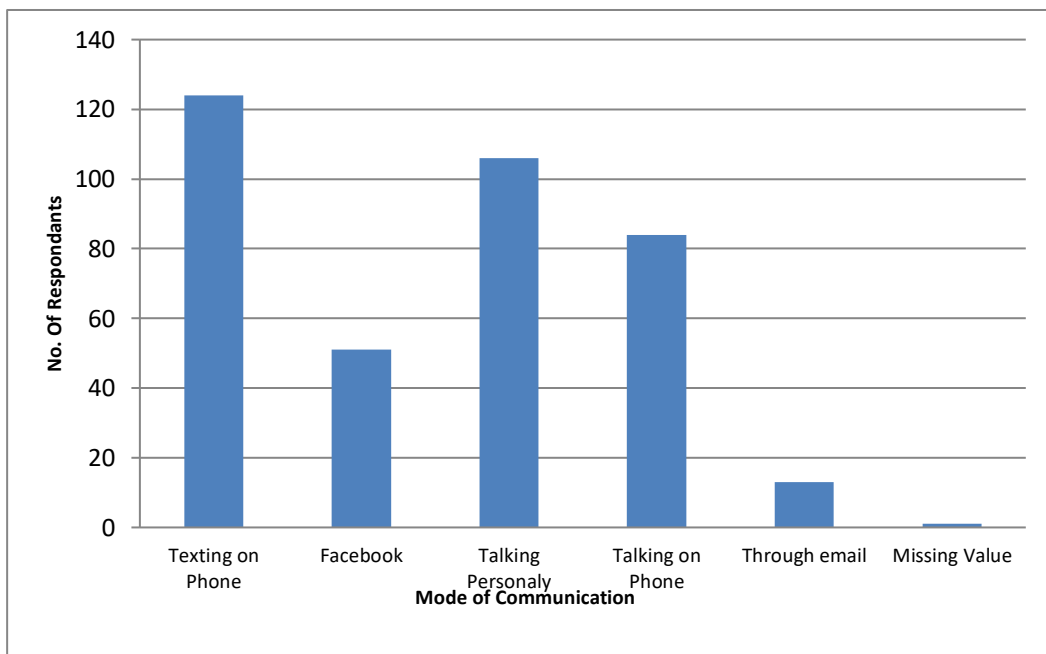
**Figure 4.8: Showing percentage of respondents comfortable in sharing feelings on social media**

Next, when the respondents were asked if they have ‘ever used social media as a platform to indirectly vent out your personal grievance’, a total of 61% of the respondents denied the statement. While, 38% said they have used social media as a platform to indirectly vent out their grievances against others. This result demonstrates that youngsters generally prefer offline face-to-face communication over social media for sharing and discussing emotions. However, they take over the social networking sites to vent out personal grievance/ anger which they otherwise are not able to do face-to-face with a person.



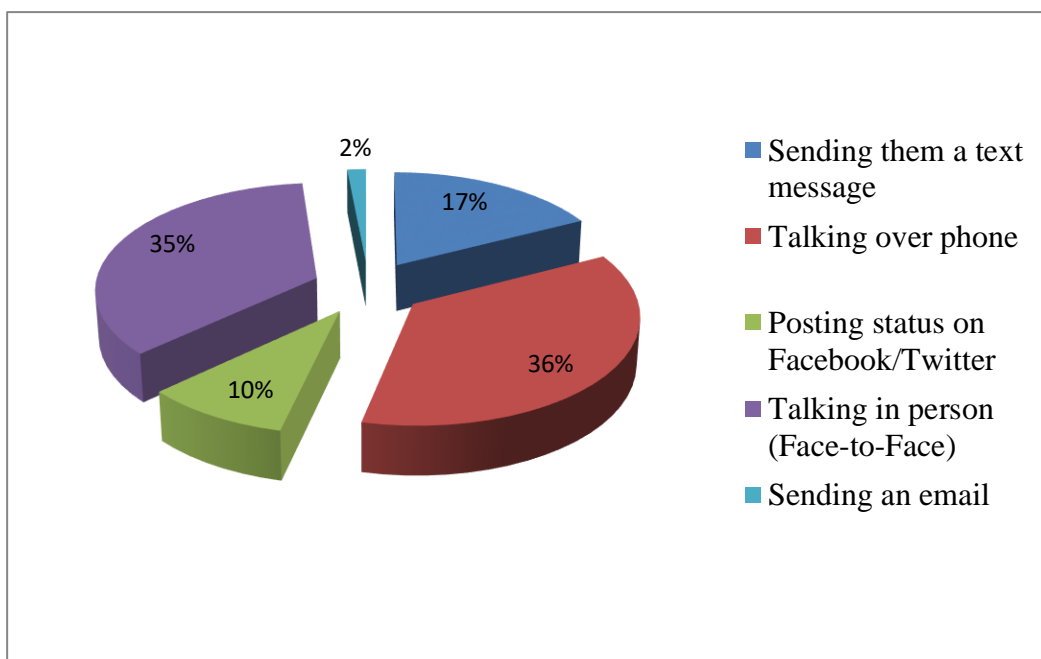
**Figure 4.9: Showing percentage of respondents who have used social media to vent out personal grievance**

The respondents were then asked about the mode they prefer to be in contact with others. The options they were given included ‘Texting on phone (messages/WhatsApp)’, ‘ Facebook’, ‘Talking personally (Face-to-Face)’, ‘Talking over phone’, or ‘Talking through Email.’ It was found that 124 out of the total 185 (67%) respondents said that they prefer to be in contact with their peers and family though texting on phone through messenger (Figure 4.10). Near about 105 respondents said that they prefer to be in contact with others by ‘talking personally’, while 80 of the total respondents said that they talk personally on phone to remain in contact with their friends and family members.



**Figure 4.10: Showing respondents’ preferred mode of communication**

When the respondents were asked which mode they use to let someone know they are upset, a majority of 36% said that they let their peers/family member know that they are upset by talking to them on phone rather than sending them a text message, which was chosen by only 17% of the respondents. Very less percentage of respondents (only 10%) said that they post status on Facebook/Twitter to let their peers/family members know they are upset.



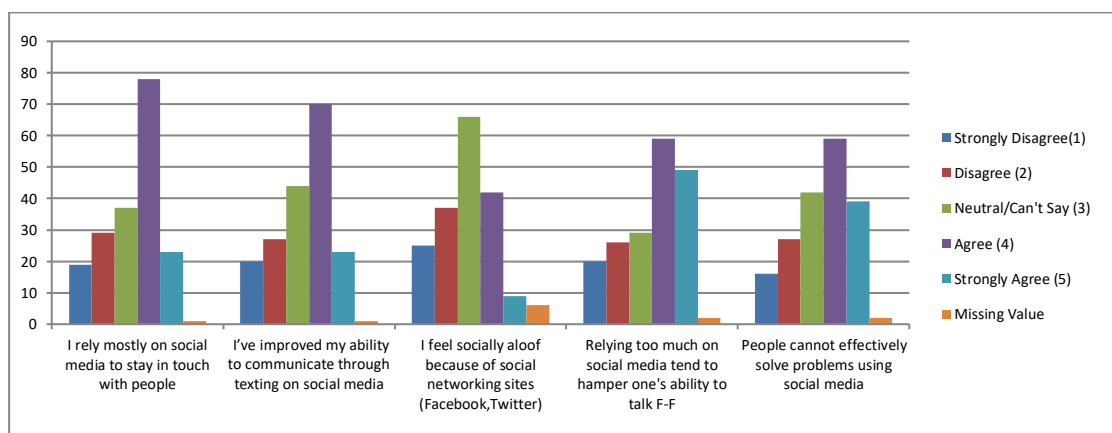
**Figure 4.11: Showing respondents' preferred mode to communicate that they are upset**

This clearly indicates that youngsters don't feel comfortable sharing their emotions on social media and would rather prefer to share it personally with their closed ones. They also like to be in contact with their friends and family members personally instead of being 'just friends' on Facebook/Twitter.

## Social Media and Communication

Using the attitudinal scale, the respondents were asked to rate their level of agreement to several statements regarding their use of social media to communicate with others. In response to statement “I rely mostly on social media to stay in touch with people”, 42% (n=78) reported they ‘agreed’. Majority of people (n=70) also ‘agreed’ that they have improved their ability to communicate through texting on social media. As many as 66 respondents couldn’t figure out if they feel socially aloof because of social networking sites, they remained ‘neutral’. The next statement was again ‘agreed’ by majority (n=59), who supported that relying too much on social media tend to hamper one’s ability to talk face-to-face. The same number of respondents (n=59) also ‘agreed’ that people cannot effectively solve problems using social media.

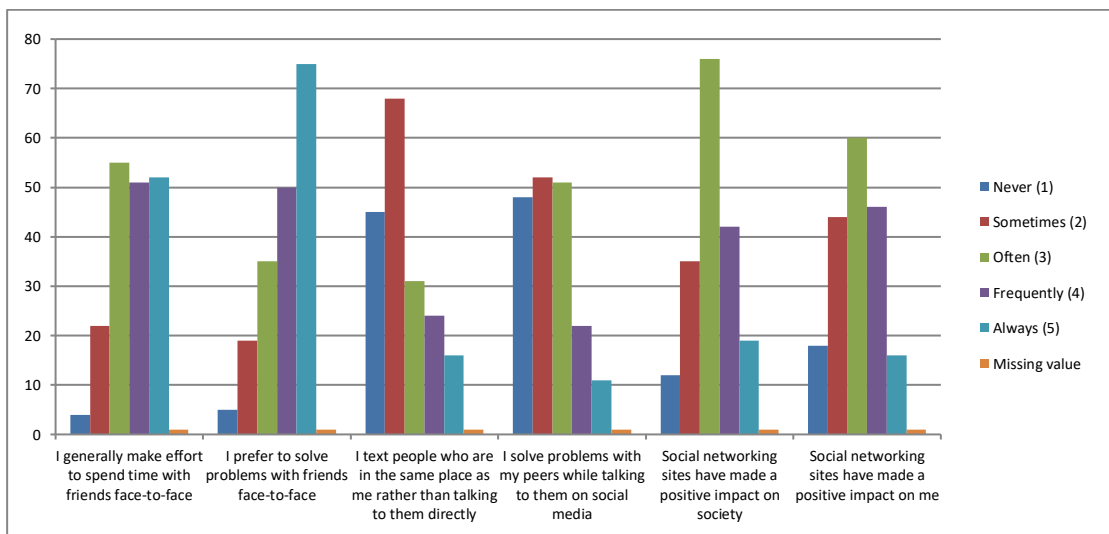
The result demonstrates that while most people use social media to remain in contact with others, they feel that social media doesn’t help solve problems effectively. On the other hand majority agreed that social media helps improve one’s ability to communicate through texting, but hampers the ability to talk face-to-face.



