Does social media make youth unsociable and lonely? empirical study

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Abstract:

The utilization of online networking by the present youth has taken off as of late, and the time spent by people before screens have supplanted the time spent by them in up close and personal connections. Today, majority of teens and youth spend a significant piece of their public activities on online space, and instructors and advisors have brought up a major issue whether the nearness of people in the computerized world gives a satisfactory feeling of social having a place. Present study examines and analyses how online life causes loneliness by studying some of the factors related to internet-based life. An electronic questionnaire was utilized as a medium to gather information from 205 people and the regression methodology outcomes demonstrated that people anticipate enthusiastic closeness and friendship via web-based networking media stages. Additionally, they long for steady acknowledgment via web-based networking media destinations.

Keywords: web-based networking , Social media, social media sites, loneliness, internet-based life, Social network, forlornness.

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Introduction:

Online based life stages are continually being created, and there is an incredible probability that some of them will turn out to be extremely effective sooner rather than later (Miller et.al,2016). Web-based social networking is additionally characterized as an aggregate Internet-based network where clients communicate with one another on the web (Christensson,2013). Web-based social networking gives rich and amazing substance to social examination exercises where clients will in general post positive mental self-portrait frequently (Yang & Brown, 2016), as it would cause them to connect more in the somewhat elevated social examination, which possibly prompts greed and in the end low confidence (Lim & Yang, 2015). Various authors have offered meanings of social media sites. They are a sort of virtual networks with the fundamental objective of making connections utilizing on the web apparatuses between individuals who share normal social, business, or some other interests (Riegner,2007). Study also characterize social media sites as an online mode that makes it feasible for people to make a profile and socialize with companions. Here, individuals make sure that their profile is available for others to see and offer content and matter identified with their private or business lives (Boyd & Ellison,2007). Individuals spend a normal of two hours and twenty-two minutes day by day on web-based networking media while this is three hours for individuals between ages 16 and 25

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(Bayindir & Kavanagh, 2018). Social networks give various chances to share content, banter with others, create and continue connections, build up notoriety, recognize, and utilize accessible network assets. They make it conceivable to stay side by side on various occasions, plan them, make intrigue gatherings, make significant data accessible to individuals, and create social intrigue ((Boniel-Nissim & Dolev-Cohen, 2013). This correspondence medium, described for the most part by corporations with associates, is a significant instrument in overseeing, keeping up, and developing fellowships (Steinfield et al., 2012). Internet-based websites are online mediums that create numerous possibilities for individuals to make an online profile and share it with companions or with the general population(Boyd and Ellison,2007). Since the previous decade, web-based life has become a piece of the lives of youths, and even grown-ups. Everybody utilizes this medium to interface with loved ones. Additionally, a huge piece of youngsters' public activities is currently coordinated with social media (Smith & Anderson, 2018). Prior investigations have additionally demonstrated that popular social media platforms like Facebook empowers individuals to speak with various social gatherings (Sponcil & Citimu, 2013). The one of a kind highlights of internet-based life offers advantages to numerous youths as far as its open nature. Studies have demonstrated that web-based life destinations make it simpler for adolescents and even grown-ups to stay aware of whom they haven't seen for some time by watching their posts and updates and making communications through the web (Quan-Haase & Young, 2010).

