IMPACT OF SOCIAL MEDIA ON MENTAL HEALTH

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**Abstract**

In the past decade, the advent of social media has revolutionized communication and interaction patterns worldwide. This study investigates the influence of online social networking on the mental health of students in two top deemed universities in Chennai. A descriptive study was conducted, surveying 90 respondents to gather insights into their demographic information, social media usage patterns, social relationships, and health effects.

The findings reveal significant associations between the time spent on social media and the number of social networking sites (SNS) utilized. Furthermore, a positive correlation is observed between feelings of anxiety and excessive activity on SNS compared to real-life interactions. These results underscore the impact of social media on student mental health, particularly in terms of depression and anxiety.

In conclusion, this study highlights the detrimental effects of excessive social media usage on student well-being, emphasizing the need for interventions and awareness campaigns to promote healthier digital habits and safeguard mental health among the student population.

**Keywords** : Social media, Online networking platforms, Web-based communication, Depression, Anxiety, Psychological well-being, Student population.

**1.INTRODUCTION**

Over the past decade, social media has become an integral part of online networking, facilitating communication, social connections, and skill development, particularly among children and teenagers (Horst, 2010). Social networking sites provide daily opportunities for individuals to connect with friends, classmates, and like-minded individuals, fostering social interaction and community engagement (Eytan, 2010). The prevalence of social media usage among preadolescents and youth has surged in recent years, with a significant portion accessing their favorite platforms multiple times a day (Hinduja & Patchin, 2010). The widespread adoption of smartphones further amplifies this trend, with a majority of young people utilizing their devices for social media, messaging, and instant communication.

Despite the evident benefits of social media, concerns have emerged regarding its potential impact on mental health, particularly concerning depression and anxiety (Pantic, 2014). The rapid evolution of social networking sites presents a relatively new phenomenon, leaving many questions unanswered regarding its implications for mental well-being. As such, there is a pressing need to investigate the relationship between social media usage and mental health issues among students comprehensively.

This research aims to delve into the intricate dynamics between social media engagement and mental health outcomes among students. The primary objective is to determine the extent to which social media usage influences depression and anxiety levels among this demographic. By conducting a thorough examination of social media habits, patterns of interaction, and emotional responses, this study seeks to provide valuable insights into the impact of digital connectivity on student mental health.

Through a combination of quantitative surveys and qualitative interviews, this research endeavors to capture a holistic understanding of the complex interplay between social media and psychological well-being. By analyzing demographic information, social media usage patterns, and self-reported mental health symptoms, the study aims to elucidate the mechanisms through which social media affects student mental health.

The findings of this research are expected to contribute to our understanding of the nuanced relationship between social media and mental health issues among students. By identifying potential risk factors and protective factors associated with social media use, this study aims to inform targeted interventions and strategies aimed at promoting healthier online behaviors and supporting student well-being in the digital age.

**2.LITERATURE REVIEW**

Later investigate by Barrense-Dias et al. (2019) highlights social media as a concerning stage for youth, with cyberbullying and trolling posturing noteworthy dangers to mental wellbeing. Williams and Teasdale (2018) found that over the top social media utilize may lead to mental wellbeing issues, proving concerns raised by Oberst et al. (2017), who recognized the overutilization of social media as a figure contributing to enthusiastic well-being issues among youngsters.

On the other hand, the World Wellbeing Organization (2017) has too shed light on the negative affect of delayed social media utilize, highlighting potential future challenges for countries. Pater and Mynatt (2017) have emphasized the hurtful impacts of social media on enthusiastic well-being, especially among youthful individuals, ascribing it to cultivating threatening and hazardous behavior.

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Parmar (2017) highlighted the critical sum of time youth spend on different social media stages, averaging 12-15 hours a day on excitement media. This adjusts with insights from Felix Richter (2019), showing the far reaching utilize of stages like Facebook, Instagram, and Delivery person, with billions of month to month and every day dynamic clients. In any case, the sheer volume of clients too raises concerns around security and security, as highlighted by the potential chance of information hacking and misuse.

By and large, whereas social media offers network and amusement, its intemperate utilize postures unmistakable dangers to youth mental wellbeing. It's pivotal to strike a adjust and advance more advantageous computerized propensities to protect enthusiastic well-being within the advanced age.