**Figure 4.12: Showing respondents’ level of agreement to statements related to use of social media communication**

In another set of statements, respondents were asked questions related to face-to-face interactions. The most common response to “I generally make effort to spend time with friends face-to-face” was ‘often’ (n=55). The next most common choice was ‘always’ with n=75 respondents saying that they prefer to solve problems with friends face-to-face. Surprisingly 68 respondents said that they ‘sometimes’ text people who are in the same place as them rather than talking to them directly. Most of the respondents (n=52) said that they ‘sometimes’ solve problems with their peers while talking to them on social media. As many as 76 respondents said that social networking sites have ‘often’ made a positive impact on society, while 60 of the total respondents said that these sites have ‘often’ made a positive impact on them.

The result demonstrates that even today youngsters often make an effort to spend time with their friends face-to-face and prefer to solve their problems offline. However, they sometimes solve problems with their peers while talking to them on social media. Majority of respondents supported the statement that social networking sites have made a positive impact on them as well as on the society.



**Figure 4.13: Showing responses related to face-to-face communication**

## **4.2. Social Media and Psychological Distress among Students Pursuing Higher Education**

The increasing use of the internet and thereby social networking sites has been raising concerns about its impact on the psychological stress of the users. The research explores that possibility and also how people's activities on the social media are associated with their own stress levels. The present objective of the study, a representative study of Indian youngsters based in Lucknow, explores relationship between digital technology use and psychological stress. Probability sampling was done among students pursuing higher studies enrolled in government and private institutions of Lucknow (Uttar Pradesh). Using random sampling technique, students were selected from two different universities, one private and one government. Cross sectional survey was conducted. Further, as adults the participants were free to chose filling the form without requiring parental permission and signed consent forms.

Since, the goal of the study was to accurately represent social networking involvement and experiences in students pursuing higher studies the eligible age limit was set between 18-23 years. The respondents were asked to establish measure of stress using the Perceived Stress Scale (PSS). The PSS consists of ten questions that measures the degree to which individual feels that their lives are overloaded, unpredictable and uncontrollable. Below are the questions that were asked. The dependent variable *psychological distress* was measured by using Perceived Stress Scale (PSS)(Cohen et al., 1983). The respondents were asked in the past 30days how often they felt irritated, angered, sad, stressed or had difficulty in dealing with their tasks. This scale is based on 10 questions that assess if the respondents feel that their life is overloaded, unpredictable and uncontrollable. The respondents answered on the scale of 0-4, where 0= Never and 4=Very Often. This scale basically helps to measure

perceived stress that can be viewed as an evaluation of the risk that people generally face for psychological disorder related to stress, such as anxiety and depression. According to the user PSS user manual by State of New Hampshire Employee Assistance Program, “the Perceived Stress Scale is interesting and important because someone’s perception of what is happening in his/her life is most important. Consider the idea that two individuals could have the exact same events and experiences in their lives for the past month. Depending on their perception, total score could put one of those individuals in the low stress category and the total score could put the second person in the high stress category” (Program).

Meanwhile it is worth noting here that since the questionnaire contained both negative as well as positive questions, all questions were made negative by reversing the code ((i.e 0=4, 1=3, 2=2, 3=1, 4=0) for the four positive questions.

In the last 30 days, how often have you:

1. Been upset because of something that happened unexpectedly
2. Felt that you were unable to control the important things in your life
3. Felt nervous and stressed
4. Felt confident about your ability to handle any personal problems
5. Felt that things were going your way
6. Found that you could not cope with all the things that you had to do
7. Been able to control irritations in your life
8. Felt that you were on top of things
9. Been angered because of things that were outside of your control
10. Felt difficulties were piling up so high that you could not overcome them

The participants were asked to respond on a 4-point scale from ‘frequently’ to ‘never’. Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress. The ten items were combined and the person getting the higher score of stress was considered to be having high level of stress.

Scores ranging from 0-13 were considered as low stress.

Scores ranging from 14-26 were considered moderate stress.

Scores ranging from 27-40 were considered as high perceived stress.

These scores were then related with the use of social networking sites and the association between the two was checked using the Chi-Square test.

Chi-square test represents an important non-parametric test used as a test of significance for the analysis of the quantitative data in social sciences. It does not require the assumption of normal or ‘t’ distributions and may be used with nominal or categorical data, i.e. data, expressed in frequencies or categories. In majority of the research studies it is used for testing the null hypothesis in two situations: (i) one saying that there exists no difference between the obtained results than the results obtained on some hypothetical basis such as chance and (ii) the other demonstrating that one variable is not affected by or related to, another variable (Mangal & Mangal, 2018). Chi Square is a statistical test that finds whether there is a relationship between two variables. But, it does not tell the direction or size of the relationship and only tells whether the two variables are associated with each other or not. The two variables have to be categorical. Since, the stress score was recorded as continuous variable it was converted into categorical variable form.

A total of 350 closed-ended questionnaires were administered among the randomly selected sample. However, out of these 302 samples, which fulfilled the criteria and purpose of research, were considered for analysis. The data was analysed using inferential statistics. Non-parametric chi-square was used to find if there was any association between independent variable, 'use of social media' and dependent variable 'stress'.

To study the pattern of use of technology, the respondents were asked about their use of social networking sites. They were asked about the frequency with which they used different social media platforms, primarily Facebook, Twitter and Instagram. Almost 34% of the total participants said that they use all three above mentioned social networking sites, while 29% said that they primarily use Facebook and Instagram.

**Table 4.2: Frequency table showing use of different social platforms**

	Frequency	Percent	Valid Percent	Cumulative Percent
Facebook	84	27.8	27.8	27.8
Twitter	6	2.0	2.0	29.8
Instagram	22	7.3	7.3	37.1
All	102	33.8	33.8	70.9
Facebook and Instagram	88	29.1	29.1	100.0
Total	302	100.0	100.0	

The respondents were asked what medium they use to access internet. The options they were given included mobile phone, computer or both. It was found that the respondents who were aged between 18-23 years of age said that they mostly use mobile (55.6%) or both computer and mobile (40.4%) to access social media. Table 4.3 represents the data collected.

**Table 4.3: Frequency table showing different mediums to access social platforms**

	Frequency	Percent	Valid Percent	Cumulative Percent
Mobile	168	55.6	55.6	55.6
Computer	12	4.0	4.0	59.6
Valid All	122	40.4	40.4	100.0
Total	302	100.0	100.0	

In order to get the information about where the respondents feel comfortable using their social media accounts, they were asked to mark the responses against the question ‘where do you access Social Networking Sites most often’. It was found that 64.2% respondents said that they access their social networking accounts at home, while 22.5% said that they check the updates both at home and also at their educational institution.

**Table 4.4: Frequency table showing different places to access social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Home	194	64.2	64.2	64.2
Educational Institute	30	9.9	9.9	74.2
Friend's place	10	3.3	3.3	77.5
Valid Home and Educational Institution	68	22.5	22.5	100.0
Total	302	100.0	100.0	

The respondents were also asked about the number of hours they spend on it, time of day during which they access their accounts and their purpose of using it, for example using it post their own pictures (33.8%), post about their mood status (15.9%), comment (1.3%), like (4.6%) or simply read others' posts (37.4%).

**Table 4.5: Frequency table showing what respondents mostly post about**

	Frequency	Percent	Valid Percent	Cumulative Percent
Own pictures	102	33.8	33.8	33.8
Mood status	48	15.9	15.9	49.7
Achievements	26	8.6	8.6	58.3
Valid Share knowledge in public interest	126	41.7	41.7	100.0
Total	302	100.0	100.0	

### **Elaborating on major findings:**

The study aims at finding out the association between use of social networking sites and stress levels among the students pursuing higher education. Since, no significant difference in the average stress score between the two genders-male and female was found, statistical modelling was done to understand the relation between stress and use of digital technology keeping the gender constant. Association between independent variable-use of social networking sites and dependent variable-stress was ascertained using the Chi-Square test.

**Q.** When do you generally access your social networks?

Morning      Afternoon      Evening      Night      Late Night

The respondents were asked ‘when do they generally access their social networks’. A total of 43% said that they access their accounts late in night, while only 9.3% said that they do so in morning hours. Also, it was found that 27.8% of the total number of respondents said that they access their social networking accounts throughout the day i.e during morning, afternoon, evening and late in night hours.

**Table 4.6: Frequency table showing Time of Day when respondents access social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Morning	28	9.3	9.3	9.3
Afternoon	22	7.3	7.3	16.6
Evening	38	12.6	12.6	29.1
Late Night	130	43.0	43.0	72.2
All	84	27.8	27.8	100.0
Total	302	100.0	100.0	

To check if there is any association between ‘time of accessing social networking site’ and stress score, chi-square test was applied on the two variables.

**Hypothesis:**

Ho: ‘Time of Day’ is not associated with ‘Stress Score’

H1: ‘Time of Day’ is associated with ‘Stress Score’

**Table 4.7: Time of Day \* Stress\_cat Cross tabulation**

		Stress_cat			Total
		Low Stress	Moderate Stress	High Stress	
Morning	Count	4	20	4	28
	% within Time of Day	14.3%	71.4%	14.3%	100.0%
Afternoon	Count	2	18	2	22
	% within Time of Day	9.1%	81.8%	9.1%	100.0%
Evening	Count	6	28	4	38
	% within Time of Day	15.8%	73.7%	10.5%	100.0%
Late Night	Count	11	93	26	130
	% within Time of Day	8.5%	71.5%	20.0%	100.0%
All	Count	5	55	24	84
	% within Time of Day	6.0%	65.5%	28.6%	100.0%
Total	Count	28	214	60	302
	% within Time of Day	9.3%	70.9%	19.9%	100.0%

**Table 4.8: Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.959 <sup>a</sup>	8	.204
Likelihood Ratio	11.023	8	.200
Linear-by-Linear Association	7.131	1	.008
N of Valid Cases	302		

a. 4 cells (26.7%) have expected count less than 5. The minimum expected count is 2.04.

Since the p-value ( $P=0.204$ ) is greater than our chosen significance level ( $\alpha = 0.05$ ), we do not reject the null hypothesis. **Rather, we conclude that there is not enough evidence to suggest an association between time of day (for accessing social networking site) and stress.**

While no association was found between the two variables, mean of ‘average stress score’ was evaluated with reference to ‘time of accessing social networking site’.

**Table 4.9: Mean of Stress Score \* Time of Day**

Stress Score

Time of Day	Mean	N	Std. Deviation
Morning	20.00	28	4.456
Afternoon	21.00	22	4.577
Evening	20.95	38	6.251
Late Night	21.58	130	5.918
All	22.86	84	5.837
Total	21.67	302	5.762

It was found that respondents accessing their social media profiles throughout the day had highest mean stress score. However, the respondents doing so in the morning hours had it the lowest.