Likewise, its openness adds to the social turn of events and information gain by individuals (Wells &Mitchell, 2008). As indicated by the authors, web-based life has picked up notoriety quickly, particularly among the youth in this data age (Pempek, et.al., 2009). As per the author, individuals utilize online life to make associations with others and continue it over the long haul (Boyd & Ellison, 2007). Social help and connectedness are significant for accomplishing a feeling of prosperity, and studies have discovered that people can spend a whole lifetime on the mission for a feeling of prosperity (Stillman et al., 2009). Prior investigates shows that the meaning of prosperity may vary as per both individual and situational requests. Utilization of web-based social networking influences physical social space by redressing, expanding, attacking, or disengaging people with high versus low degrees of saw dejection (Berezan, et.al., 2019). Various investigations demonstrate that restricting the time spent via web-based networking media is critical to one's prosperity. Commitment to the social examination that internet-based life instigates is regularly referred to as negatively affecting mental prosperity (Tandoc et al., 2015). Instructors and advisors have brought up significant issues whether youngsters' prolonged presence in the virtual circle is a substitute for a feeling of belongingness and forestalls the forlornness that youths frequently experience (Bányai et al., 2017). Loneliness alludes to a statement of feeling that exists in individuals all things considered (De Jong Gierveld and Van Tilburg 2010;). It emerges when there is a wide gap between the social closeness accomplished by the individual and the expected one (Asher&Weeks,2014). Numerous analysts have tended to the meaning of dejection or loneliness. Loneliness is seen to be as a genuine social issue (De Jong Gierveld and Van Tilburg .,2010) and public health-related issues as well (Holt-Lunstad, et.al., 2015). It emerges because of the disparity among genuine and wanted social connections (Peplau & Perlman, 1982), and expanding utilization of wellbeing administrations .The discoveries of the HomeNet Project demonstrate that members who spend a noteworthy portion of their time online announced significant levels of pressure and loneliness (Kraut et al., 1998). Another investigation found that concentrated Internet utilization was related to a high danger of misery (Kraut et al., 2002). Studies by analysts have likewise discovered that loneliness and misery are related to the frequent use of social media (Hunt et al., 2018).

Numerous researches likewise show that emotional prosperity is the intellectual assessment of one's life (Ed Diener,2009). The psychological assessments are chiefly made of two sections, the fulfilment that life offers and the charming degree of feelings that one encounters. The unnecessary time spent in internet-based life will supplant and, in the end, devour the time fundamental to develop social and scholarly commitment (Heponiemi, et.al., 2006). Prior examinations additionally indicated that one should spend appropriate time for proper sleep is significant for an enthusiastic turn of events, and the over the top media presentation frequently happens around evening time (Eggermont & Bulck,2006). This may prompt an intellectual breakdown that is related to despondency (Lakdavalla,

et.al, 2007). The creator expresses that online namelessness in web-based life systems doesn't fundamentally secure protection as it contains distinguishing pictures that regularly unveil more than doing up close and personal collaborations. Earlier explores has examined the relationship between Internet use and mental prosperity and found that concentrated Internet use prompts a decrease in connections with relatives. (Barak, 2006). It is essential to recognize social disconnection and depression. Online networking sites encourage relational and social interchanges that may never happen very quickly under customary conditions. The Individual's capacity to react changes them into a crowd of people that takes an interest in the encounters of someone else. Hu (2009) found that youngsters express a measurably and altogether more noteworthy level of depression after their discussions via web-based networking stages, contrasted, and the level of forlornness they express after eye to eye discussions . The current examination investigates whether, among youth, virtual companionships establish substitutes for genuine companions, or the utilization of the virtual world is the reason for obstacles in making genuine fellowships (Ceyhan & Ceyhan, 2008; Dunbar, 2010).

Studies on the various impacts of virtual companionship show that youngsters with low mental self-portrait make a bigger number of kinships on interpersonal organizations than those with a high mental self-portrait. These youngsters feel ensured in the virtual condition and they seem to use the online secrecy and imperceptibility to make up for their prominent restrictions concerning correspondence and relational relations (Boniel-Nissim and Dolev-Cohen, 2013). Not just the social media goes about as a beacon of help for learning, development, passionate development and obtaining aptitudes, it might likewise be a source of a negative impact and unsafe practices (Sharabi & Margalit,2010). In this examination, we look at the relationship between internet-based life use and loneliness. We explicitly try to investigate the discoveries that increasingly concentrated utilization of online networking is related to more elevated levels of loneliness (Sheldon, 2008; Primack et al.,2017).

Objective of the study:

The objective is geared towards finding out how social media (internet-based life) causes loneliness among Indian youth by analysing several factors related to the usage of social media.