In later considers, different analysts have shed light on the significant affect of social media on the mental well-being of youthful people. Barrense-Dias et al. (2019) emphasized the darker side of social media, highlighting how it serves as a breeding ground for cyberbullying and trolling, posturing critical risks to the mental wellbeing of adolescents. Additionally, Williams and Teasdale (2018) found that drawn out and over the top utilize of social media can lead to mental wellbeing issues, resounding concerns raised by Oberst et al. (2017) with respect to the inconvenient impacts of overutilizing social media stages on enthusiastic well-being.

On the other hand, the World Wellbeing Organization (2017) given bits of knowledge into the long-term dangers related with broad social media utilization, raising concerns approximately its potential affect on long-standing time well-being of countries. Moreover, Pater and Mynatt (2017) highlighted the part of social media in cultivating unfriendly and risky behavior, especially among youths, encourage emphasizing its destructive impacts on passionate well-being.

Moreover, Parmar (2017) drew consideration to the critical sum of time today's youth spend on different social media stages, demonstrating a drift of investing 12-15 hours a day on excitement media. These insights, bolstered by Felix Richter's discoveries in 2019, emphasize the inescapable nature of social media utilization among the more youthful statistic, raising concerns around security and security.

Besides, analysts such as Thornicroft et al. (2016) and Mill operator et al. (2016) have given differentiating viewpoints on the part of social media in youth's lives. Whereas a few contend its importance in promoting emotional well-being and keeping up social associations, others caution approximately its potential dangers, counting computerized bullying and negative impacts on self-esteem.

By and large, the writing highlights the complicated relationship between social media utilize and mental wellbeing among youth, encouraging for advance investigate and intercessions to address the negative results and advance more beneficial advanced habits.

GermannMolz and Paris (2015) highlighted the positive perspective of social media, recommending that teenagers lock in with online stages to exhibit their abilities, interface with peers, and fortify familial connections, in this manner contributing to their by and large mental well-being. Alternately, Gipson et al. (2015) recognized the significance of mental wellbeing and well-being among teenagers but famous a need of data on how to preserve it, especially within the setting of social media utilize. Zhang et al. (2015) proposed that social media encourages communication and social interaction, possibly upgrading mental wellbeing. Be that as it may, Rivers (2015) cautioned that over the top social media utilize among youth regularly leads to trouble and boredom.

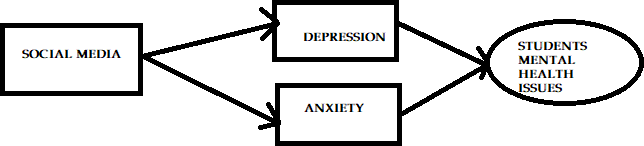
Amedie (2015) contended that social media can worsen uneasiness and misery among youthful individuals, particularly when comparing oneself to others who show up more joyful or more effective online. So also, Clarke, Kuosmanen, and Barry (2015) recommended that social media can increase sentiments of insufficiency among youth. In any case, Jelenchick et al. (2013) found no conclusive prove connecting social organizing location (SNS) utilization to clinical misery among American young people, differentiating with the statement made by Mustafa Koc (2013) with respect to the addictive nature of Facebook.

Also, Gabre and Kumar (2012) highlighted the relationship between Facebook utilization and expanded stretch levels and misfortune of control among undergraduates. Misery, a predominant mental wellbeing issue around the world, essentially impacts individuals' lives and societal well-being (Lépine et al., 2011). Thinks about have too connected computer utilize and tv seeing to uneasiness and depressive indications (de Mind et al., 2011). O'Dell (2011) distinguished Facebook as a potential cause of misery and forlornness among understudies, a wonder coined as "Facebook Sadness" by O'Keeffe, Clarke-Pearson, and the Chamber on Communications and Media (2011). In addition, Moreno et al. (2011a) proposed that Facebook expressions may show the nearness of depressive symptoms.

The predominance of misery underscores the require for comprehensive inquire about on the affect of social media on mental wellbeing. Whereas concerns almost social media enslavement endure, the evidence regarding its unfavorable effects on individual well-being remains uncertain (World Wellbeing Organization, 2006). By the by, the increasing number of understudies looking for treatment for depressive indications highlights the criticalness of tending to mental wellbeing issues exacerbated by innovation utilize (Voelker, 2003). The mental behavior demonstrate sets that innovation enslavement strengthens maladaptive considerations, counting misery, uneasiness, and moo self-esteem (Davis, 2001).