**Q.** Do you access your social profiles:

- a.) Just after getting out of bed in morning
- b.) Just before sleeping at night
- c.) During travelling
- d.) While having meals

To understand the social media usage pattern of the respondents more deeply, they were asked about the specific activities they do while checking their account. A total of 45% of the respondents said that they check their social networks ‘just before sleeping’, while around 22% said that they check it throughout the day ‘while having meals’, ‘during travelling’, ‘just after getting out of bed’, ‘just before sleeping’ and ‘getting out of bed and sleeping in night’.

**Table 4.10: Frequency table showing when respondents access social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
While having meals	10	3.3	3.3	3.3
During travelling	28	9.3	9.3	12.6
just after getting out of bed	24	7.9	7.9	20.5
just before sleeping	136	45.0	45.0	65.6
Valid Getting out of bed and sleeping in night	38	12.6	12.6	78.1
All	66	21.9	21.9	100.0
Total	302	100.0	100.0	

**Hypothesis:**

Ho: ‘When do you access social media’ is not associated with ‘Stress Score’

H1: ‘When do you access social media’ is associated with ‘Stress Score’

**Table 4.11: When do you access social media\* Stress\_cat Cross tabulation**

		Stress_cat			Total	
		Low Stress	Moderate Stress	High Stress		
When	While having meals	Count	0	6	4	10
		% within	0.0%	60.0%	40.0%	100.0%
		When				
		Count	6	18	4	28
		% within	21.4%	64.3%	14.3%	100.0%
		When				
		Count	2	20	2	24
		% within	8.3%	83.3%	8.3%	100.0%
		When				
		Count	16	94	26	136
		% within	11.8%	69.1%	19.1%	100.0%
		When				
		Count	2	32	4	38
		% within	5.3%	84.2%	10.5%	100.0%
	When					
	Count	2	44	20	66	
	% within	3.0%	66.7%	30.3%	100.0%	
	When					
	Count	28	214	60	302	
	% within	9.3%	70.9%	19.9%	100.0%	
	When					

**Table 4.12: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.210 <sup>a</sup>	10	.020
Likelihood Ratio	21.775	10	.016
Linear-by-Linear Association	4.442	1	.035
N of Valid Cases	302		

a. 6 cells (33.3%) have expected count less than 5. The minimum expected count is .93.

Since the p-value ( $p=0.02$ ) is less than our chosen significance level ( $\alpha = 0.05$ ), we fail to accept the null hypothesis and accept the Alternative Hypothesis. **We conclude that there is a strong association between ‘when do you access social media’ and stress.**

Even though an association was found between the two variables, mean of ‘average stress score’ was evaluated with reference to ‘When do you access social media’.

**Table 4.13: Mean of Stress Score \* When**

Stress Score

When	Mean	N	Std. Deviation
While having meals	24.60	10	3.806
During travelling	20.64	28	6.673
just after getting out of bed	20.83	24	4.878
just before sleeping	21.21	136	5.718
Getting out of bed and sleeping in night	20.95	38	5.923
All	23.33	66	5.600
Total	21.67	302	5.762

It was found that respondents accessing their social media profiles while having meals had highest mean stress score (24.60). However, the respondents doing so during travelling had the lowest score (20.64).

**Q.** How many hours do you spend on social networks during the 24hour time span (approx.)

a) 0-2 hours

b) 2-4 hours

c) 5-8 hours

d) More than 8 hours

Next, the respondents were asked about the number of hours they spend accessing the social networking site. Almost 34% of the respondents said that they spend 0 to 2 hours on social media, while 29% said that they spend 2 to 4 hours checking updates on their social media accounts.

**Table 4.14: Frequency table showing hours spend by respondents on social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
0 to 2 hours	104	34.4	34.4	34.4
2 to 4 hours	88	29.1	29.1	63.6
Valid 4 to 8 hours	76	25.2	25.2	88.7
more than 8 hours	34	11.3	11.3	100.0
Total	302	100.0	100.0	

**Hypothesis:**

Ho: ‘No. of hours spend on social media’ is not associated with ‘Stress Score’

H1: ‘No. of hours spend on social media’ is associated with ‘Stress Score’

**Table 4.15: No. of hours spend on social media\* Stress\_cat Cross tabulation**

			Stress_cat			Total
			Low Stress	Moderate Stress	High Stress	
Hours Spend	0 to 2 hours	Count	16	84	4	104
		% within Hours Spend	15.4%	80.8%	3.8%	100.0%
	2 to 4 hours	Count	8	72	8	88
		% within Hours Spend	9.1%	81.8%	9.1%	100.0%
	4 to 8 hours	Count	4	42	30	76
		% within Hours Spend	5.3%	55.3%	39.5%	100.0%
	more than 8 hours	Count	0	16	18	34
		% within Hours Spend	0.0%	47.1%	52.9%	100.0%
	Total	Count	28	214	60	302
		% within Hours	9.3%	70.9%	19.9%	100.0%
		Spend				

**Table 4.16: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	68.929 <sup>a</sup>	6	.000
Likelihood Ratio	70.902	6	.000
Linear-by-Linear Association	55.723	1	.000
N of Valid Cases	302		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 3.15.

Since the p-value ( $p=0.000$ ) is less than our chosen significance level ( $\alpha = 0.05$ ), we reject the Null Hypothesis and accept the Alternative Hypothesis. **Hence, we conclude that there is a strong association between ‘no. of hours spend on social media’ and stress.**

Even though a strong association was found between the two variables, mean of ‘average stress score’ was evaluated with reference to ‘no. of hours spend social media’.

**Table 4.17: Mean of Stress Score \* Hour Spend**

Stress Score

Hours Spend	Mean	N	Std. Deviation
0 to 2 hours	19.46	104	5.076
2 to 4 hours	20.52	88	5.085
4 to 8 hours	24.11	76	5.628
more than 8 hours	25.94	34	5.565
Total	21.67	302	5.762

It was found that respondents accessing their social media profiles for more than 8 hours had highest mean stress score (25.94). While, the respondents doing so for 0-2 hours had lowest average stress score (19.46).

**Q.** How often do you check your social media profile(s) in one day?

- a) Every half-an-hour
- b) Every one hour
- c) At an interval of two hours
- d) Once a day
- e) Twice/thrice a day
- f) Not daily

When asked about ‘how often do they check their social media profile(s) in one day’, 37.4% of the respondents said that they do so every one-hour. Also, a total 35.8% said they check their profiles once or twice a day.

**Table 4.18: Frequency table showing how often respondents check social media profile**

	Frequency	Percent	Valid Percent	Cumulative Percent
Not daily	30	9.9	9.9	9.9
Once or twice a day	108	35.8	35.8	45.7
Valid Every one hour	113	37.4	37.4	83.1
Every half-an hour	51	16.9	16.9	100.0
Total	302	100.0	100.0	

**Hypothesis:**

Ho: 'Frequency of checking profile on social media' is not associated with 'Stress Score'

H1: 'Frequency of checking profile on social media' is associated with 'Stress Score'

**Table 4.19: Frequency of checking profile on social media\* Stress\_cat Cross tabulation**

			Stress_cat			Total
			Low Stress	Moderate Stress	High Stress	
Frequency of checking profile	Not daily	Count	4	26	0	30
		% within Frequency of checking profile	13.3%	86.7%	0.0%	100.0%
	Once or twice a day	Count	18	84	6	108
		% within Frequency of checking profile	16.7%	77.8%	5.6%	100.0%
	Every one hour	Count	5	69	39	113
		% within Frequency of checking profile	4.4%	61.1%	34.5%	100.0%
	Every half-an hour	Count	1	35	15	51
		% within Frequency of checking profile	2.0%	68.6%	29.4%	100.0%
	Total	Count	28	214	60	302
		% within Frequency of checking profile	9.3%	70.9%	19.9%	100.0%

**Table 4.20: Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.694 <sup>a</sup>	6	.000
Likelihood Ratio	56.405	6	.000
Linear-by-Linear Association	32.774	1	.000
N of Valid Cases	302		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.78.

Since the p-value ( $p=0.000$ ) is less than our chosen significance level ( $\alpha = 0.05$ ), we reject the Null Hypothesis and accept the Alternative Hypothesis. **Hence, we conclude that there is a strong association between ‘frequency of checking profile on social media’ and stress.**

Even though a strong association was found between the two variables, yet mean of ‘average stress score’ was evaluated with reference to ‘frequency of checking updates on social media profile’.

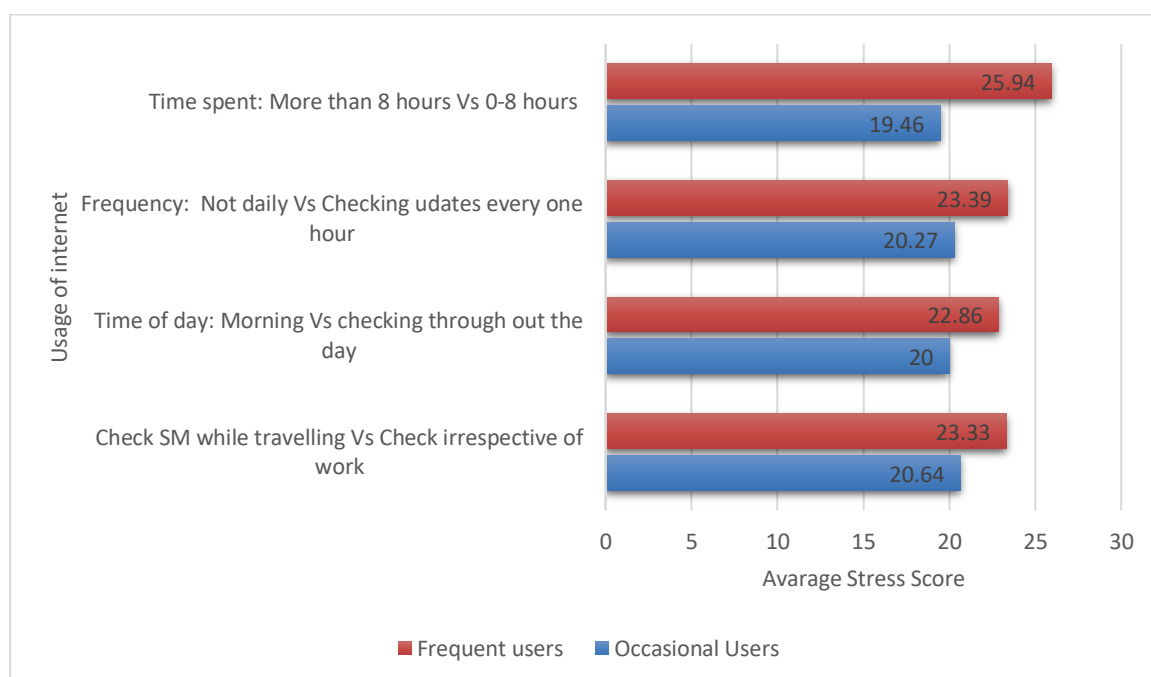
**Table 4.21: Mean of Stress Score \* Frequency of checking profile**

Stress Score

Frequency of checking profile	Mean	N	Std. Deviation
Not daily	20.27	30	4.464
Once or twice a day	20.00	108	5.334
Every one hour	22.86	113	5.778
Every half-an hour	23.39	51	6.264
Total	21.67	302	5.762

The study found that the people who access their social media accounts every half-an-hour have the highest value of average stress score (23.39). While the respondents who check their profiles once or twice a day have the lowest value of average stress score (20.00).