Literature review :

Various studies directed in the past show that a lot of our online time, aside from searching for data, is spent on online networking sites, for example, Facebook and Twitter. 'Online life' has become the regularly acknowledged mark for these advancements, which is utilized for relational and dynamic (Schroeder, 2018). Social media is characterized as an advanced system that empowers youth to "interface and initiate a conversation" with companions or outsiders. Furthermore, this system could be promptly practiced through online networking sites (Correa, et.al.,2010). As indicated by the author large portion of the investigation on the utilization of web-based life has been solely centred around online networking sites (Correa et.al,2010). Online networking sites are virtual assortments of crowds' profiles, which could be seen and shared by different individuals, to build up a type of correspondence, or essentially stay in contact (Raacke et.al.,2008).

Baker & Oswald (2010) have likewise found that web-based life made an agreeable situation to collaborate with others without the necessity for up close and personal association particularly for individuals who are shy and experienced less social correspondence and absence of social help because of the shyness. The rise of Internet equipped Social Media has made it feasible for one individual to speak with several others (Mangold & Faulds, 2009). Such media might be utilized to look for data about genuine subjects (Westerman et al., 2014). By and large, social media might be assembled by reason, including, media that greatly help in socializing (for example, Facebook, Twitter, and so on.), proficient systems administration (LinkedIn), media sharing (YouTube), and computer-generated reality (Ventola, 2014). Various examinations in the field of online networking and its effect on loneliness have discovered that to guarantee one's prosperity, it is essential to confine the time one

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spends via web-based networking media. For instance, taking part in the social examinations that are more than frequently induced by online life is considered to negatively affect the mental prosperity of an individual (Verduyn et al., 2015). A significant ramification of research was that an irresponsible utilization of social networks considering stressors introduced predisposition toward finding tricky mental results, for example, compulsion (Kim et al., 2009); lone conduct (Kraut et al., 1998); and related temperament issue (Weinstein et al., 2015). Ongoing explores demonstrate that apparent online life enslavement is the impulsive utilization of web-based life that reflected social addictive indications (Hawi & Samaha,2017). Such addictive indications contain the accompanying six viewpoints: "remarkable quality, resilience, struggle, withdrawal, backslide and state of mind adjustment" (Griffiths, 2005).

Continuous assessments have found that the use of Facebook lengthen one's social capital, yet this may depend upon the person's conduct while using stages in such manner. For example, on Facebook, various people try to establish some sort of distinction concerning others. But the studies show that solely absorbing the content of others builds the apparent loneliness while diminishing social capital (Burke, et.al., 2010). One of the potentials effects of the consistent accessibility of online networking is expanded desires and requests within a growing friend circle, for example, desires for steady availability and consolation. Ongoing examinations have discovered that youths feel intense and extraordinary commitment to be emotionally available to companions consistently (Fox & Moreland, 2015) and that online networking platforms play an important role in ensuring their accessibility and correspondence with companions (Lyons et.al. 2015). The experience of loneliness is believed to be an uncomfortable and apparent irregularity between what one needs and their genuine social circumstances (Peplau & Perlman, 1982). The reliance on the abstract impression of it as opposed to the target functionalities of the circumstance separates this presence of forlornness from different issues, for example, social confinement (Wang et al., 2017). Social disconnection alludes to the target number of connections in which one is included, while forlornness mirrors one's apparent feeling of social segregation (Masi et al., 2011). Teenagers and other young individuals have been appeared to be especially defenceless against the negative outcomes of forlornness (Danneel, et.al., 2018). One of the significant inquiries raised by psychologist and analysts is whether the existence of youngsters in the virtual field comprises a satisfactory substitute for a feeling of belongingness and reduce the depression that one generally experiences (Bányai et al., 2017; Dzogang et al., 2017; O'Keeffe & Clarke-Pearson, 2011; Przybylski et al., 2013; Turkle, 2012). Studies have likewise indicated that social exercises on online platforms lead to changes in connection designs in current human culture, particularly in young adults and teenagers (Chukwuere & Chukwuere, 2017; Kontos et al., 2010; Prensky, 2001). The absence of eye to eye connection, which is one of the conspicuous highlights of the subsequent social collaborations has prompted high self-exposure, as interchanges in the type of text and not including eye to eye connection welcomes loose and direct discussions (Mesch & Talmud, 2010). Kraut et al.(2002) have also identified that a person's character and temperament influence web-based perusing results, outgoing and gregarious people experience a surge in their social networking skills and a decrease in the feeling of loneliness whereas shy and timid people experience a decrease in their social networking based tasks and a surge in dejection . Web-based social networking use is driven by self-portrayal and depiction accompanied by a feeling of belongingness. The sentiment of being lonely is very emotional and is the translation given by a person to their world. That is, an individual can feel socially delighted on the off chance that they are associated with few social ties or feel desolate regardless of whether they are encircled by individuals. Prior examinations have discovered that sentiment of dejection guides us to either enjoy social collaborations or abstain from accepting them (Masi et al., 2011). Several specialists in the past have tended to the topic of whether virtual informal communities are proper and right goals to the sentiment of depression that youngsters now and again feel. They noticed that virtual kinships might be less fulfilling than eye to eye companionships. An ongoing report has likewise discovered that restricting web-based life use can diminish forlornness and above all downturn (Hunt et al. 2018). In this examination, we analyse the relationship between social media life use and loneliness. We likewise look to investigate the discoveries that progressively serious utilization of online life is related to more significant levels of loneliness (Sheldon, 2008; Primack et al., 2017; Hunt et al., 2018).