Fig 1: Hypothetical Framework

H01: There's critical relationship between sadness and understudies mental wellbeing issues CA\_NEWLINE\_CA H02: There's a noteworthy relationship between uneasiness and stude.



**3.MATERIAL AND METHODS**

In this ponder, a graphic investigate approach was chosen to investigate the relationship between social organizing utilization and different health-related issues among MBA understudies. Both essential and auxiliary information were accumulated to guarantee a comprehensive investigation. The survey included segments covering statistic data as well as multiple-choice questions tending to viewpoints such as designs of social organizing utilization, time went through on social media, day by day exercises on social organizing destinations, and engagement levels with social organizing administrations (SNS). Furthermore, members were inquired approximately health-related issues such as trouble resting, eating propensities, misery, and anxiety.

Auxiliary information, sourced from legitimate websites, magazines, and diaries, supplemented the essential information collection, improving the study's profundity and breadth. To analyze the collected information, factual apparatuses such as Crosstabs, Anova, and Relationship were utilized, utilizing SPSS\_v (16.0) program. These expository methods empowered analysts to recognize designs, connections, and affiliations between social organizing behaviors and wellbeing results among MBA understudies. Through a fastidious examination of both essential and auxiliary information, the consider pointed to supply important bits of knowledge into the affect of social organizing on the well-being of MBA understudies, contributing to the existing body of information in this field.

# 4.RESULTS

**Testing of Hypothesis**

## Table 1: Reliability Reliability Statistics

|  |  |
| --- | --- |
| Cronbach's  Alpha | N of Items |
| 0.713 | 13 |

To ensure the reliability of the questionnaire, a Cronbach's alpha test was performed, following the methodology outlined by Goerge and Mallery (2003). The obtained overall reliability score was found to be 0.713. This indicates a satisfactory level of internal consistency among the questionnaire items. Therefore, the questionnaire is deemed suitable for further analysis and can be confidently utilized to explore the intended research objectives.

## Table 2: Multiple response analysis:

**$Purpose Frequencies**

## $Purpose Frequencies

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | Responses | | Percent of Cases |
| N | Percent |
| $Purpose of SNSa | Academics | 68 | 21.7% | 75.6% |
|  | Games | 49 | 15.7% | 54.4% |
|  | Movies | 51 | 16.3% | 56.7% |
|  | Sports | 42 | 13.4% | 46.7% |
|  | Entertainme nt | 74 | 23.6% | 82.2% |
|  | Serials | 29 | 9.3% | 32.2% |
| Total |  | 313 | 100.0% | 347.8% |

1. Dichotomy group tabulated at value 1.

Based on the findings presented in Table 2, it's evident that various purposes drive students' engagement with social networking sites (SNS). Approximately 21.7% of students utilize SNS for academic purposes, indicating a significant focus on educational activities. Following closely, 15.7% of students use SNS for gaming, while 16.3% opt for watching movies. Additionally, 13.4% of students engage in SNS for sports-related content, while 23.6% seek entertainment through these platforms. Interestingly, a smaller percentage, 9.3%, utilize SNS for viewing serials.

The study aligns with Mustafa's (2017) observation that educational purposes rank highest among students' motivations for using social media, closely trailed by entertainment. Notably, the data suggests a lower emphasis on social interaction purposes among students, indicating a potentially more utilitarian approach to SNS usage.

Based on these findings, we formulate the null hypothesis (H01) that there exists an association between the time spent on social media and the number of social networking sites used. This hypothesis seeks to explore the potential correlation between usage patterns and the breadth of engagement across different SNS platforms.

## Table 3: Cross tabs

## Chi-Square Tests

|  |  |  |  |
| --- | --- | --- | --- |
|  | Value | Df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square | 49.432a | 16 | .000 |
| Likelihood Ratio | 47.715 | 16 | .000 |
| Linear-by-Linear Association | 9.875 | 1 | .002 |
| N of Valid Cases | 90 |  |  |

a. 19 cells (76.0%) have expected count less than 5. The minimum expected count is .36.