**Frequent users of social media are more stressful than those who use it occasionally or in moderation**



**Figure 4.14: Showing responses of frequent users Vs occasional users**

The above Figure (Figure 4.14) clearly shows that respondents who access their social media accounts for more than 8 hours reflected higher average stress score (25.94), while the ones who used it for less than 8 hours a day showed comparatively less stress (19.46). Also, people who check their profiles for updates every one hour showed to be under high stress (23.39) when compared to their counterparts who do not use it daily. The data shows that youngsters who keep checking their social media

profiles throughout the day are far more stressed (22.86) than those who check it only during the morning hours. However, it remains unclear if people already under stress because of some other reason check their profiles more or keeping a constant tab on social media results into more stress. Similarly, it can be understood that people who check updates only while travelling, thereby utilizing their time have lesser stress when compared to those who check it irrespective of work they are doing.

Q. What is your motive (primary purpose) behind using the social networking sites?

- a) Make new connections
- b) Stay in touch with friends
- c) Gather information
- d) Dating

The respondents were asked about their primary purpose for using the Social Networking Sites. They were given four options and were asked to choose one from them. The options given included ‘Make new connections’, ‘Stay in touch with friends’, ‘Gather information’ and ‘Dating’. From the data received it was found that 50.7% of the total respondents use social networking sites to stay in touch with their friends, while 27.5% use it to gather information.

**Table 4.22: Frequency table showing purpose of using social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Make new connections	56	18.5	18.5	18.5
Stay in touch with friends	153	50.7	50.7	69.2
Valid Dating	10	3.3	3.3	72.5
Gather information	83	27.5	27.5	100.0
Total	302	100.0	100.0	

To check the association between the two variables, chi-square test was applied.

**Hypothesis:**

Ho: ‘Purpose behind using social media’ is not associated with ‘Stress Score’

H1: ‘Purpose behind using social media’ is associated with ‘Stress Score’

**Table 4.23: Purpose behind using social media \* Stress\_cat Cross tabulation**

		Stress_cat			Total
		Low Stress	Moderate Stress	High Stress	
Make new connections	Count	8	28	20	56
	% within Purpose behind using SM	14.3%	50.0%	35.7%	100.0%
Stay in touch with friends	Count	14	116	23	153
	% within Purpose behind using SM	9.2%	75.8%	15.0%	100.0%
Dating	Count	0	6	4	10
	% within Purpose behind using SM	0.0%	60.0%	40.0%	100.0%
Gather information	Count	6	64	13	83
	% within Purpose behind using SM	7.2%	77.1%	15.7%	100.0%
Total	Count	28	214	60	302
	% within Purpose behind using SM	9.3%	70.9%	19.9%	100.0%

**Table 4.24: Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.072 <sup>a</sup>	6	.004
Likelihood Ratio	18.584	6	.005
Linear-by-Linear Association	.458	1	.499
N of Valid Cases	302		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is .93.

Since the p-value ( $p=0.004$ ) is less than our chosen significance level ( $\alpha = 0.05$ ), we reject the null hypothesis and accept the Alternative Hypothesis. **Hence, we conclude that there is a strong association between ‘purpose of using social media’ and stress.**

Even though an association was found between the two variables, yet mean of ‘stress score’ was evaluated with reference to ‘purpose of checking social media profile’.

**Table 4.25: Mean of Stress Score \* Purpose behind using Social Media**

Stress Score

Purpose behind using SM	Mean	N	Std. Deviation
Make new connections	22.11	56	7.892
Stay in touch with friends	21.14	153	4.993
Dating	25.20	10	5.750
Gather information	21.92	83	5.297
Total	21.67	302	5.762

When the mean of stress score was compared with ‘purpose of using social media’ it was found that people using it for dating purpose have higher level of stress (stress score= 25.50) followed by those using it to make new connections (stress score= 22.11).

**Q. How many friends do you have/follow on your social media account(s) (approx.)?**

- a) Less than 300
- b) 300-500
- c) 500-700
- d) 800-1000
- e) More than 1000

The respondents were asked the number of friends they are connected to on their social networking site. Majority (49.7%) of the respondents said that they have less than 300 friends on their social network. It was found that only 10% of the total respondents said that they have more than 1000 pals on their social network.

**Table 4.26: Frequency table showing no. of friends respondents have on social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 300	150	49.7	49.7	49.7
Between 300-500	72	23.8	23.8	73.5
Between 500-700	32	10.6	10.6	84.1
Between 800-1000	18	6.0	6.0	90.1
More than 1000	30	9.9	9.9	100.0
Total	302	100.0	100.0	

To check the association between the two variables, chi-square test was applied.

**Hypothesis:**

Ho: 'No. of friends on social media' is not associated with 'Stress Score'

H1: 'No. of friends on social media' is associated with 'Stress Score'

**Table 4.27: No. of friends on social media \* Stress\_cat Cross tabulation**

			Stress_cat			Total
			Low Stress	Moderate Stress	High Stress	
No. of friends	Less than 300	Count	20	102	28	150
		% within No. of friends	13.3%	68.0%	18.7%	100.0%
	Between 300-500	Count	2	58	12	72
		% within No. of friends	2.8%	80.6%	16.7%	100.0%
	Between 500-700	Count	4	20	8	32
		% within No. of friends	12.5%	62.5%	25.0%	100.0%
	Between 800-1000	Count	0	8	10	18
		% within No. of friends	0.0%	44.4%	55.6%	100.0%
	More than 1000	Count	2	26	2	30
		% within No. of friends	6.7%	86.7%	6.7%	100.0%
Total	Count	28	214	60	302	
	% within No. of friends	9.3%	70.9%	19.9%	100.0%	

**Table 4.28: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.541 <sup>a</sup>	8	.001
Likelihood Ratio	27.401	8	.001
Linear-by-Linear Association	1.559	1	.212
N of Valid Cases	302		

a. 4 cells (26.7%) have expected count less than 5. The minimum expected count is 1.67.

Since the p-value ( $P=0.001$ ) is less than our chosen significance level ( $\alpha = 0.05$ ), we reject the Null Hypothesis and accept Alternative Hypothesis. **Hence, we conclude that there is an association between ‘no. of friends on social media’ and stress.**

Even though an association was found between the two variables, mean of ‘stress score’ was evaluated with reference to ‘no. of friends on social media’.

**Table 4.29: Means of Stress Score \* No. of friends**

Stress Score

No. of friends	Mean	N	Std. Deviation
Less than 300	20.99	150	5.766
Between 300-500	22.53	72	4.315
Between 500-700	20.75	32	6.830
Between 800-1000	25.89	18	7.459
More than 1000	21.47	30	5.431
Total	21.67	302	5.762

Meanwhile, when the total number of friends was compared with the mean of stress score it was found that people having 800-1000 friends tend to have higher stress, with the mean of their stress score being almost 26. Also, it was found that respondents having friends between 500-700 have a average stress score of 21 which was found to be the lowest among all categories.

**Q.** How many friends/ followers in your social networking account(s) are the once you have met personally?

- a) 25%
- b) 50%
- c) 75%
- d) Almost all
- e) None

When the respondents were asked ‘how many friends/followers in their social networking have they met in person’. Around 41% said that they have met only 25% of their total online friends in person. While, only 8.6% of the respondents said that they have met 99% of their online friends.

**Table 4.30: Frequency table showing percentage of friends respondents have met personally on social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
0	70	23.2	23.2	23.2
25	124	41.1	41.1	64.2
50	34	11.3	11.3	75.5
Valid 75	48	15.9	15.9	91.4
99	26	8.6	8.6	100.0
Total	302	100.0	100.0	

To check the association between the two variables, chi-sqaure test was applied.

**Hypothesis:**

Ho: ‘Percentage of friends met personally on social media’ is not associated with ‘Stress Score’

H1: ‘Percentage of friends met personally on social media’ is associated with ‘Stress Score’

**Table 4.31: Percentage of friends met personally on social media \* Stress\_cat  
Cross tabulation**

		Stress_cat			Total
		Low Stress	Moderate Stress	High Stress	
Friends met personally	Count	8	52	10	70
	0 % within Friends met personally	11.4%	74.3%	14.3%	100.0%
	Count	8	98	18	124
	25 % within Friends met personally	6.5%	79.0%	14.5%	100.0%
	Count	8	14	12	34
	50 % within Friends met personally	23.5%	41.2%	35.3%	100.0%
	Count	2	30	16	48
	75 % within Friends met personally	4.2%	62.5%	33.3%	100.0%
	Count	2	20	4	26
Total	99 % within Friends met personally	7.7%	76.9%	15.4%	100.0%
	Count	28	214	60	302
	% within Friends met personally	9.3%	70.9%	19.9%	100.0%

**Table 4.32: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.011 <sup>a</sup>	8	.000
Likelihood Ratio	25.760	8	.001
Linear-by-Linear Association	3.531	1	.060
N of Valid Cases	302		

a. 3 cells (20.0%) have expected count less than 5. The minimum expected count is 2.41.

Since the p-value ( $p=0.000$ ) is less than our chosen significance level ( $\alpha = 0.05$ ), we reject the Null Hypothesis and accept the Alternative Hypothesis.

**Hence, we conclude that there is a strong association between ‘friends met personally on social media’ and stress.**

Even though an association was found between the two variables, mean of ‘stress score’ was evaluated with reference to ‘friends met personally on social media’.