Research gap :

The studies conducted in this research paper discuss the impact of how web-based networking media use can be a major cause of loneliness and affect the notion of self-perception w.r.t. Indian youth which has not been studied so far as per authors' knowledge. Hence this study attempts to investigate finding out how social media (internet-based life) causes loneliness among Indian youth by analysing several factors related to the usage of social media.

Methodology:

Data Collection:

The present study used primary data for the analysis. The research sample comprised of 205 participants who belonged to the age group of 18-30 years. This is the age group that comprises youth as per United Nations. The participants included students, homemakers as well as working professionals. They either belonged to either metropolitan city, non-metropolitan city, or town/village. An electronic questionnaire was built on a google form and the link was shared with the participants. Russell et al., (1980) had built up the usually utilized instrument called Revised UCLA Loneliness Scale for the estimation of dejection, and it has accomplished normal understanding in the field of social behaviour. The scale has 20 assertions which are used to measure the level of loneliness of the participants. We have taken certain factors from it to frame our questionnaire. The aim of the study was presented to them, and they were asked to fill the questionnaire with the assurance that the information will be purely used for research purposes.

Tool for questionnaire :

To understand the discoveries of the examination of the present study, we have used quantitative technique. As per Leavy (2004), " statistical techniques are utilized to depict the resultant fluctuation in the information". This includes the way towards breaking down the information that has been gathered. Subsequently, the motivation behind measurements is, to sum up, and answer queries that were acquired in the exploration. The upper degree of measurable noteworthiness for theories testing was set at 5%. Expressive measurements are utilized to portray and sum up the conduct of the factors in an examination and SPSS programming bundle is utilized to perform relapse investigation

Research Model:

Regression analysis was performed on the acquired data where loneliness was taken as the dependent variable and social media factors were taken as independent variables.

Result and analysis:

Table I Descriptives

	N	Range	Mean	Median	Mode	Std. Deviation	Variance
Time spent	205	4	3.46	4.00	4	1.148	1.319
Befriending	205	4	3.33	4.00	4	1.282	1.643
social skills	205	4	3.41	4.00	4	1.328	1.764
companionship	205	4	3.46	4.00	4	1.377	1.897
emotional intimacy	205	4	3.33	4.00	4	1.388	1.927
easy trust	205	4	3.31	4.00	4	1.339	1.792

discussing problems	205	4	3.24	4.00	4	1.287	1.656
meaningful relationships	205	4	3.40	4.00	4	1.345	1.809
emotional support	205	4	3.12	4.00	4	1.192	1.421
efforts to make friends	205	4	3.81	4.00	4	1.275	1.625
forget true realities	205	4	3.40	4.00	4	1.353	1.829
expect high engagement	205	4	3.38	4.00	4	1.310	1.716
isolation	205	4	3.33	4.00	4	1.247	1.554
unshared ideas	205	4	3.41	4.00	4	1.252	1.567
anonymity	205	4	3.80	4.00	5	1.273	1.622
time consuming	205	4	3.38	4.00	4	1.358	1.845
emptiness	205	4	3.47	4.00	4	1.223	1.495
less social	205	4	3.40	4.00	4	1.255	1.575
yearn for recognition	205	4	3.51	4.00	4	1.290	1.663
low on confidence	205	4	3.36	4.00	4	1.105	1.222

