



Use of social media and its impact

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Abstract

The main purpose of this study is to explore the use pattern of social media and assess whether social media harms the users' behavior. Further study will evaluate whether users spend more time on social media to avoid the loneliness feeling or kill their free time. Similarly, the study tried to associate uses of social media with emerging concepts in social media "stalking". With the sample size of 199 respondents and applying linear regression test on collected data we found that there is negative impact of excess use of social media on the users' behavior, like depression, insomnia, etc. Also applying the chi-square test we found that there is a statistically significant association between the use of social media and loneliness. The study also finds that there is a statistically significant association between the use of social media and stalking habits and people who use social media for stalking and follow their stalker. The researcher concluded that people use social media to avoid loneliness which resulted in addiction and changed behavior.

Keyword: Social Media, Behaviour, Impact, Loneliness, Stalking,

Introduction:

The social networking journey started in 1997 which was eventually expanded by LinkedIn, Facebook, YouTube, and many more (Aharony, 2012). Today people stay connected with the use of the virtual world by sharing photos text and video content. Social media have changed the flora of interaction and association among individuals and organizations (Veletsianos and Kimmons, 2013).

"Social media isn't a utility. It's not like power or water where all people care about is whether it works. Young people care about what using one platform or another says about them." –Jonah Berger (Fardouly and Vartanian, 2015). Today people stay connected with the use of the virtual world by sharing photos text and video content. College students are using advanced technology as compared to any other age group. Today Social media is used to share or exchange information and ideas in virtual communities (Kaplan and Haenlein, 2010). Further social media is also used to build an ideological foundation that allows the exchange of user-generated content (Kietzmann, Hermkens, McCarthy and

Silvestre, 2011). Due to the exchange process platform, users can do substantial and pervasive changes between organizations, communities (Aharony, 2012). Studies by Reilly (2016), Skeggs & Yuill (2016), Kolan and Dzandza (2018) suggest that the use of social media has a significant role in empowering people and use social media for creating value in public but cautious on the addiction of use of social media.

Table1: Statistics of use of social media

Social Media Age	18-29	30-49	50-65	65+	monthly active users	Male user	Female users
Face book	86%	77%	51%	34%	2.45+ billion	46%	54%
YouTube	89%	71%	61%	23%	1.80 billion	51%	49%
Instagram	67%	47%	23%	8%	1 billion	49%	51%
Twitter	38%	26%	17%	7%	330 million	50%	50%
LinkedIn	67%	53%	40%	10%	300 million	57%	43%

Source: (statusbrew, 2018; pewresearch, 2018)

Social media is associated with decreased loneliness and increased happiness as lonely people need someone for communication (Pittman, 2015). Thus, loneliness enforce individual to engage them on a social network as many options of time engagement is available to kill their time, gradually they may engage themselves more than looked-for time. Excess time engagement on social media in loneliness may cause addiction this study will confirm this. Alone with this, many times popup consumes more time of the user for no reason does social media user is behind popup without any specific reason. Many times people change their behavior in their day-to-day life at a personal and professional level rather they attempt similar behavior after eagle-eyed on social media. The compartment may be a negative or positive impression on an individual.

“Money is not everything but we can’t do anything without money” quote by Ratan Tata similarly social media is everything but we can’t live without social media. Now a day's use social media addiction is a new real phenomenon. Uses of digital devices for various purposes which harder to escape the internet due to which people spend their time on social media. Such excess use of social media causes many physical and mental negative impacts on the user like depression, FOMO, insomnia, etc (Pewresearch, 2018). The use of Facebook is also having enough negative impact which causes the loss of academic grades (Junco and Cotton, 2012). He found a significant relationship between academic performance and the use of social media by students. Further Academic performance also depends on how many times users access social media while studying if the user accesses it multiple times during the study period it causes more academic loss (Junco, 2011). The use of social media also because incorrect self-diagnosis and Potential breach of privacy along with spending long may cause various changes in the behavior of the user (Akram and Kumar, 2017). There is the Fear of Missing out (FOMO) phenomenon on social media, which is one of the most extensive negative effects of social media Grohol (2018). Constantly checking messages on Social Media increases the incidents of anxiety

and depression as excess use of social media may affect the sleeping quality (Przybylski, Murayama, DeHaan, and Gladwell, 2013).

This is high time to understand the negative impacts due to excessive use of social media. Once users became addicted then it might have catastrophic effects on their personal life and health mentally and physically (Grabe, Ward, and Hyde, 2008).

Thus the study will examine the impact of individual behaviors when they reach the addiction level of usages of social media. The study will attempt to find out the root cause of craving of use of social media by various age group people alone with that it will find out what kinds of craving at what age with what profession. This research will find the use of social media age-wise by using the multistage cluster sample method. Very important this study will find out the driving force of excess use of social media and its impression on users and provide suitable guidelines to avoid the gravity of addiction. Does loneliness is a major driving force alone with popup and FOMO (fear of missing) or if I want to prove myself I must be more active than others on social media.