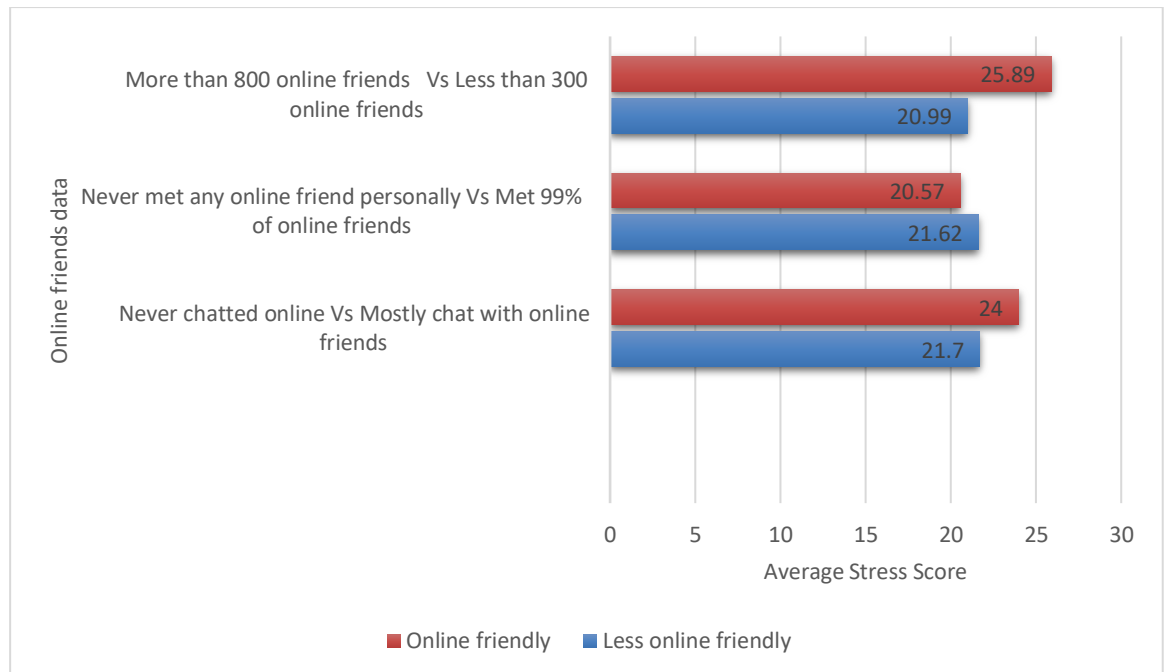
**Table 4.33: Mean of Stress Score \* percentage of friends met personally**

Stress Score

Friends met personally	Mean	N	Std. Deviation
0	20.57	70	5.023
25	21.97	124	5.202
50	21.06	34	9.345
75	22.96	48	4.626
99	21.62	26	5.831
Total	21.67	302	5.762

It was found that respondents those who have met 75% of their friends have high value of average stress score (22.96). While those who haven’t met any of the listed friends on social networking site have the lowest level of stress (20.57).

## Online friendship tends to elevate stress levels among young individuals



**Figure 4.15: Showing responses of online friendly users Vs less online friendly users**

It was found that respondents who value online friendship more are in high stress than their counterparts. The data clearly shows the direct proportionality between the number of friends and level of stress. In a contrast it was found that respondents those who had never met their online friends showed less stress while the others who had met most of their online friends had higher average stress score. It can be understood with the findings here that having only known friends in the friend list creates some sort of peer pressure on the user that results in stress, while not knowing any of them keeps the person easy. However, this is just an assumption and not clear from the results. Although Chi Square test didn't find any association between online

friendship and average stress score, it was seen that people who mostly chat with online friends have high stress score than the one who never chat with their online friends.

### **Social media activities linked to stress levels in youngsters**

By applying non-parametric Chi Square test a significant association was found between different social media activities and stress, where  $p < 0.05$ . Activities like only liking other's posts or posting at own profile were found to be associated with low levels of stress, while activities including reading other's posts, commenting etc. were associated with high average stress score. Similarly, respondents who shared mostly about their achievements showed less stress (17.54), while those mostly posting about mood status had high average stress score (23.25).

Q. Do you prefer chatting with random people on these social networking sites?

- a) Mostly
- b) Sometimes
- c) Never (I chat with only known friends)
- d) I don't chat online

It was found that majority of the respondents said that they have never chatted online i.e 47%. While only 2.6% of the total respondents said they mostly chat online on social media. A total of 43% said that they sometimes use their social media profiles to chat online. And 7.3% of the student respondents said that they don't chat online at all.

**Table 4.34: Frequency table showing online chatting by respondents on social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	142	47.0	47.0	47.0
Sometimes	130	43.0	43.0	90.1
Mostly	8	2.6	2.6	92.7
I don't chat online	22	7.3	7.3	100.0
Total	302	100.0	100.0	

To check the association between the two variables, chi-square test was applied.

**Hypothesis:**

Ho: ‘Online chatting’ is not associated with ‘Stress Score’

H1: ‘Online chatting’ is associated with ‘Stress Score’

**Table 4.35: Online chatting \* Stress\_cat Cross tabulation**

			Stress_cat			Total
			Low Stress	Moderate Stress	High Stress	
Chatting	Never	Count	10	106	26	142
		% within Chatting	7.0%	74.6%	18.3%	100.0%
	Sometimes	Count	12	90	28	130
		% within Chatting	9.2%	69.2%	21.5%	100.0%
	Mostly	Count	2	4	2	8
		% within Chatting	25.0%	50.0%	25.0%	100.0%
	I don't chat online	Count	4	14	4	22
		% within Chatting	18.2%	63.6%	18.2%	100.0%
	Total	Count	28	214	60	302
		% within Chatting	9.3%	70.9%	19.9%	100.0%

**Table 4.36: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.263 <sup>a</sup>	6	.394
Likelihood Ratio	5.283	6	.508
Linear-by-Linear Association	.704	1	.402
N of Valid Cases	302		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .74.

Since the p-value (p=0.394) is greater than our chosen significance level ( $\alpha = 0.05$ ), we do not reject the null hypothesis. **Rather, we conclude that there is not enough evidence to suggest an association between chatting preference on social media and stress.**

While no association was found between the two variables, mean of ‘stress score’ was evaluated with reference to ‘chatting preference on social media’.

**Table 4.37: Means of Stress Score \* Chatting**

Stress Score

Chatting	Mean	N	Std. Deviation
Never	21.70	142	5.285
Sometimes	21.55	130	5.822
Mostly	24.00	8	12.118
I don't chat online	21.27	22	5.382
Total	21.67	302	5.762

After comparing ‘chatting preference’ with ‘stress score’ it was found that respondents who said that they mostly use their social networking sites to date have high level of stress, where the mean of stress core was found to be 24. Also, it was found that people who said that they don’t chat online have the lowest level of stress, where mean of stress score was found to be 21.27.

Q. What are your common social networking activities?

- a) Reading others' posts
- b) Liking other people's content
- c) Commenting on their podtd
- d) Posting on own wall
- e) All

The respondents were asked about the common activities they do on social networking site. A total of 46% of the respondents said that do all the mentioned activities on their social networking sites. These include reading other's post, liking other's posts, commenting and posting. Around 37% of the respondents said that they like to read other's post on their social networking site.

**Table 4.38: Frequency table showing social networking activities**

	Frequency	Percent	Valid Percent	Cumulative Percent
Reading other's post	113	37.4	37.4	37.4
Liking	14	4.6	4.6	42.1
Commenting	4	1.3	1.3	43.4
Posting	32	10.6	10.6	54.0
All	139	46.0	46.0	100.0
Total	302	100.0	100.0	

To check the association between the two variables, chi-sqaure test was applied.

**Hypothesis:**

Ho: ‘Social Networking Activities’ is not associated with ‘Stress Score’

H1: ‘Social Networking activities’ is associated with ‘Stress Score’

**Table 4.39: Social networking activities \* Stress\_cat Cross tabulation**

			Stress_cat			Total
			Low Stress	Moderate Stress	High Stress	
SN activities	Reading other's post	Count	10	87	16	113
		% within SN activities	8.8%	77.0%	14.2%	100.0%
	Liking	Count	2	12	0	14
		% within SN activities	14.3%	85.7%	0.0%	100.0%
	Commenting	Count	0	2	2	4
		% within SN activities	0.0%	50.0%	50.0%	100.0%
	Posting	Count	12	18	2	32
		% within SN activities	37.5%	56.2%	6.2%	100.0%
	All	Count	4	95	40	139
		% within SN activities	2.9%	68.3%	28.8%	100.0%
Total	Count	28	214	60	302	
	% within SN activities	9.3%	70.9%	19.9%	100.0%	

**Table 4.40: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	51.776 <sup>a</sup>	8	.000
Likelihood Ratio	45.270	8	.000
Linear-by-Linear Association	6.814	1	.009
N of Valid Cases	302		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .37.

Since the p-value ( $p=0.000$ ) is less than our chosen significance level ( $\alpha = 0.05$ ), we reject the Null Hypothesis and accept the Alternative Hypothesis. **Hence, we conclude that there is a strong association between ‘social networking activities’ and stress.**

Even though an association was found between the two variables, mean of ‘stress score’ was evaluated with reference to ‘Friends met personally on social media’.

**Table 4.41: Mean of Stress Score \* SN activities**

Stress Score

SN activities	Mean	N	Std. Deviation
Reading other's post	21.35	113	5.163
Liking	18.00	14	5.054
Commenting	27.50	4	8.660
Posting	17.06	32	6.725
All	23.19	139	5.186
Total	21.67	302	5.762

After comparing ‘social networking activities’ with ‘stress score’ it was found that respondents who said that they mostly use their social networking profiles to comment on other’s post have the highest average stress score. While, people who generally post on their social media have the lowest stress score.

Q. What do you generally post about?

- a) Own pictures
- b) Mood status
- c) Achievements
- d) Share knowledgeable content in public interest

When the respondents were asked about what they prefer to post about, 41.7% of them said that they generally prefer to post about knowledgeable content in public interest. Next, 33.8% of the respondents said that they like to post their own pictures on their social networking sites. While, 15.9% said that they post their mood status, 8.6% said that they like to use social media to post about their achievements.

**Table 4.42: Frequency table showing what respondents mostly post about on social media**

	Frequency	Percent	Valid Percent	Cumulative Percent
Own pictures	102	33.8	33.8	33.8
Mood status	48	15.9	15.9	49.7
Achievements	26	8.6	8.6	58.3
Share knowledge in public interest	126	41.7	41.7	100.0
Total	302	100.0	100.0	

To check the association between the two variables, chi-square test was applied.

**Hypothesis:**

Ho: 'Mostly post about' is not associated with 'Stress Score'

H1: 'Mostly post about' is associated with 'Stress Score'

**Table 4.43: Mostly post about \* Stress\_cat Cross tabulation**

		Stress_cat			Total
		Low Stress	Moderate Stress	High Stress	
Mostly post about	Own pictures	Count 8 7.8%	72 70.6%	22 21.6%	102 100.0%
	Mood status	Count 2 4.2%	32 66.7%	14 29.2%	48 100.0%
	Achievements	Count 10 38.5%	16 61.5%	0 0.0%	26 100.0%
	Share knowledge in public interest	Count 8 6.3%	94 74.6%	24 19.0%	126 100.0%
	Total	Count 28 9.3%	214 70.9%	60 19.9%	302 100.0%

**Table 4.44: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.762 <sup>a</sup>	6	.000
Likelihood Ratio	29.563	6	.000
Linear-by-Linear Association	.762	1	.383
N of Valid Cases	302		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.41.