"Efforts to make friends" has a mean of 3.81 indicating that youngsters easily make friends on social media and must put more effort to do so in real life. This is followed by anonymity having a mean of 3.80 and mode 5. The high mean indicates that users generally don't want to reveal they're true personality and have a hideous approach to everything while using social media. The mode is 5 which indicates that this is the most influential factor while using social media sites. Individuals also yearn for recognition and companionship on social media platforms indicated by a mean of 3.51.

Table II Model to fit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.615[a]	.378	.375	.989
2	.683[b]	.466	.461	.918
3	.716[c]	.512	.505	.880
4	.731[d]	.534	.524	.863
5	.737[e]	.543	.532	.856

Predictors: (Constant expect high engagement

Predictors: (Constant), expect high engagement, isolation

Predictors: (Constant), expect high engagement, isolation, efforts to make friends

Predictors: (Constant), expect high engagement, isolation, efforts to make friends, emotional support

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Predictors: (Constant), expect high engagement, isolation, efforts to make friends, emotional support, easy trust

Dependent Variable: loneliness

We had performed a stepwise regression method which has generated a highly efficient model with an R-value of 0.737. The predictors defined by model 5 account for 54.3% of the variation. This implies that individuals expect a high level of engagement on social media. They should put some extra efforts to make friends in real life than on social media. They look for emotional support from friends made on social media sites. They develop easy trust among social media friends.

Discussion :

In this analysis, we have considered the effect of social media life on causing loneliness. Many exploration papers, for example, the one by (Huishan Guo,2018) have used the technique of factor analysis to understand the variables that cause people to feel alone and correlation analysis to understand the connection among loneliness and those variables. In our analysis, we have utilized regression technique to create a mode to see how social networking makes youth unsociable and desolate. We have identified several variables that are associated with internet-based life and its use. Youths invest a large portion of their time and energy in online networking sites.

They build up a passionate closeness with Facebook or Instagram companions instead of genuine loved ones. They long for steady acknowledgment and friendship and expect a high commitment to their online networking posts. These elements if not satisfied cause dejection among youths over some undefined time frame. This investigation is contemplation based on numerous examinations on significant issues. In any case, with the constraint of information and time, this proposition is just about the connection between internet-based life use and the feeling of loneliness of Indian youth. It is an exploratory and fundamental conversation in the current global scenario. There are yet numerous opportunities for development and investigation in the profundity and expansiveness of the examination. Taking all things together, this investigation has the accompanying deficiencies that have the opportunity to get better. An examination concentrate on various online life can be significant to investigate how extraordinary kind of web-based life impact individuals and in what ways. This study deals with all types of social media networks irrespective of usage and popularity. But the effect of online networking sites by youth generation can be progressively intricate and differing. Instead of trying to analyze all online networking sites together, it will be effective if one of them is chosen (e.g. Facebook, Instagram, etc.,) and the impact is studied accordingly. There is still a lot of opportunities to get better in the research structure and exploration technique. It would be valuable for future work to parse out every stage separately to help sharpen comprehension of these affiliations. At long last, it ought to be considered that this investigation concentrated on youth aged between 16–30 years; because of which these outcomes can't be summed up to other age groups and different sections of the population, for example, adults aged 30 years and above. Also, in this research paper, we have created a modal that explains how only certain factors a major impact on loneliness have whereas other factors are not considered. But the research can be modified in the future to conduct an analysis that studies the impact of all the factors considered in this study.