Today NGOs are arranging workshops for INTERNET DETOX to avoid excess use of the internet or social media after investigation study will provide suitable guidelines (social media calendar) to avoid the gravity of addiction. The study will confirm the major cause of social media addiction and provide a suitable calendar for use of social media.

Literature Review :

Literature review (Kaplan and Haenlein, 2010; Gordon, 2008; Subrahmanya, 2008; Nicole, 2007; Lee, 2009; Akram and Kumar, 2017) summarizes the positive impact of social media by pointing towards the benefit of social media for all segments of users. Gordon (2008) enumerated the use of social media for five specific purposes like meeting people, seeking information, distraction, coping, and e-mails. Further, Subrahmanya (2008) found that adolescents use the Internet as a communication tool to strengthen relationships, which is also verified by Nicole (2007). SNS helps in developing communication skills, business ideas, which will help teens in their future as confirmed by Lee (2009).

Literature review (Reilly, 2016; Skeggs & Yuill, 2016; Akram and Kumar, 2017; Sormanen and Dutton, 2015) concluded that social media has a significant role to play in empowering and branding people. Hussain et al (2017) find that SNS is used for personal benefit whereas Briones et al (2011) claim that social media is effective and necessary for practicing public relations. Social media is the only fastest communication media along with media coverage and also has a quick feedback system (Cho et al, 2014) and helpful in political agenda. Nicholson (2011) finds that social networking is a great forum for discussing mutual topics of interest for occupying new knowledge, it enhances their knowledge bank and improves productivity at the workplace. Similarly, Pappas (2013) suggested that social media is an educational tool for both students and teachers. A concept like e-learning has changed the education process which is benefitted for both parties. Manjunatha (2013) concluded that today digital communication is an extension of traditional communication methods as social networking sites as often a much quicker and more convenient way to interact further they are aware of risk.

Christofferson (2016) weighed both risks and benefits of social media and cautious of the impact from emotional and academic perspectives. Alongside the benefits, social media may cause some behavioral issues (Kolan and Dzandza, 2018). Mekinc et al (2013) observed that more use of the internet like Facebook profiles, publication of personal data are an expression of signs of internet addiction among users. It may cause addiction to the

internet. Further, Kaplan and Haenlein (2010) showed that Generation Y's obsession with social media applications like Facebook, MySpace, Twitter, and LinkedIn has impacted their relationships. Literature review (Junco, 2011; Mensah and Nizam, 2016; Junco and Cotton, 2012; Abdulahi et al, 2014; Rosen et al, 2013; Paul et al, 2012) summarizes the impact of social media on academic performance and found a negative impact on academic performance. Mensah and Nizam (2016) found that time parameters play important role in Malaysian students' academic performance. Similarly, a very positive relationship between multiple parameters of Facebook use and academic performance is observed by Junco and Cotton (2012) except for the time parameter which is proved by Paul et al (2012). Thomas (2011) explained in his article that addiction to Internet chatting may damage health physically and mentally, which is also observed by Abdulahi et al (2014). Further, Rosen et al (2013) observed that many times use of social media-induced task-switching while studying but also concluded that Gen Y is capable to manage to do their work and also interact with the virtual environment very effectively.

Literature review (Charlton and Danforth, 2007; Fenichel, 2009; Balakrishanan and Raj, 2012) discovered that excess use of social media exhibits some addictive symptoms, such as salience in behavior (both cognitive and behavioral), loss of control, withdrawal, relapse, and reinstatement, which match with Brown's Addiction Behaviour Framework. The study by Kandell (1998) stated that excessive time spent on social media caused behavioral problems due to internet addiction. However, Young (1998) strongly argued that the Internet itself is not addictive, rather highly interactive applications are addictive and showed that the overuse of the internet brings health problems known as a mental disorder, which she named Pathological Internet Use – PIU. Griffiths (2000) added that the percentage of anxiety and its side effects by using computer networks for social interaction is increased very drastically. Cabral (2008) concluded that the brains of the younger generations are growing and developing differently due to the use of technology. Further Czincz (2009) argued that the rapid growth in technology is enabling youngsters to create their uniqueness and find social suitability. Bryant et al. (2006) supported the arguments of Czincz (2009) and Cabral (2008) and showed that SNS causes teen depression, self-mutilation, dysfunctional families, and promiscuity in today's youth than ever before. Thus, looking at the grave impact of social media on the users' behaviors first hypothesis is framed as follows.

H1: There is a negative impact of the use of social media on users' behaviors.

As revealed in the previous section, users relied on social media to avoid loneliness feeling or kill their free time (Pittman, 2015). Similarly, Yang (2016) showed that social media applications such as Instagram help in dropping loneliness and thus suggested healthy social media use for specific kinds of people and purpose for psychological well-being. Brinn (2015) suggested that the advancement in ICT technology has increased the speed of communication but it has not helped in maintain relations. Further, Singh et al. (2017) explored that the social media users are spending more time on meaningless activities to kill free time has impacted their daily life timetable. Kai and Chua (2015) confirmed that the students who are lonelier spend more time on social media as compare to non-lonely. People preferred social media to traditional face-to-face media to communicate and thus impacted their relationships.