Since the p-value ( $p=0.000$ ) is less than our chosen significance level ( $\alpha = 0.05$ ), we reject the Null Hypothesis and accept the Alternative Hypothesis. **Hence, we conclude that there is a strong association between ‘mostly post about’ and stress.**

Even though an association was found between the two variables, mean of ‘stress score’ was evaluated with reference to ‘Mostly post about’.

**Table 4.45: Mean of Stress Score \* Mostly post about**

Stress Score

Mostly post about	Mean	N	Std. Deviation
Own pictures	21.82	102	5.532
Mood status	23.25	48	5.428
Achievements	17.54	26	6.307
Share knowledge in public interest	21.79	126	5.626
Total	21.67	302	5.762

After comparing ‘what people mostly post about’ with ‘means of stress score’ it was found that respondents who said that they mostly post their mood status on their social networking profiles have the highest means of stress score i.e. 23.25. While respondents who said that they like to share about their achievements on the social media had the lowest level of stress score i.e. 17.54.

**Gender doesn't play a role in terms of social media usage and its association with stress.**

To compare stress across genders, we applied Mann-Whitney U-test- the non-parametric equivalent of independent t-test. This was taken into consideration because the stress score was found to be non-normal. No association was found between gender, social media usage and stress.

**Mann-Whitney Test**

**Table 4.46: Ranks**

	Gender	N	Mean Rank	Sum of Ranks
Stress Score	Male	136	149.16	20286.00
	Female	166	153.42	25467.00
	Total	302		

**Table 4.47: Test Statistics<sup>a</sup>**

	Stress Score
Mann-Whitney U	10970.000
Wilcoxon W	20286.000
Z	-.422
Asymp. Sig. (2-tailed)	.673

a. Grouping Variable: Gender

### **4.3. Social Media and Suicidal Ideation among Students Pursuing Higher Education**

In order to find out if there is any association between use of social media, specifically social networking sites and suicidal ideations among students pursuing higher education, five experts were interviewed using in-depth Interview through interview schedule. The experts included psychiatrist, psychologist, counsellor and motivational speaker as a part of qualitative approach to the research. The data was collected and thereby analysed using narrative/descriptive approach.

The interview schedule consisted of five questions that were based on the expert's views and personal experience to find out about youngsters psychology. Below are the excerpts from interview of each expert.

**Expert 1: Dr. Vipul Singh, Associate Professor, psychiatry, G.S.V.M. Medical College, Kanpur (U.P.)**

**Q1. How do you think use of social media impacts the interpersonal (face-to-face) communication skills of youngsters (For example, people use social media to vent out their anger/frustration etc.)?**

**Answer:** It is true that the youngsters today tend to vent out their anger/frustration on social media. However, there is this common practice of putting good and glamorous things happening in their life which results is creating frustration for others who can't

afford it. This pomp and show on social media results in inferiority complexes in individuals especially students falling in age bracket of 18-23 years. Lack of interpersonal communication skills have definitely affected the psychology of individuals and have contributed in increase of inferiority complexes in users of social networking sites.

**Q2. Do you think frequent or too much use of social media leads to psychological distress (depression/anxiety) among youngsters Or is it vise-a-versa?**

**Answer:** Definitely, too much use of social media leads to psychological distress (depression/anxiety) among youngsters. The main reason being the amount of time wasted in social media leads to neglecting many other priorities of life, leading to piling up of work. This further leads to frustration and irritable behaviour among them. Sleep deprivation is another very important negative consequence of excessive time given to social media which might lead to anxiety or depression.

**Q3. We often come across ‘suicidal news stories’ getting viral on social media. How do you think such coverage impacts the mind of youngsters?**

**Answer:** Such type of viral stories published on social media every now and then are quite disturbing. They impact the psych of any individual reading or watching it. They hammer the most to the vulnerable lot which is youngsters. They get motivation and ideas to commit suicide. The content on social media can be accessed by anyone from anywhere, which I think is the main drawback of it. The content needs to be regulated.

**Q4. According to you, can these suicidal coverage/stories catalyse suicidal ideation among the youth?**

**Answer:** Yes, it definitely can! Especially in youth who is prone to it due to weak personality traits and emotional strength. The coverage of such suicidal stories act as catalyser to suicidal ideations among the youth who is reeling under some kind of social, emotional or financial stress.

**Q5. Have you ever come across any such case where a student complained of depression or anxiety and you found social media to be the culprit?**

**Answer:** Every day we come across cases where we find that excessive use of social media behind the psychological and behavioural problems in youth. Peer pressure to show off things on social networking profiles is a leading factor causing psychological depression and anxiety among the youth. Their lack of maturity in handling social media use is a difficult problem that needs to be addressed by the parents or guardians, who play an important part in managing and convincing their ward what to see and what not to see.

**Expert 2: Neha Anand, psychiatrist and counsellor, BBAU, Lucknow (U.P.)**

**Q1. How do you think use of social media impacts the interpersonal (face-to-face) communication skills of youngsters (For example, people use social media to vent out their anger/frustration etc.)?**

**Answer:** The youth today has become very comfortable in the virtual world of online media. This is because resilience in youth is very less these days. If we go back to two decades, we see that people used to live in joint families. Since at that time people were less exposed to mobile and television, people used to meet and chat with each other. So one-to-one communication used to happen. However people those who are introvert and have submissive personality are not comfortable with one-to-one interaction, so now with the advancement of technology such people find themselves comfortable in virtual world where they can communicate without actually disclosing their identity of facing physical being.

Anonymous groups and communities have taken place where people can vent out their anger and frustration without revealing their identity. This lead to a new defence mechanism among human beings. Youngsters those who are more vulnerable to emotional break down because of their family background or some other reason, they have found a way to say their mind through these social media platforms. Youth today is more vulnerable because of various socio-economic factors, family set ups and lack of emotional backup. So, they tend to find out emotional support through online media. The meaning of friendship has changed with time. Social media is an easy way

to make friends. You just have to type name, search for a person and make friends which is otherwise difficult in face-to-face communication.

**Q2. Do you think frequent or too much use of social media leads to psychological distress (depression/anxiety) among youngsters Or is it vise-a-versa?**

**Answer:** Usage is in terms of resolutions and pixels that weaken your neuro connections. Whenever we use too much social media it tends to damage your attention and concentration. The main reason behind psychological distress among youth using social media is ‘comparison’. On social media, no one portray their negative image, we all try to make our positive image in terms of materialistic or emotional dimensions on social networking sites. Looking at others’ profiles lead to dissatisfaction and lead to depression and anxiety. Comparison is the biggest reason behind this. The number of likes and comments a person get on their post, and also the number of friends a person has have become a measure of his/her likability. These factors precipitate psychological distress among the youth.

**Q3. We often come across ‘suicidal news stories’ getting viral on social media. How do you think such coverage impacts the mind of youngsters?**

**Answer:** The coverage of ‘suicidal news stories’ getting viral on social media might catalyse suicidal ideation among youth, provided the person is not having any coping mechanism or some kind of personal problem. There are two type of people, one- who know they are having problems and know how to cope up with that and the second- are ones who know they have problem but don’t know how to cope up with it. So the

moment they read such kind of stories and they already have suicidal ideations, they are more likely to commit suicide. Because now they know what are the procedure and how they can go about it. The viral stories that are being posted on social media might play a pivotal role in adding the fuel to the fire. When such vulnerable lot go through those stories they think that they are not the only person feeling so low so may be committing suicide is the ultimate resort that other people are going for it.

**Q4. According to you, can these suicidal coverage/stories catalyse suicidal ideation among the youth?**

**Answer:** Suicidal ideations has lot of reasons, which include the vulnerability of an individual and his/her coping mechanism. The person who is feeling low for sometime, and they are watching some movie or listening to some bluemoon song or come across such stories, so they will start relating that with themselves. People with clinical depression are at high risk! India and China are at the top in terms of suicide cases. The condition of mental health in our country is at devastating stage, and that is because people have stopped talking to each other. Communication is the key!

Students without emotional backup, parent support or lacking in coping mechanism are the once who are more trapped. Acceptance to each individual is important.

**Q5. Have you ever come across any such case where a student complained of depression or anxiety and you found social media to be the culprit?**

**Answer:** Yes, everyday. There are so many such cases I deal to. We do not disclose names or identity, but let me tell you people from all age group are facing social

media depression because of comparisons. Mostly youth is under a lot of pressure because of parents' expectation, social media comparison etc. For them failure is a big deal. Parents and guardians play a very important role in keeping a check on their ward, and accepting their child the way they are. Parents play an important role in making their child vulnerable to such ideations.

**Expert 3: Dr. Ashutosh Singh, practicing counsellor, Private Hospital, Kanpur (U.P.)**

**Q1. How do you think use of social media impacts the interpersonal (face-to-face) communication skills of youngsters (For example, people use social media to vent out their anger/frustration etc.)?**

**Answer:** Social media has immense impact over youngsters, it has led to create a small niche of their own with minimal and reduced interaction with surroundings. Social media has caused over load of information which has both negative and positive impact depends on what is perceived by people. The information is many a time misleading. That unnecessarily creates stress among the users. Many times this may also cause communal, political, social drift in Society. Other side, it has led to easy availability of information related to any subject and issue and consequently easy to decision making in day to day life. It seems that social media has replaced face-to-face interactions. Earlier when people used to make friends or even rivals in real world, today they do it all on social networking sites.

It is a fact that what an individual can't talk face-to-face, they do it online on their social networking site's profile page. There are two faces of each individual now, one is offline and the other is online.

**Q2. Do you think frequent or too much use of social media leads to psychological distress (depression/anxiety) among youngsters Or is it vice-a-versa?**

**Answer:** Yes, frequent or too much use of social media leads to psychological distress (depression/anxiety) among youngsters. It is a fact that information overload on the internet many a times lead to anxiety and depression. Youth is the most vulnerable lot among all age groups. It has been observed that patient searching about his disease gets to read a lot about symptoms, differential diagnosis, treatment and prognosis which may not have all applicability on him/her but by merely reading all those things they get to feel anxious.

However, it has been seen that it is other way round as well. People diagnosed with clinical depression tend to crave for acceptance in society, for which they turn over to social media. There they find themselves at ease of making friends and being accepted by the virtual world as they do not have to reveal their real identity.