References :

1. Asher, S. R., & Weeks, M. S. (2014). Loneliness and belongingness in the college years. In R. J. Coplan & J. C. Bowker (Eds.), The Handbook of Solitude: Psychological perspectives on social isolation, social withdrawal, and being alone (pp. 283-301). Hoboken, NJ: John Wiley. doi: https://doi.org/10.1002/9781118427378.ch16
2. Baker, L. R., & Oswald, D. L. (2010). Shyness and online social networking services. Journal of Social and Personal Relationships, 27(7), 873-889. doi: 10.1177/0265407510375261
3. Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., & Griffiths, M. et al. (2017). Problematic Social Media Use: Results from a Large-Scale Nationally Representative

Adolescent Sample. PLOS ONE, 12(1), e0169839.
https://doi.org/10.1371/journal.pone.0169839

4. Bayindir, N., & Kavanagh, D. (2018). The latest social media trends to know in 2019. (Social: Global Web Index's flagship report on the latest trends in social media), Flagship Report 2018. Retrieved from https://www.globalwebindex.com/hubfs/Downloads/Social-H2-2018-report.pdf.

5. Boniel-Nissim, M., & Dolev-Cohen, M. (2013). Face to face with teenagers using Facebook. Mifgash: Journal of Social-Educational Work, 38, 79-94

6. Boyd D M, Ellison N B. Social network sites: definition, history, and scholarship. J Comput-Mediat Comm. 2007;13(1):210–230. doi: 10.1111/j.1083-6101.2007.00393.x

7. Burke, M., Marlow, C., & Lento, T. (2010). Social network activity and social well-being. Proceedings of 28th ACM Conference: Human Factors in Computing Systems, (pp. 1909-1912). doi: 10.1145/1753326.1753613

8. Christensson, P. (2013, August 7). Social Media Definition. Retrieved 2020, June 28, from http://techterms.com

9. Chukwuere, J. E., & Chukwuere, P. C. (2017). The impact of social media on social lifestyle: a case study of university female students, Vol.15(4), 9966-9981. https://hdl.handle.net/10520/EJC-c1e3ae5f6

10. Correa, T., Hinsley, A. W., & De Zuniga, H. G. (2010). Who interacts on the Web? The Intersection of users' personality and social media use. Computers in Human Behavior, 26(2), 247-253.doi: 10.1016/j.chb.2009.09.003

11. De Jong Gierveld, J., & Van Tilburg, T. (2010). The De Jong Gierveld short scales for emotional and social loneliness: Tested on data from 7 countries in the UN generations and gender surveys. European Journal of Ageing, 7(2), 121-130. doi:10.1007/s10433-010-0144-6.

12. Diener, E. (2009). *The Collected Works of Ed Diener: Defining and Measuring Subjective Well-Being*. Springer.

13. Dzogang, F., Goulding, J., Lightman, S., & Cristianini, N. (2017). Seasonal Variation in Collective Mood via Twitter Content and Medical Purchases. Retrieved 27 June 2020, from. (pp. 63-74). https://doi.org/10.1007/978-3-319-68765-0_6

14. Eggermont, S., & Van den Bulck, J. (2006). Nodding off or switching off? The use of popular media as a sleep aid in secondary-school children. Journal of Paediatrics and Child Health, 42(7-8), 428-433. https://doi.org/10.1111/j.1440-1754.2006.00892.x

15. Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. Journal of Substance use, 10(4), 191-197.doi: https://doi.org/10.1080/14659890500114359

16. Hawi, N., & Samaha, M. (2016). To excel or not to excel: Strong evidence on the adverse effect of smartphone addiction on academic performance. Computers & Education, 98, 81-89. https://doi.org/10.1016/j.compedu.2016.03.007

17. Heponiemi, T., Elovainio, M., Kivimäki, M., Pulkki, L., Puttonen, S., & Keltikangas-Järvinen, L. (2006). The longitudinal effects of social support and hostility on depressive tendencies. Social Science & Medicine, 63(5), 1374-1382. https://doi.org/10.1016/j.socscimed.2006.03.036

18. Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: a meta-analytic review. Perspectives on Psychological Science, 10(2), 227-37. doi: 10.1177/1745691614568352