According to the data presented in Table 3, the significance value stands at 0.000, which is below the conventional threshold of 0.05. This indicates a statistically significant relationship between the time spent on social media and the number of social networking sites utilized by students. Consequently, we reject the null hypothesis and infer that an association indeed exists between social media usage duration and the extent of engagement across various social networking platforms.

Building upon this observation, we formulate the hypothesis H02, which aims to investigate the relationship between the overall usage of social media and the number of distinct social networking sites frequented by students. By exploring this association, the study seeks to gain deeper insights into the multifaceted dynamics of students' digital interactions and their implications for social media engagement patterns.

## Table 4: Cross tabs Chi-Square Tests

|  |  |  |  |
| --- | --- | --- | --- |
|  | Value | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square | 47.226a | 16 | .000 |
| Likelihood Ratio | 38.327 | 16 | .001 |
| Linear-by-Linear Association | 18.865 | 1 | .000 |
| N of Valid Cases | 90 |  |  |

1. 18 cells (72.0%) have expected count less than 5. The minimum expected count is .04.

Based on the data presented in Table 4, the significance value of 0.000 is below the conventional threshold of 0.05. Consequently, we reject the null hypothesis, indicating a significant association between the usage of social media and the number of social networking sites accessed.

Expanding upon this finding, we formulate hypothesis H03, which aims to investigate the potential variance in the symptoms of depression based on the number of social networking sites utilized by individuals. This hypothesis seeks to explore whether there is a discernible difference in the prevalence or severity of depression symptoms among individuals who engage with varying numbers of social networking platforms. Through this analysis, the study endeavors to elucidate the potential impact of social media usage patterns on individuals' mental health outcomes, contributing to a deeper understanding of the complex interplay between digital engagement and psychological well-being.

## Table 5: Anova

## ANOVA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of SNS |  |  |  |  |  |
|  | Sum of  Squares | df | Mean Square | F | Sig. |
| Between Groups | 14.172 | 4 | 3.543 | 2.554 | .045 |
| Within Groups | 117.928 | 85 | 1.387 |
| Total | 132.100 | 89 |  |

Based on the findings presented in Table 5, the significance value of 0.045 falls below the predetermined threshold of 0.05. Consequently, we reject the null hypothesis, indicating a significant difference between the number of social networking sites utilized and the symptoms of depression experienced by individuals.

Building upon this observation, we formulate hypothesis H04, aiming to explore the relationship between individuals' feelings of anxiety and their level of activity on social networking sites compared to real-life interactions. This hypothesis seeks to delve into the potential impact of social media engagement on individuals' emotional states, particularly regarding heightened levels of anxiety in the digital realm compared to offline interactions. Through this exploration, the study endeavors to shed light on the intricate interplay between online social behavior and mental well-being, providing valuable insights for understanding contemporary digital phenomena.

## Table 6: Correlation:

|  |  |  |  |
| --- | --- | --- | --- |
| **Correlation** | | | |
|  | | Symptoms of anxiety | Symptoms of Depression |
| Symptoms of anxiety | Pearson Correlation | 1 | .193 |
|  | Sig. (2-  tailed) |  | .068 |
|  | N | 90 | 90 |
| Symptoms of Depression | Pearson Correlation | .193 | 1 |
|  | Sig. (2-  tailed) | .068 |  |
|  | N | 90 | 90 |

Based on the results presented in Table 6, the significance value of 0.068 exceeds the predetermined threshold of 0.05. Therefore, we accept the null hypothesis, suggesting that there is no statistically significant linear positive correlation between symptoms of anxiety and symptoms of depression.

This finding implies that, within the context of the study, there is no strong linear relationship between anxiety and depression symptoms among the participants. While anxiety and depression are often considered to be closely related, the data in this study does not provide evidence of a direct linear correlation between the two variables. Further exploration and analysis may be necessary to fully understand the relationship between these mental health indicators in the context of social media usage and engagement.

**5.DISCUSSION**

Recent research by Igor Pantic (2012) has highlighted the detrimental effects of excessive social media usage, linking it to an increased risk of depression. Similarly, the American Psychological Association (APA, 2011) has noted the negative impact of daily media consumption on the mental health of children, adolescents, and preteens, emphasizing a correlation with depression, anxiety, and other psychological issues. This study reinforces these findings, revealing a significant association between the amount of time spent on social media and the number of social networking sites accessed.