Dibb and Foster (2020) demonstrated that Facebook users who reflect and compare their perceived superiors on Facebook are more likely to experience loneliness. Seabrook et al (2016) observed that positive interactions and activities on social media were related to lower levels of depression and anxiety, whereas negative interactions and social comparisons were related to higher levels of depression and anxiety. Thus social media use is related to less loneliness and greater self-esteem and life satisfaction are in sync with Yang (2016). Today to kill free time people always relied on various social media sites. Thus is found a significant relationship between the use of social media and kill free time to reduce loneliness. Therefore the second hypothesis is framed as:

H2: There is a significant relationship between the use of social media and kill freetime of an individual.

A literature review by Antonini et al, 2019; Dreßing et al, 2014; Pietkiewicz and Treder, 2018; Rozatkar and Gupta, 2019; and Shimizu, 2013; Anderson, 2010; identified that stalking habits consume more time on social media and cause for addiction of social media. The term "stalking" is a type of reading activity emerging from the unique features of social networks aimed to gain insight on a subject as explained by Shimizu (2013). Rozatkar and Gupta (2019) explained that social media users follow particular stalkers and engaged themselves to follow the activities of the stalker. Anderson (2010) proved that advancement in technology made social media access and use easier hence many users engage more time on social media and dostalking. Such staking habit causes users to imitate stalkers' behavior and adopt new life patterns. Dreßing et al (2014) stressed that more stalking attracts more followers and holds users on social media for no reason. Sometimes stalker poses on behalf of a real person and does the commutation which influences more cyber-crimes. Cyber-stalking is popular among youngsters as they want to explore the activities of their peers and thus they spend a lot of time on social media for doing such non-productive activity is pointed out by Pietkiewicz and Treder, (2018). Finally Antonini et al, 2019 cautioned that there is a need for increased awareness in regulating online social platforms, such as WhatsApp, Instagram, Facebook, and Twitter, to identify incidents of cyberstalking and to provide greater safety for potential/actual targets online. Thus there is a strong relationship between the use of social media and stalking habits. Therefore the third hypothesis is framed as:

H3: There is a significant relationship between the use of social media and stalking habits.

Conceptual Model:

The conceptual model in Figure 1 is developed to assess the use pattern of social media and its impact. This model uses three social media applications namely Facebook, YouTube, and Instagram. A review from literature pointed out that social media is used for personal, professional or to kill free time. The observations from the Literature review by Charlton and Danforth (2007), Fenichel (2009), Young (1998), and Bryant et al. (2006) confirmed that excess use of social media has a negative impact on the users. Thus study proposes the first hypothesis that excess use of social media has a negative impact

on the users' behavior and this carving of social media causes behavioral issues like depression, Insomnia, and Mood Swing.

Figure 1: Conceptual Model

Concerning the Literature review by Kai and Chua (2015), Singh et al. (2017), and Seabrook et al (2016) it is confirmed that users spend more time on social media to kill free time or reduces loneliness feelings. The findings of Morahan- Martin, and Schumacher (2003) confirmed that people spend more time on social media to reduce the emotional gap of loneliness so there is no specific reason to use social media. Thus study proposes the second hypothesis that there is a significant relationship between the use of social media and loneliness. The use of social media to kill free time or dropping loneliness feeling give rise to stalking habits due to jealousy and feelings of fear of missing on social media confirmed by Dreßing et al (2014), Pietkiewicz and Treder, (2018) and Anderson (2010). Thus the study encourages proposing the third hypothesis that there is a significant relationship between uses of social media and stalking habits.

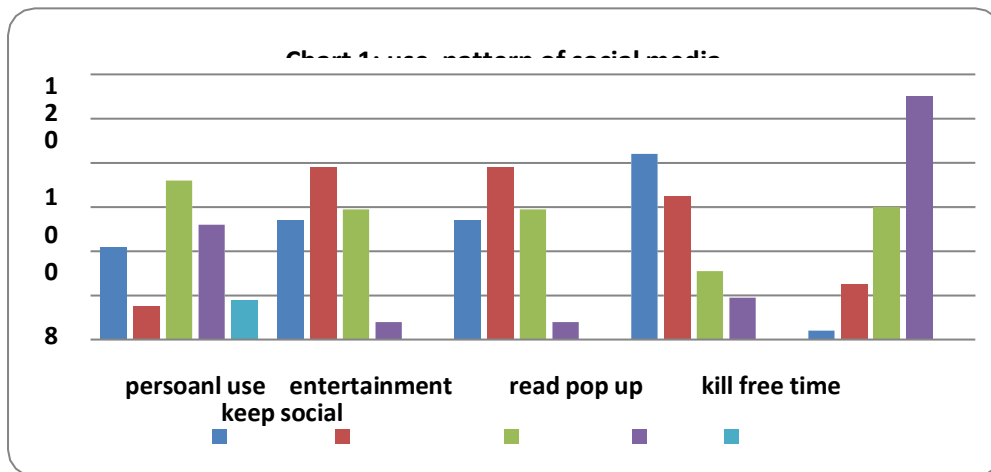
Research Method:

This is descriptive and exploratory research. The study mainly focused on understanding the use of social media and its impact on users. The study uses secondary data as a resource to find the various purposes people use of social media. The study uses primary data to understand whether there is a negative impact of social media on the users and explore the relationship between the use of social media and loneliness. Further study will discover the relationship between excessive use of social media and stalking habits. Thus, primary data is used to fulfillment of said objective and hypothesis.

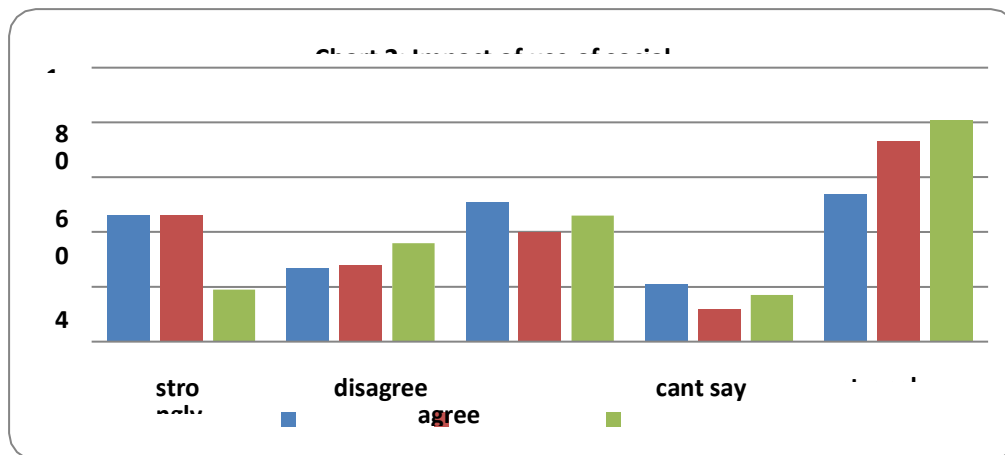
Study has use Questioner vie Google form for survey base primary data collection. The Sample method is simple random and convenience sampling techniques to collect the data Expected sample size was 250 actual data received 199 between age group 18 to 55. The collected analyze using excel version 12 and SPSS version 20. Test use: anova to compare between group an within group , Chi-Square Tests relationship between use of social media and stalking habits and other variables like loneliness regression impact was also check with the same. Received responses as age group between 20-25(data - 87) ,26-30(data -78) ,31-35(data-21) and 36- 45(data -13)

Data Analysis with interpretation:

People use social media for various reasons from data analysis study found that the Indian social media user wants to keep update themselves in the various surrounding area as from the total respondent 199 stated that they want updated information with them hence they invest more time on it in case the people who are free and want to kill their time such percentage found less, though many popups appear but only sometimes they look up at.



They also give equal priority to entertainment on social media by watching new videos information. Though there are many disadvantages of social media there are many advantages as well so if users use social media very wisely it may helpful for their personal growth. The use of pattern of social media indicates that respondents use social media for various purposes like personal use entertainment read popup kill free time and keep, the self-update about the social virtual world more 50% responded said they used always they use social media for entertainment and 84% stated to kill free time they use social media.



There are lots of negative impacts of using social media from their own experience and we tryto find out some of them from the total respondents. In the case of a mood swing, most of the respondents were strongly agree that they were having mood swing after excessive use of socialmedia more than 50% of respondents agreed they cause insomnia. In the study, more than 50% responded to face insomnia, and 73% of users go into depression due to the use of excess use

of social media further 81% faced issues like mood swings as well. User needs to be careful while using social media and take care of mental health and avoid excessive use of the social media.

Table 1: ANOVA^a Excess engagement on social media has an impact on userbehavior					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	16.402	3	5.467	7.094	.000 ^b
Residual	150.291	195	.771		
Total	166.693	198			
a. Dependent Variable: no of hrs spend on social media					
b. Predictors: (Constant), mood swing, insomnia, depression					

Table 2: Coefficients						
a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.132	.129		8.794	.000
	depression	.164	.077	.158	2.131	.034
	insomnia	.109	.036	.215	3.066	.002
	Mood swing	.045	.060	.054	.751	.454
a. Dependent Variable: no of hrs spend on social media						

In several studies, Mekinc et al (2013), Kaplan and Haenlein (2010), Thomas (2011), and many more stated that social media users spend more time on sites cause many side effects like depression than those who spent less time. Excess use of social media may trigger an array of negative emotions which go ahead with depression, insomnia, and mood swing. To prove this we use leaner regression where no of hours use on various social media is independent virile and depression insomnia and mood swing were dependent variables. Linear regression beta value for depression was 0.158 and insomnia it was 0.215 further for mood swing 0.060 which proves that spending more hours on social media has a negative impact. The Lancet study recorded those social media users who check Facebook late at night were more depressed. In the case of depression, the significant value is 0.034 and in the case of insomnia, the significant value is 0.002 which is less than the alpha value means excess uses of social media cause both. In the case of a mood swing, the significant value is 0.454 which is more than the alpha value means from total respondents it is concluded that mood swing may not be possible due to the use of excess use of social media. The regression t-value for dependent variables was 2.131 for depression, 3.066 for insomnia, and 0.751 for mood

swing it means there is a strong relationship between excessive use of social media and depression and mood swing as compare to insomnia.