19. Hu, M. (2009). Will Online Chat Help Alleviate Mood Loneliness? Cyberpsychology & Behavior, 12(2), 219-223. https://doi.org/10.1089/cpb.2008.0134

20. Guo, Huishan (2015). " *Linking Loneliness and Use of Social Media*"[University of Helsinki, Faculty of Social Sciences, Department of Social Research]

21. Hunt, M. G., Marx, R., Lipson, C., & Young, J. (2018). No More FOMO: Limiting Social Media Decreases Loneliness and Depression. Journal of Social and Clinical Psychology, 37(10), 751-768. https://doi.org/10.1521/jscp.2018.37.10.751

22. Jesse Fox, Jennifer J. Moreland (2015). The dark side of social networking sites: An exploration of the relational and psychological stressors associated with Facebook use and

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affordances. Volume 45, April 2015, Pages 168-176. https://doi.org/10.1016/j.chb.2014.11.083

23. Junghyun Kim, Robert LaRose, and Wei Peng.CyberPsychology & Behavior. Aug 12(4).451-455.http://doi.org/10.1089/cpb.2008.0327

24. Kraut R, Kiesler S, Boneva B, Cummings J, Helgeson V, Crawford A. Internet paradox revisited. Journal of Social Issues. (2002) Jan;58(1). (pp.49–74)

25. Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? American Psychologist, 53(9), 1017-1031. doi:10.1037/0003-066X.53.9.1017

26. Lakdawalla, Z., Hankin, B., & Mermelstein, R. (2007). Cognitive Theories of Depression in Children and Adolescents: A Conceptual and Quantitative Review. Clinical Child and Family Psychology Review, 10(1), 1-24. https://doi.org/10.1007/s10567-006-0013-1

27. Lim, M., & Yang, Y. (2015). Effects of users' envy and shame on social comparison that occurs on social network services. Computers in Human Behavior, 51, 300-311. doi: 10.1016/j.chb.2015.05.013

28. Louise Hawkley, John T Cacioppo. Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms, Article (PDF Available) in Annals of Behavioral Medicine 40(2):218-27. DOI: 10.1007/s12160-010-9210-8

29. Maes M, Vanhalst J, Spithoven A W, Van den Noortgate W, Goossens L. Loneliness and Attitudes Toward Aloneness in Adolescence: A Person-Centered Approach. (2016);45(3):547-67. doi: 10.1007/s10964-015-0354-5.

30. Mangold, W.G., & Faulds, D.J. (2009). Social media: The new hybrid element of the promotion mix. Business Horizons, 52(4), 357–365. DOI: 10.1016/j.bushor.2009.03.002

31. Masi, C. M., Chen, H. Y., Hawkley, L. C., & Cacioppo, J. T. (2010). A meta-analysis of interventions to reduce loneliness. Personality and Social Psychology Review, 15(3), 219-266. https://doi.org/10.1177/1088868310377394

32. Mesch, G., & Talmud, I. (2010). Wired Youth: The social world of adolescence in the information age. New York: Routledge. https://doi.org/10.4324/9780203855102

33. Miller, D., Costa, E., Haynes, N., McDonald, T., Nicolescu, R., Sinanan, J., Spyer, J., Venkatraman, S., Wang, X. (2016). How the World Changed Social Media. London: UCL Press. Retrieved June 28, 2020, from www.jstor.org/stable/j.ctt1g69z35

34. Orie Berezan, Anjala Krishen, Anuj Jenveja. Loneliness and Social Media: The Interplay of Physical and Virtual Social Space. In book: Marketing and Humanity: Discourses in the Real World, Publisher: Cambridge Scholars Publishing, pp.49

35. Patricia Niland, Antonia C. Lyons, Ian Goodwin, Fiona Hutton(2014). Friendship Work on Facebook: Young Adults' Understandings and Practices of Friendship. https://doi.org/10.1002/casp.2201

36. Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. Journal of applied developmental psychology, 30(3), 227-238. doi: https://doi.org/10.1016/j.appdev.2008.12.010

37. Peplau, L. A., & Perlman, D. (1982). Perspective on loneliness. Loneliness: A sourcebook of current theory, research, and therapy (pp. 1-18). New York: John Wiley and Sons.