Contrasting perspectives emerge from a study conducted by Jordyn Young (2018), which suggests that reduced social media usage corresponds to lower levels of depression and loneliness, indicating a potential qualitative improvement in well-being. However, our research contradicts this notion, revealing that the number of social networking sites frequented is indeed linked to symptoms of depression, indicating the nuanced nature of social media's impact on mental health.

Further evidence supporting the adverse effects of excessive social media use on mental health is found in studies by Suryakant C. Deogade (2018), Primack et al. (2017), and Shensa et al. (2017), which highlight heightened levels of depression, anxiety, and overall dissatisfaction with life. Moreover, our study corroborates the relationship between symptoms of anxiety and depression, as well as the tendency for individuals to feel more anxious and active on social networking sites compared to real-life interactions.

These findings underscore the complex interplay between social media usage and mental well-being, emphasizing the need for comprehensive strategies to mitigate potential risks and promote healthier digital habits among individuals of all ages.

**6.CONCLUSION**

The research aimed to investigate the influence of social media on the mental well-being of students. Findings from the study indicated a prevalent trend among respondents, with a majority reporting frequent usage of multiple social networking sites, often dedicating more than four hours per day to these platforms. Notably, the research uncovered a significant disparity between the number of social networking sites utilized and the manifestation of depression symptoms among participants.

Furthermore, the study highlighted a robust correlation between symptoms of anxiety and depression, underscoring the interconnected nature of these mental health indicators. Additionally, the research emphasized a distinct relationship between feelings of anxiety and heightened engagement on social networking sites compared to real-life interactions.

These findings collectively suggest that excessive social media usage, coupled with the proliferation of social networking sites and prolonged screen time, adversely impacts the mental health of students, leading to heightened levels of depression and anxiety. As such, there is a pressing need for further examination and proactive interventions to mitigate the detrimental effects of social media on student well-being.

***REFRENCES***

[1] Amedie, Jacob (2015). "The Impact of Social Media on Society". Advanced Writing: Pop Culture Intersections.

[2] American Psychological Association (APA), (2011). Social networking's good and bad impacts on kids.

[3] Barrense-Dias. et al., (2019). Journal of Adolescent Health, 64(2), p.S12.Brooks, S., 2015. Does personal social media usage affect efficiency and well-being? Computers in Human Behavior, 46, pp.26-37

[4] Burnsed, B. (2010, November 19). 5 tips to avoid depression in college. US News

[5] Clarke, A.M., Kuosmanen, T. and Barry, M.M., 2015. A systematic review of online youth mental health promotion and prevention interventions. Journal of youth and adolescence, 44(1), pp.90-113.

[6] Eytan T. (2010) ―The more we change the world‖— Blog-ter-view with Wendy Sue Swanson, MD, about physicians and social media [blog on the Internet] Washington, DC.

[7] Gabre, H., & Kumar, G. (2012). The effects of perceived stress and Facebook on accounting students’ academic performance. Accounting and Finance Research, ISSN 1927-5986 ,1(2), 87-100

[8] George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference, 231.

[9] GermannMolz, J. and Paris, C.M., (2015). The social affordances of flashpacking: Exploring the mobility nexus of travel and communication. Mobilities, 10(2), pp.173-192.

[10] Gipson et.al (2015). Columbia-suicide severity rating scale: predictive validity with adolescent psychiatric emergency patients. Pediatric emergency care, 31(2), p.88.

[11] Heather A. Horst et.al (2010), Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning

with New Media. Research Gate. 30-78.

[12] Helen G. Gabre(2012). The Effects of Perceived Stress and Facebook on Accounting Students’ Academic Performance. Accounting and Finance Research, ISSN 1927-5986 E-ISSN 1927-5994, Vol. 1, No. 2.

[13] Igor Pantic,(2014). Online Social Networking and Mental Health. Cyberpsychology, behavior, and social networking, 17(10), 652 – 657

[14] Jelenchick, L. A., Eickhoff, J. C., & Moreno, M. A. (2013). ―Facebook depression?‖ Social networking site use and depression in older adolescents. Journal of Adolescent Health, 52(1), 128–130.

[15] Jordyn Young, (2018), No More FOMO: Limiting Social Media Decreases Loneliness and Depression. Journal of Social and Clinical Psychology. Vol. 37, No. 10, 2018, pp. 751-768.