Table 3: Chi-Square Tests relationship between use of social media and loneliness			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	36.909 ^a	9	.000
Likelihood Ratio	31.781	9	.000
Linear-by-Linear Association	18.645	1	.000
N of Valid Cases	199		
a. 6 cells (37.5%) have expected count less than 5. The minimum expected count is 1.24.			

Today's busy schedule didn't allow people to spend time together when others are busy and you have free time where to spend so people engage themselves on the internet on various social sites. From the respondent study, we concluded that people use social media when they are alone and want to kill their loneliness which gradually becomes a habit, and though other workinfants give priority to be on social media and spend more time on social media.

From the data analysis by using the chi-square test we found that the p-value is 0.000 which is less than the alpha value hence we can say there is a statistically significant association between the use of social media and loneliness.

The Pearson chi-square value is 36.909 and likelihood ratio is 31.781 along with linear by linear association indicate 18.645 clear stated that the people who are alone and want to kill their loneness are more on the virtual world. This significant relationship is found in all classes of age group users. The results are consistent with the study by Kai and Chua (2015) which stated that lonely students occupied themselves more on social media. He further concluded that lonely students use social media for the self-fulfillment of desired and treated it as an important way to stay connected with friends and family. The result of the study is also consistent with Morahan-Martin and Schumacher (2003) which stated that lonely students are frequently used social media as an emotional support system. Hence we confirm that there is a significant relationship between excessive use of social media and loneliness, with support of the previous study of Yee (2015) which concluded a strong association between loneliness and use of social media using t-test ($t = -8.126, p < .05$).

Now the third hypothesis argued that there is a relationship between the use of social media and stalking habits. It is acceptable to be stalking on the internet but frequent stalking habit is awful cause addiction and in some cases, it may lead to abnormal behavior. As a forensic psychiatrist, Brook Zitek says, stalking is much more about inducing fear and the overwhelming majority of stalkers are men (Davis, 2004).

Table 5: Chi-Square Tests relationship between use of social media and stalking habits			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	115.626	9	.000
Likelihood Ratio	81.565	9	.000
Linear-by-Linear Association	53.208	1	.000
N of Valid Cases	199		
a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .59.			

As per Tomaszek and Tucholska (2012) repetition of the same behavior again and again just as habit consumes time for no reason stalking habits are not good this may cause damage to a person. Today young generation always feels peer competition on social media and does cyber-stalking, keep more engagement to find out the current status of the stalker and peer as well observed by Shimizu (2013). More than 60% of people face a lot of legal issues as well. The study found that stalking habit is one of the major reasons in India people engages themselves on social media. From chi-square, we obtain a Pearson chi-square value of 115.626 and a likelihood ratio of 81.565. Further linear by linear association value was 53.208 which indicates that people hold screen time when that stalking someone. There is a significant relationship between the use of social media and stalking habits as the test result shows a significant value of 0.000 which is less than the p-value. Hence it is proved that both variables are significantly associated. It means people use social media for stalking and follow their stalkers. Stalking reasons might be any love revenge update but more stalks on social media have a negative impact on user behavior.

Concerning Kai and Chua (2015) findings, the students who are lonelier spend more time on social media as compare to non-lonely. The findings of Morahan- Martin, and Schumacher (2003) confirmed that people spend more time on social media to reduce the emotional gap of loneliness so there is no specific reason to use social media. In our study, the association between loneliness and the use of social media is confirmed as more than 55% of respondents stated that they use social media because they are alone or feel lonely. The review of literature on stalking habits also confirms that youngsters have a habit of stalking. The use of technology has lots of disadvantages and the stalking habit is one of them. Mani and Gaur, (2019) reasoned that the jealousy and feelings of fear of missing on social media caused stalker to follow other and their activities. They also find that there is no specific reason to use social media but more than 58% user confirms that stalking habit consumes more time of users on social media. Hence we conclude that more than 58% of users confirm staking habit and more time on using social media. Loid et al (2019) find that 49.63% of users spend additional time for no reason in anticipation of pop-up notifications. Such pop-up notifications always force the user to look at the screen for a long time for no reason. As discussed in the Literature review, social media is used for personal growth and business growth. Hussain et al (2017) find that social media is used for personal benefit whereas Briones et al (2011) claim that social media is effective and