**Q3. We often come across 'suicidal news stories' getting viral on social media. How do you think such coverage impacts the mind of youngsters?**

**Answer:** Viral suicidal stories on the social media throw many possible ways of suicide. Patient in acute depression phase gets an easy access to the techniques, methods and process to commit suicide. They feel motivated after reading such stories and they tend to find similarity between themselves and the person who has already

committed suicide. They start thinking that committing suicide is an easy way round to get rid of all what they are not happy in their lives. The viral stories give them ideas and boosts they to easily fall prey to the mishap.

**Q4. According to you, can these suicidal coverage/stories catalyse suicidal ideation among the youth?**

**Answer:** Well, it depends on the presentation of the suicidal coverage. If the story talks about the reason behind the suicide or what triggered it, it might give suicidal ideations to the vulnerable person. however, if the suicidal story focuses on the ill-effects and mental harassment of near and dear post the mishap took place, it may give hard click to one before trying to take similar step. So we can say that yes, sympathizing suicidal attempt may catalyze suicide ideations among the vulnerable.

It is the responsibility of each of us to check what is being posted on the internet. Also, one has to be conscious about what he/she is reading on the net. Not every information on the social media is worth reading.

**Q5. Have you ever come across any such case where a student complained of depression or anxiety and you found social media to be the culprit?**

**Answer:** Many! Infact, such cases have increased many folds in last 1-2years with people falling under the age bracket of 12-30 years. Unmarried individuals, especially females are the most vulnerable lot. Social pressure, peer pressure and lack of family support is the reason behind why such people take over to social media to feel

accepted and happy which slowly make them feel lonely and unhappy, leading to depression and anxiety among them.

#### **Expert 4: Dr. Renu Kapoor, M.A and D.Lit in psychology**

**Q1. How do you think use of social media impacts the interpersonal (face-to-face) communication skills of youngsters (For example, people use social media to vent out their anger/frustration etc.)?**

**Answer:** When a person talks face-to-face he/she keeps in mind the behaviour norms and physical barriers. We generally don't talk rudely while communicating interpersonally with a person, or do not use bad words. However, when a person express himself on social media, they tend to use foul language, show aggression and kind of ignore or social norms. The consequences of taking of over to social media is that people have lost patience and have become intolerance. Which is not so in case of face-to-face interaction.

**Q2. Do you think frequent or too much use of social media leads to psychological distress (depression/anxiety) among youngsters Or is it vise-a-versa?**

**Answer:** Yes, use of social media has a lot of psychological impact among youngsters. It is the both ways. When a person is in depression or is anxious then they tend to find their way out on social media. In most cases it is seen that people who are

not contented mentally, tend to come under a lot of pressure seeing other's achievement, materialistic things etc. They reel under peer pressure.

**Q3. We often come across 'suicidal news stories' getting viral on social media. How do you think such coverage impacts the mind of youngsters?**

**Answer:** Usually, coverage of suicidal news stories give ideas to people who are most vulnerable to suicides. Even it has been seen that people before committing suicide leave a suicide note or picture on their Facebook profile which is very devastating not only for the family of the deceased but also for civilians. It is very painful. Because of social media the news spreads very fast unlike before when people used to leave a suicide note. These viral suicide stories creates a psychological impact on one's mind.

**Q4. According to you, can these suicidal coverage/stories catalyse suicidal ideation among the youth?**

**Answer:** Instagram, Facebook and other video chatting apps are giving rise to cases of mental harassment among youth, specially young girls. They share their pictures with their lover, who sometimes blackmail them taking advantage of those pictures. This creates lot of pressure among the youngsters. Some feel deeply harassed and even commit suicide. So this is one way social media plays role in catalysing suicide among youngsters.

Other thing is that reading suicide stories on internet gives ideas to the vulnerable individuals who already are having suicidal ideation in the back of their mind. This is a disadvantage of fast news available on social media.

**Q5. Have you ever come across any such case where a student complained of depression or anxiety and you found social media to be the culprit?**

**Answer:** We across such cases every day. We see that parents give their teenage kids smartphones and once they become addicted to the apps and virtual world, parents worry and bring their kids to counsellor. So there is a need that parents keep a check on their kids.

Earlier children used to share emotions among their cousins. They knew the importance of sharing which is with advancement in reach of social media is lacking among new kids. Social media is like a 'dark hole', to which if one gets addicted fall prey of it.

### **Expert 5: Dr. Mahesh Goel, Psychologist**

**Q1. How do you think use of social media impacts the interpersonal (face-to-face) communication skills of youngsters (For example, people use social media to vent out their anger/frustration etc.)?**

**Answer:** The face-to-face communication which takes place between two or more individuals is an essential part of human development. Functional intelligence, social decision making and self- expression are all part of human development which is dependent on interpersonal communication. It is the most natural way of communication which occurs in every family, organisation or community. People converse among each other, sharing facts, feelings and ideas. However, over a period of time with invent of internet and then social media people have started to confine themselves to the virtual world. This has impacted the interpersonal communication

skills of users to great extent. Since, youngsters are heavy users of social media it has been seen that they tend to be happy within themselves sharing their feelings on their social networking profile. They also vent out anger on it, instead of talking to their parents or friends about the problems directly face-to-face.

**Q2. Do you think frequent or too much use of social media leads to psychological distress (depression/anxiety) among youngsters Or is it vise-a-versa?**

**Answer:** Definitely! When you use social media for a long time you tend to enter a hallucinated world where you can speak of your choice and talk to people you like. But, reality is little harsh from the virtual world of social media. It has been seen that such over users of social media tend to feel anxious while facing the reality. This sometimes leads them to depression and even suicidal ideations. Youngsters and even school going teenagers have a feeling of loneliness these days. Unlike olden times, they don't share their feelings and emotions with their parents and sometimes end up taking their lives too. Also, if we come across patients who are introvert in nature and engage themselves in social media where they feel they get acceptance from their society. They sometimes create fake account, hide their identity, make a different profile and then make contacts with whom they can talk without even facing them. These also leads to the feeling of self depression and anxiety. So, it is both ways round.

**Q3. We often come across ‘suicidal news stories’ getting viral on social media. How do you think such coverage impacts the mind of youngsters?**

**Answer:** suicidal stories give ideas to people reading it who are emotionally weak and more vulnerable towards committing suicide. It has a similar impact like people watching crime serials. People get ideas from these serials to do crimes. In the same manner, coverage of suicidal on social media may influence people. Not just that we often see that people share such stories and make it viral and post their opinion about it on their social networking profile. News and stories spread at a fast pace on social media. It has a impact on the psychology of a person who is already emotionally weak. Therefore, one should be careful about what they post.

**Q4. According to you, can these suicidal coverage/stories catalyse suicidal ideation among the youth?**

**Answer:** Yes, it can. Since, as discussed above reading suicidal stories again and again tends to impact one’s psychology. It may catalyse suicidal ideation and acts of suicide of among those who are already depressed on facing anxiety issues in day to day life. People get ideas and motivation to commit suicide after reading such stories. There is a need to understand that reading suicide story on any platform be it newspaper, television or social media has a negative impact on a person’s mind. But, social media is of prime concern because any news spreads at a very fast pace on social media including social networking sites.

**Q5. Have you ever come across any such case where a student complained of depression or anxiety and you found social media to be the culprit?**

**Answer:** Yes, now a days a lot of parents visit us complaining about anxiety issues in their ward. Students pursuing higher studies and even those in school lack coping mechanism. This is because of too much use of smartphones and internet. Online virtual world cannot teach you how to cope with real life struggles. Therefore, one needs to learn to deal with both success and failure in the real world. It is the prime duty of parents to keep a check on their ward.

**Summery of the expert interview:**

All the five expert have shown that using social media impacts the interpersonal communication skills of youngsters. This is because it gives its users a platform where they can pick and chose their connections and talk freely with like-minded people sometimes even without disclosing their identity. Social networking sites have with time developed a tendency among youngsters to stay engrossed among themselves in the virtual environment rather than talking to their parents or pals face-to-face. People usually post best things about themselves, like edited pictures, holiday posts, about their achievements etc. which sometimes develops depressive tendencies in youngsters who are emotionally weak. They feel depressed and anxious after looking at other's posts. Not just this, too much information available on internet about a particular topic also makes a person anxious. However, some experts differ in their opinion saying that people already diagnosed with clinical depression turn over to social media for acceptance in society. They find social networking sites as a easy platform to express their thoughts.

Meanwhile, the experts unanimously agreed to the point that suicidal stories viral on social media catalyse suicidal ideation among youngsters, which is the most vulnerable lot among all age groups. They get ideas after reading such incident on social media. Youngsters who are already depressed feel motivated to commit suicide after reading such stories. Sometimes they tend to find similarity between themselves and the person who has already committed suicide. The news on social media spread very far. The suicide stories create a psychological impact on the mind of readers. This clearly indicates that social media is associated with suicidal ideation among youngsters. The experts suggested that parents should encourage their child to indulge more in face-to-face communication and share their feelings and emotions with them rather than engaging themselves in virtual world of social media. This will not only enhance communication among youngsters but will also help them keep psychological distress at bay. Also, the experts said that it is the responsibility of parents to keep an eye on their ward to what he/she is looking at social media.

## **Chapter 5**

### **Discussion and Conclusion**

#### **Overview**

*The conclusion is one of the most important chapters of any research. The conclusion intends to make the reader understand the crux of the research. It also makes the reader understand why the research matters to them. The conclusion is not just the summary of the research problem but also the synthesis of key points of any study.*

#### **5.1 Discussion and Conclusion**

The study that aimed at finding out the association between use of social media and suicidal ideations among students pursuing higher education, found that the coverage of ‘suicidal news stories’ getting viral on social media tend to catalyse suicidal ideation among the youngsters. They motivate youngsters, who is the vulnerable group, and give ideas to proceed with committing suicide. They impact the psyche of any individual reading or watching it. They hammer the most to the vulnerable lot which is youngsters. People who lack emotional support from family or friends or don’t have a coping mechanism are vulnerable to such suicide stories. Youngsters already having such suicidal ideations on their mind are more likely to attempt suicide after reading such kind of stories on social media. Because now they know what are the procedure and how they can go about it. The viral stories that are being posted on social media might play a pivotal role in adding the fuel to the fire.

The footfall of people diagnosed with clinical depression in a psychiatric clinic is increasing day by day. It has been seen that unlike the past years when children used to play with their friends outside the house or used to share things among cousins, today they are more involved in their smartphones from quite an early age. By the time they reach teenage or become adolescent they have already become addicted to the virtual world of social media. They take their mobile phones to the bed, sleep with it and wake up with it. Their bonding with their parents, friends or other family members is decreasing with time. This results in less of emotional backing and lack of coping mechanism among them. Such youngsters are the most vulnerable lot, more prone to be affected by the viral suicide stories on social media. Therefore, there is a need that parents keep a check on their ward and try to build them emotionally strong right from the beginning so that they never feel alone and do not escape from reality, while searching for acceptance on social media.