[16] Justin W. Patchin, Sameer Hinduja (2010), Trends in online social networking: adolescent use of MySpace over time. New media & Society. 12(2), 197-216. https://doi.org/10.1177/1461444809341857

[17] Koc Mustafa Koc, Seval Gulyagci, (2013). Facebook Addiction among Turkish College Students: The Role of Psychological Health, Demographic, and Usage Characteristics.

Cyberpsychology, behavior, and social networking, 16(4), 279-284.

[18] Len-Ríos, M.E., Hughes, H.E., McKee, L.G. and Young, H.N., 2016. Early adolescents as publics: A national survey of teens with social media accounts, their media use preferences, parental mediation, and perceived Internet literacy. Public Relations Review, 42(1), pp.101-108.

[19] Lépine et.al; (2011). Cross-national epidemiology of DSM-IV major depressive episode. BMC Medicine. 1741-7015/9/90.

[20] Lin, N., (2017). Building a network theory of social capital. In Social capital (pp. 3-28).

[21] McCall, L. (2007). Increasing class disparities among women and the politics of gender equity. In D. S. Cobble (Ed.), NY: Cornell University Press The sex of class (pp. 15-34). Ithaca.

[22] Miller. et.al. 2016. How the world changed social media. UCL Press (p. 286).

[23] Moreno, M. A., Jelenchick, L. A., Egan, K. G., Cox, E., Young, H., Gannon, K. E., & Becker, T. (2011). Feeling bad on Facebook: depression disclosures by college students on a social networking site. Depression and Anxiety, 28(6), 447–455.

[24] O’Dell, J. (2011). For students, what is the Facebook effect on grades? Retrieved on November 6, 2011.

[25] O’Keeffe, G. S., Clarke-Pearson, K., & Council on Communications and Media. (2011). The impact of social media on children, adolescents, and families. Pediatrics, 127(4), 800- 804.

[26] Oberst, U., Wegmann, E., Stodt, B., Brand, M. and Chamarro, A., (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. Journal of adolescence, 55,

pp.51-60.

[27] Parmar, N., (2017). Digital Parenting. United Learning Schools, Ashford, Kent.

[28] Patel, V. et.al. 2016. Addressing the burden of mental, neurological, and substance use disorders: key messages from Disease Control Priorities. The Lancet, 387(10028), pp.1672-1685.

[29] Pater, J. and Mynatt, E.D., (2017). Defining Digital Self-Harm. In CSCW, ISBN: 978-1-4503-4335-0 (pp. 1501-1513).

[30] Primack, B.A., et.al (2017), ―Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among US young adults‖, Computers in Human Behavior, 69, 1-9.

[31] Roger B. Davis, (2001). The Use of Complementary and Alternative Therapies to Treat Anxiety and Depression in the United States. The American journal of psychiatry. 158:289–294.

[32] Segal, Z.V., Williams, M. and Teasdale, J., (2018). Mindfulness-based cognitive therapy for depression. Guilford Publications.

[33] Shensa, A., Escobar-Viera, C.G., Sidani, J.E., Bowman, N.D., Marshal, M.P. and Primack, B.A. (2017), ―Problematic social media use and depressive symptoms among US young adults: a nationally representative study‖, Social Science & Medicine, 182, 150-157.

[34] Suryakant C. Deogade, et al. (2018). Adverse health effects and unhealthy behaviors among dental undergraduates surfing social networking sites. Ind Psychiatry J, 26: 207-14.

[35] Thornicroft. et al., Evidence for effective interventions to reduce mental-health-related stigma and discrimination. The Lancet, 387(10023), pp.1123-1132.

[36] Townsend, L. et.al 2016. Building virtual bridges: How rural Micro‐Enterprises develop social capital in online and Face‐to‐Face settings. 56(1), pp.29-47.

[37] Voelker, R. (2003). Mounting student depression taxing campus mental health services. The Journal of American Medical Association, 289, 2055–2056.

Volume 51, August 2016, Pages 41-49

[38] Wood, Holly Scott. (2016).Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem.

Journal of Adolescence

[39] World Health Organization, (2017). Preventing suicide: a resource for media professionals. who.int/gho/data/view

[40] Zhang, Y. et.al; (2015). Social network aware device- to-device communication in wireless networks. IEEE Transactions on Wireless Communications, 14(1), pp.177-190.