necessary for practicing public relations. Similarly, Polańska (2014) stated that 44% of respondents use social media in business for marketing, brand awareness and 56% of respondents use it for personal growth to learn new skills. Craving or addiction to the use of social media has many negative impacts on their behavior such as depression, mood swings, and insomnia as discussed in the literature review of Bryant et al. (2006), Czincz (2009), and Cabral's (2008). From the multiple regression method, we concluded that excessive use of social media causes depression and mood swing as the sum of squares of regression was 16.402 and mean square value 5.467 along with f-value 7.094. The p-value is less than the alpha value hence there is a significant relationship between the use of social media and mood swings and depression as the beta value of depression is 0.158, insomnia 0.215, and mood swing 0.054 further t-values are 2.131, 3.033, and 0.751 respectively. Thus it is confirmed that people keep investing their time on social media like Facebook, YouTube, and Instagram, etc for a variety of reasons like personal, professional or to kill free time. It is also confirmed that excess use of social media has a negative impact on users' behavior. And a factor causing excess use of social media is stalking habits.

Conclusion:

The outcomes of this study observe many aspects associated with the usage of social media. The Digital era has changed the face of socialization. People use social media for personal as well professional purposes. Sometimes users face the negative impact of excessive use of social media as face-to-face socialization is outdated. The majority of the respondents used excess time spends on social media. This study tries to find that excessive use of social media has an impact on users' behavior like insomnia depression etc. Now a day people try to use detox of social media to avoid the extremely negative impact of the use of social media. Today generation rely on social networking site for knowledge and update them by communicating on the viral world. Further studies are needed to scrutinize additional issues of excessive use of a social network such as legal, ethical, and intellectual aspects.

Suggestion:

Today life without social media is no life that doesn't mean we should avoid face-to-face communication. There must be enough balance between both. The use of social media must be value-added in terms of information and knowledge. Many organization is doing detoxification of addiction of social media in case if you feel mood swing depression or insomnia need to approach such organization to avoid any big losses. Time management plays an important role when you use social media no one is supposed to engage more than 3 hrs per day on social media.

Future scope of the study :

The use of social media may have a positive or negative impact and utility but still, social media is used to gain commercial values and personal growth with economic benefit is possible. Therefore new research area will be on exploring the ways to annul the excessive use of social media to maximize on benefits.

Reference:

1. Abdulahi, A., Samadi, B., and Gharleghi, B. (2014). A Study on the Negative Effects of Social Networking Sites Such as Facebook among Asia Pacific University Scholars in Malaysia. *International Journal of Business and Social Science*, 5(10), 133-145.
2. Aharony, Noa. (2012). Facebook use in libraries: An exploratory analysis. *Aslib Proceedings*, 64(4), 358-372.
3. Ahlqvist, T., Bäck, A., Halonen, M., and Heinonen, S. (2008). Social media roadmaps: exploring the futures triggered by social media. VTT Research Notes 2454. Retrieved from <https://www.vttresearch.com/sites/default/files/pdf/tiedotteet/2008/T2454.pdf>
4. Akram, W., and Kumar, R. (2017). A Study on Positive and Negative Effects of Social Media on Society. *International Journal of Computer Sciences and Engineering*, 5(10), 351-354
5. Anderson, W. L. (2010). Cyber Stalking (Cyber Bullying) – Proof and Punishment. *Insightsto a Changing World Journal*, 12, 19.
6. Antonini, A., Mejia, G.G., and Lupi, L. (2019). All We Do is "Stalking": Studying New Forms of Reading in Social Networks. In *Proceedings of the 30th ACM Conference on Hypertext and Social Media (HT '19)*. Association for Computing Machinery, New York, NY, USA, 111–115.
7. Arquero, J. L., and Esteban, R., (2013). Using social network sites in Higher education: an experience in business studies. *Journal of Innovations in Education And Teaching International*, 50(3)238-24.
8. Balakrishanan, V., and Raj, R. (2012). Exploring the relationship between urbanized Malaysian youth and their mobile phones: A quantitative approach. *Telematics And Informatics*, 29(3), 263-272.
9. Briones, R. L., Kuch, B., Liu, B. F., and Jin, Y. (2011). Keeping up with the digital age: How the American Red Cross uses social media to build relationships. *Public Relations Review*, 37(1), 37–43.
10. Brinn, J., (2015). Are we killing time? Social Media and the Perception of Time during Leisure (Master Dissertation), London School of Economics, Retrieved from DOI:10.13140/RG.2.1.1805.4487
11. Bryant, J.A., Sanders-Jackson, A., and Smallwood, A. (2006). IMing, Text Messaging and Adolescent Social Networks. *Journal of Computer-Mediated Communication*, 577-592.
12. Cabral, J. (2011). Is Generation Y Addicted to Social Media?. *The Elon Journal of Undergraduate Research in Communications*, 2(1), 5-14
13. Charlton, J., and Danforth, I. (2007). Distinguishing addiction and high engagement in the context of online game playing. *Computers in Human Behaviour*, 23(3), 1531–15.
14. Cho, J. (2014). Will social media use reduce relative deprivation? Systematic analysis of social capital's mediating effects of connecting social media use with relative deprivation. *International Journal of Communication*, 8(1), 2811–2833.
15. Christofferson, J. P. (2016). How is Social Networking Sites Affecting Teen's Social and Emotional Development: A Systemic Review. Retrieved from Sophia, the St. Catherine University repository. website: https://sophia.stkate.edu/msw_papers/650