The study found an association between the use of social media and psychological distress among the youngsters. Use of Social media has a significant impact on the psychology of youngsters. One of the main reasons being the amount of time spent on social media leads to neglecting many other priorities of life, resulting to piling up of work. This further leads to frustration and irritable behaviour among them. Sleep deprivation is another factor leading to psychological distress among them. Youngsters who access their social media accounts for more than 8 hours reflect higher average stress score. Also, another major reason behind psychological distress among youth using social media is ‘comparison’. There is an association between ‘no. of friends on social media’ and stress. Youngsters who have more than 1000 friends suffer more from stress. People generally portray their positive image on social media, no one portray their negative image. Everyone tries to make their

positive image in terms of materialistic or emotional dimensions on social networking sites. Looking at others' profiles lead to dissatisfaction. This further leads to depression and anxiety. This pomp and show on social media results in inferiority complexes in individuals especially students falling in age bracket of 18-23 years. People who read, like, comment on others' post and also post their updates on social networking site suffer from high level of stress. Also, youngsters who generally post about their mood status on their social networking profiles tend to more stressed than others. However, it is worth mentioning here that gender doesn't have any association with social media use or stress level.

The study also tried to analyse the impact of social media on interpersonal communication skills of youngsters. It suggests that social media is an important tool for students pursuing higher study to stay in contact with their peers and family members. It was found that though youngsters don't feel comfortable sharing their personal emotions on social media and would rather prefer it doing face-to-face with a person, they still take it over to vent out their grievances against someone/something. The study suggests that while social media helps one's ability to communicate through texting, it hampers the ability to talk face-to-face, thus hampering the interpersonal communication skills of youngsters. Interestingly, the study revealed that while youngsters often make an effort to spend time and solve conflicts with their peers face-to-face, they end up solving issues while talking to them on social media. Also, large number of respondents said that they sometimes text people who are in the same place as them rather than talking to them face-to-face. This result clearly indicates that youngsters today find it more convenient to converse online rather than doing it face-to-face.

Social media that has become an important medium for youngsters to stay connected with their friends or even to date tends to be associated with high levels of stress among the youngsters between ages 18-23 years. Students pursuing their higher studies and spending more than 8 hours a day on social networking were found to have high stress level. Also, users who frequently look into their mobiles for updates on their social media profiles irrespective of what work they are doing simultaneously showed high level of stress. College students having more than 800 friends and those who prefer chatting with their online friends (known or unknown both) were found to be more stressed. However, it remains unclear if frequent use of social media results in high stress or people already having high level of stress because of some other reasons use social media more. With rise in penetration of internet in the country, increasing suicide rate among students 15-29 years globally and one student committing suicide every one hour in the country. This study suggests that there is some association between use of social media and psychological distress and hence suicidal ideations.

The results of this study are helpful to spread awareness among people especially parents and policy makers, about the adverse psychological effects of using too much social media. The results are useful for the Indian government and the non-governmental organisations to frame policies related to the use of internet. Also, the study identifies a need for preventive measures regarding the ill-effects of social media on the psyche of the students pursuing higher education, which is a vulnerable section of society. The policy makers may establish counselling centres and employ counsellors to help the youth already adversely affected by the excessive use of social media.

## **5.2 Limitation and Suggestions for Further Research**

The study found that there is an association between social media and suicidal ideation among the youngsters. Also, an association between use of social networking sites and psychological distress was found. However, it remains unclear whether too much use of social networking sites leads to psychological distress among youngsters or if youngsters who are already psychologically distressed, or undergoing depression and anxiety issues tend to use too much of social networking sites. Therefore, it is suggested that further study may be conducted to bring more clarity about the association and cause and effect relationship between the two. Similarly, the study found that use of social media impacts the interpersonal skills of youngsters. But, again it remains unclear if vice-a-versa is true or not. Therefore, further research is recommended in this regard.

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# Appendix

## Use of Social Media and Psychological Distress among Indian Youth

This survey is purely for academic purpose!

The survey intends to find out the relation between use of social networking sites and psychological distress among youngsters pursuing higher studies. Below are series of questions about your use of social media. If you chose to fill the survey, all the information you supply will be held in the strictest confidence. No individual will be identified and all responses will be reported in a summarized format.

**Name (Optional):**

**Gender:**

**Age:**

**Name of the Institution:**

**Relationship Status:**                      Single                      Committed  
relationship

**Date:**

### Section A

**Tick against the appropriate option**

1.) Do you have a profile on Social Networking Sites?  
Yes                      No

2.) On which social platform do you have the profile? (you can tick on multiple options)  
Facebook                      Twitter                      Instagram

3.) What is your medium of accessing Internet?

Mobile phones                      Computer                      Both  
4.) Where do you access Social Networking Sites most often?  
Home   Education Institute   Both   Other (Please mention)\_\_\_\_\_

5.) When do you generally access your social networks?  
Morning                      Afternoon                      Evening                      Night  
Late Night

6.) Do you access your social profiles:

Just after getting out of bed in morning  
Just before sleeping at night  
During travelling  
While having meals

7.) How many hours do you spend on social networks during the 24hour time span (approx.)?

0-2hours  
2-4hours  
5-8hours  
More than 8hours

6.) How often do you check your social media profile(s) in one day?

Every half-an-hour  
Every one hour  
At an interval of two hours  
Once a day  
Twice/thrice a day  
Not daily

7.) What is your motive (primary purpose) behind using the Social Networking Sites?

Make new connections  
Stay in touch with friends  
Gather information

Dating

8.) How many friends do you have/follow on your social media account(s) (approx.)?

Less than 300      300-500      500-700      800-1000  
More than 1000

9.) How many friends/followers in your social networking account (s) are the once you have never met personally?

25%      50%      75%      Almost all  
None

10.) Do you prefer chatting with random people on these Social Networking Sites?

Mostly      Sometimes      Never (I chat with only known  
friends)  
I don't chat online

11.) What are your common social networking activities?

Reading others' posts  
Liking other people's content  
Commenting on their posts  
Posting on own wall  
All

12.) What do you generally post about?

Own pictures  
Mood status  
Achievements  
Share knowledgeable content in public interest

## Section B

**Mark your answer on the scale of 0-4**

**0=Never      1=Almost never      2=Sometimes   3=Fairly Often  
4=Very Often**

1. In the last 30days, how often have you been upset because of something that happened unexpectedly?  
0                      1                      2                      3                      4
  
2. In the last 30days, how often have you felt that you were unable to control the important things in your life?  
0                      1                      2                      3                      4
  
3. In the last 30days, how often have you felt nervous and “stressed”?  
0                      1                      2                      3                      4
  
4. In the last 30days, how often have you felt confident about your ability to handle any personal problems?  
0                      1                      2                      3                      4
  
5. In the last 30days, how often have you felt that things were going your way?  
0                      1                      2                      3                      4
  
6. In the last 30days, how often have you found that you could not cope with all the things that you had to do?  
0                      1                      2                      3                      4
  
7. In the last 30days, how often have you been able to control irritations in your life?  
0                      1                      2                      3                      4

8. In the last 30days, how often have you felt that you were on top of things?

0      1                  2                  3                  4

9. In the last 30days, how often have you been angered because of things that were outside of your control?

0      1                  2                  3                  4

10. In the last 30days, how often have you felt difficulties were piling up so high that you could not overcome them?

0                  1                  2                  3                  4

Thankyou for your time to complete this survey!

## **Impact of Social Media on Interpersonal Communication Skills in Students Pursuing Higher Studies**

This is an 'Online Survey' that asks for no identifying information.

The purpose of this study is to see if there is an impact of Social Media (Facebook and Twitter) on interpersonal skills in students pursuing higher studies.

**Gender:**            Male            Female            Transgender

**Academic Course Pursuing:**    Engineering            Medical            Management  
Humanities/Social Science            Others

**Name of the Institution (College/ University):**

**Please answer the following questions and select only one response:**

1. Do you have a profile on Facebook/Twitter ?

Facebook            Twitter            Both

2. When do you visit Facebook/Twitter?

Daily  
Weekly  
Fortnightly  
Monthly

3. Where do you generally access social media sites?

Personal mobile  
Institutional computer  
Personal computer/ Laptop  
Both mobile and computer/laptop

4. How much time do you spend on Facebook/ Twitter in general?(Please answer in \_\_\_\_\_ hours \_\_\_\_\_mins in the space provided)

5. On an average how much time do you specifically spend texting on Facebook/Twitter per day? (Please answer in \_\_\_\_ hours \_\_\_\_ mins in the space provided)

6. How much time do you spend on face-to-face social interaction? (Please answer in \_\_ hours \_\_ min in the space provided)

7. What time do you prefer to access social media?

Morning

Afternoon

Evening

Late night

8. Do you like to share personal emotions in the form of posts on social media?

Yes

No

9. Which platform makes you more comfortable for sharing ideas or emotions?

Social Media

Offline face-to-face interaction

10. Do you find it more convenient to share feelings/emotions on social media (online) rather than discussing them face-to-face with your peers or family?

Yes

No

11. Have you ever used social media as a platform to indirectly vent out your personal grievance?

Yes

No

12. I prefer to be in contact with others by:

Texting on phone  
(messages/WhatsApp) Facebook  
Talking personally (Face-to-  
Face)  
Talking over phone  
Through Email

13. I prefer to let someone know I'm upset by:

Sending them a text message  
Talking over phone  
Posting a status on  
Facebook/Twitter Talking in person  
(Face-to-Face)  
Sending an email

**Please read each statement and mark the number that most applies to you using the following scale:**

1- Strongly Agree 2-Agree 3-Neutral/Can't say 4-Disagree 5-Strongly Disagree

14. I rely mostly on social media to stay in touch with people:

1 2 3 4 5

15. I've improved my ability to communicate through texting on social media:

1 2 3 4 5

16. I feel socially aloof because of social networking sites (Facebook, Twitter):

1 2 3 4 5

17. Relying too much on social media tend to hamper one's ability to talk Face-to-Face:

1      2      3      4      5

18. People cannot effectively solve problems using social media:

1      2      3      4      5

**Please read each statement and mark the number that most applies to you using the following scale: -**

1-Always      2-Very frequently      3-Often      4- Sometimes      5-Never

19. I generally make effort to spend time with friends face-to-face:

1      2      3      4      5

20. I prefer to solve problems with friends face-to-face:

1      2      3      4      5

21. I text people who are in the same place as me rather than talking to them directly:

1      2      3      4      5

22. I solve problems with my peers while talking to them on social media:

1      2      3      4      5

23. Social networking sites have made a positive impact on society:

1      2      3      4      5

24. Social networking sites have made a positive impact on me:

1      2      3      4      5

**Thankyou very much for your time and participating in this survey!**