16. Czincz, J., and Hechanova, G. (2009). Internet Addiction: Debating the Diagnosis. *Journal of Technology in Human Services*, 27, 257-272, <http://dx.doi.org/10.1080/15228830903329815>
17. Davis, J.L. (2004, 29 July). The mind of a Stalker: Why Torment Someone?. *MedicineNet*, <https://www.medicinenet.com/script/main/art.asp?articlekey=50316>
18. Dibb, B. and Foster, M.,(2020). Loneliness and Facebook use: the role of social comparison and rumination, *Heliyon*,7(1): e05999, <https://doi.org/10.1016/j.heliyon.2021.e05999>.
19. Dreßing, H., Bailer, J., Anders, A., Wagner, H., Gallas, C. (2014). Cyberstalking in a large sample of social network users: prevalence, characteristics, and impact upon victims. *CyberPsychology, Behaviour and Social Networking*, 2 (17), 61-67.
20. Fardouly, J. and Vartanian, L., (2015). Negative Comparisons About One's Appearance Mediate the Relationship Between Facebook Usage and Body Image Concerns. *Body image*,12C, 82-88. [10.1016/j.bodyim.2014.10.004](https://doi.org/10.1016/j.bodyim.2014.10.004).
21. Fenichel, M. (2009). Facebook Addiction Disorder (FAD). <http://www.fenichel.com/facebook/>
22. Gordon, C., Juang, L., and Syed, M. (2007). Internet Use and Well-Being among College Students: Beyond Frequency of Use. *Journal of College Student Development*, 48(6), 674- 688. DOI: 10.1353/csd.2007.0065
23. Grabe, S., Ward, L. M., and Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134(3), 460-476.
24. Griffiths, M. (2000). Does Internet and Computer addiction exist? Some Case Study Evidence. *Cyber Psychology & Behavior*, 3(2), 211-218
25. Grohol, J. M. (2018, 8 July). FOMO Addiction: The Fear of Missing Out. *Psychcentral*. <https://psychcentral.com/blog/fomo-addiction-the-fear-of-missing-out/>
26. <https://knowledge.wharton.upenn.edu/article/impact-of-social-media/>
27. <https://statusbrew.com/insights/social-media-statistics/>
28. <https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/>
29. Hussain, M., Loan, F., and Yaseen, G. (2017). The use of social networking sites (SNS) by post-graduate students. *International Journal of Digital Library Services*, 7(1), 72-84.
30. Junco, R. (2011). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behaviour*, 28(1),187-198.
31. Junco, R., and Cotton, S. (2012). The relationship between multitasking and academic performance. *Computers & Education*, 59(4), 1-10.
32. Kai, Y., & Chua, B.S. (2015). Are lonely undergraduate students avoiding communicating in real life but vigorous in Facebook?. *International Journal of Humanities and Social Science*, 5(61):43-50.

33. Kandell, J. (1998). Internet addiction on campus: The vulnerability of college students. *Cyber Psychology & Behaviour*, 1(1), 11-17.
34. Kaplan, A.M. and Haenlein, M. (2010). Users of the world, unite! The Challenges and Opportunities of Social Media. *Business Horizons*, 53, 59-68.
35. Kietzmann, J. H., Hermkens, K., McCarthy, I. P., and Silvestre, B.S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54, 241-251.
36. Kolan, B.J., and Dzandza, P. E. (2018). Effect of Social Media on Academic Performance of Students in Ghanaian Universities: A Case Study of University of Ghana, Legon. *Library Philosophy and Practice (e-journal)*. 1637-1662.
37. Lawrence, L. (2009). Factors Associated with Internet Addiction among Adolescents. *Cyber Psychology & Behaviour*, 12(5), 551-555.
38. Lee, S.J. (2009). Online Communication and Adolescent Social Ties: Who benefits more from internet use?. *Journal of Computer-Mediated Communication*, 14(3), 509-531.
39. Loid, K., That, K., and Rozgonjuk, D. (2019). Do pop-up notifications regarding smartphone use decrease screen time, phone checking behavior, and self-reported problematic smartphone use? Evidence from a two-month experimental study. *Computers in Human Behavior*, 102, 22-30.
40. Mani, D.S., & Gaur, D.N. (2019). Understanding and predicting cyberstalking in social media: Integrating theoretical perspectives on shame, neutralization, self-control, rational choice, and social learning. *South Asian Law and Economics Review*. 4,88-142
41. Manjunatha S. (2013). The Usage of Social Networking sites Among the College Students in India. *International Research Journal of Social Sciences*, 2(5), 15-21
42. Mekinc, J., Smailbegović, T., and Kokić, A. (2013). Should we be concerned about children's use of the internet? – Pilot Study. *Innovative Issues And Approaches In Social Sciences*, 6(2), 6-20.
43. Mensah, S., and Nizam, I. (2016) "The impact of social media on students' academic performance- a case of Malaysia tertiary institution. *International Journal of Education, Learning and Training*, 1(1), 14-21.
44. Morahan-Martin, J., Schumacher, P. (2003). Loneliness and social uses of the Internet. *Computers in Human Behavior*, 19, 659-671.
45. Nicholson, S. (2011, April 27). Infographics: The history of online social networking. *SocialMediaToday*. <https://www.socialmediatoday.com/content/infographic-history-online-social-networking>
46. Nicole E., (2007). The benefits of Facebook "Fiends;" Social Capital and College Students' Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 12(4), 11143-1168.
47. Pappas, C., (2013). The role of social media in E-learning. Retrieved from <https://elearningindustry.com/the-role-of-social-media-in-elearning>
48. Paul, J., Baker, H., and Cochran, J. (2012). Effect of online social networking on student academic performance. *Computers in Human Behaviour*, 28(6), 2117-2127.
49. Pietkiewicz, M., and Treder, M. (2018). Cyberstalking in social media – Polish view. *Journal of Modern Science*, 38(3), 29-40.

50. Pittman, M. (2015). Creating, consuming, and connecting: Examining the relationship between social media engagement and loneliness. *The Journal of Social Media in Society*, 4(1), 66-98.
51. Polańska, K. (2014). Social media in modern business. *European Scientific Journal*, 1, 335-345.
52. Przybylski, A. K., Murayama, K., DeHaan, C.R., and Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841-1848.
53. Reilly, P. (2016). Tweeting for peace? Twitter and the Ardoyne parade dispute in Belfast, July 2014. *First Monday*, 21(11). <https://doi.org/10.5210/fm.v21i11.6996>
54. Rosen, L., Carrier, L., & Cheever, N. (2013). Facebook and texting made me do it: Media-induced task-switching while studying. *Computers in Human Behaviour*, 29(3), 948-958.
55. Rozatkar, A. R., and Gupta, N. (2019). The concept of "Stalking" and its relevance to the existing phenomena of the internet and social media. *Indian Journal of Social Psychiatry*, 35, 1-3.
56. Seabrook, E. M., Kern, M. L., & Rickard, N. S. (2016). Social Networking Sites, Depression, and Anxiety: A Systematic Review. *JMIR mental health*, 3(4), e50.
57. Shimizu, A. (2013). Recent Developments: Domestic Violence in the Digital Age: Towards the Creation of a Comprehensive Cyberstalking Statute. *Berkeley Journal of Gender, Law & Justice*, 28, 116-117.
58. Singh M.M., Amiri M., Sabbarwal S., (2017). Social Media Usage: Positive and Negative Effects on the LifeStyle of Indian Youth, *UCT Journal of Social Sciences and Humanities Research*, 5(4), 39-44.
59. Skeggs, B., and Yuill, S. (2016). Capital experimentation with person/a formation: how Facebook's monetization refigures the relationship between property, personhood, and protest. *Information, Communication & Society*, 19(3), 380-396.
60. Sormanen, N., and Dutton, W. H. (2015). The Role of Social Media in Societal Change: Cases in Finland of Fifth Estate Activity on Facebook. *Social Media + Society*, 1(2). <https://doi.org/10.1177/2056305115612782>
61. Subrahmanyam, K., and Greenfield, P. (2008). Online Communication and Adolescent Relationships. *The Future of Children*, 18(1), 119-146. doi:10.1353/foc.0.0006.
62. Thomas, D. (2011). Addiction in Internet chatting: An empirical study using modified Technology Acceptance Model. *Interdisciplinary Journal of Contemporary Research in Business*, 3(4), 290-291.
63. Tomaszek, K. and Tucholska, S. (2012). Psychosocial Consequences of the Sense of Alienation among Teenagers. *Paedagogia Christiana*, 30(2), 163-178. Veletsianos, G. and Kimmons, R. (2013). Scholars and faculty members' lived experiences in online social networks. *The Internet and Higher Education*, 16(1), 43-50.
64. Wu, L. (2013). Social Network Effects on Productivity and Job Security: Evidence from the Adoption of a Social Networking Tool. *Information Systems Research*, 24 (1), 1-51. <http://dx.doi.org/10.1287/isre.1120.0465>.

65. Yang, C. C. (2016). Instagram use, loneliness, and social comparison orientation: interact and browse on social media, but don't compare. *Cyber psychology, Behavior, and Social Networking*, 19(12), 703-708.
66. Young, S. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyber Psychology & Behaviour*, 1(3), 237-244.