38. Perlman, D., & Peplau, L. A. (1981). Toward a Social Psychology of Loneliness. Personal Relationships: Relationships in Disorder (pp. 31-56). London: Academic Press

39. Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. Y., Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social Media Use and Perceived Social Isolation Among Young Adults in the U.S. American journal of preventive medicine, 53(1), 1–8. https://doi.org/10.1016/j.amepre.2017.01.010

40. Quan-Haase, A., & Young, A. (2010). Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging. *Bulletin Of Science, Technology & Society*, *30*(5), 350-361. https://doi.org/10.1177/0270467610380009

41. Raacke, J., & Bonds-Raacke, J. (2008). MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. Cyberpsychology & behavior, 11(2), 169-174. doi: 10.1089/cpb.2007.0056

353

42. Riegner, C. (2007). Word of Mouth on the Web: The Impact of Web 2.0 on Consumer Purchase Decisions. *Journal Of Advertising Research*, *47*(4), 436-447. https://doi.org/10.2501/s0021849907070456

43. Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: concurrent and discriminant validity evidence. *Journal of personality and social psychology*, 39(3), 472–480. https://doi.org/10.1037//0022-3514.39.3.472

44. Schroeder, R.(2018). The internet in everyday life I: Sociability. In Social Theory after the Internet: Media, Technology, and Globalization (pp. 82-100). London: UCL Press. doi:10.2307/j.ctt20krxdr.7.

45. Sharabi, A.& Margalit, M., (2010). Social ties on the internet and sense of loneliness among students with and without learning disabilities. Article in Journal of Learning Disabilities 44(3):215-27. doi: 10.1177/0022219409357080

46. Sheldon, P. (2008). The relationship between unwillingness-to-communicate and students 'Facebook use. Journal of Media Psychology, 20(2), 67-75. https://doi.org/10.1027/1864-1105.20.2.67

47. Smith, A., & Anderson, M. (2018). Social media use in 2018. Washington, DC: Pew Internet & American Life Project. Retrieved from http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/

48. Sponcil, M., & Gitimu, P. (2013). Use of social media by college students: Relationship to communication and self-concept. Journal of Technology Research, 4,(1)

49. Steinfiek, C., Ellison, N., Lampe, C., & Vitak, J. (2012). Online social network sites and the concept of social capital. In Frontiers in New Media Research, 15, 115-131

50. Stillman, T., Baumeister, R., Lambert, N., Crescioni, A., DeWall, C., & Fincham, F. (2009). Alone and without purpose: Life loses meaning following social exclusion. *Journal Of Experimental Social Psychology*, *45*(4), 686-694. https://doi.org/10.1016/j.jesp.2009.03.007

51. Tandoc, E., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is Facebooking depressing? Computers In Human Behavior, 43, 139-146. https://doi.org/10.1016/j.chb.2014.10.053

52. Ventola C. L. (2014). Social media and health care professionals: benefits, risks, and best practices. P & T: a peer-reviewed journal for formulary management, 39(7), 491–520

53. Wang, Q., Fink, E. L., & Cai, D. A. (2008). Loneliness, gender, and parasocial interaction: A uses and gratifications approach. Communication Quarterly, 56(1), 87-109. https://doi.org/10.1080/01463370701839057

54. Wells, M., & Mitchell, K. J. (2008). How do high-risk youth use the Internet? Characteristics and implications for prevention. Child Maltreatment, 13(3), 227-234. https://doi.org/10.1177/1077559507312962

55. Weinstein, A., Dorani, D., Elhadif, R., Bukovza, Y., Yarmulnik, A., & Dannon, P. (2015). Internet addiction is associated with social anxiety in young adults. Annals of Clinical Psychiatry, 27(1), 4-9. Retrieved from www.scopus.com

56. Westerman, D., Spence, P.R., & Van Der Heide, B. (2014). Social Media as Information Source: Recency of Updates and Credibility of Information. Journal of Computer-Mediated Communication, 19(2), 171–183. doi: 10.1111/jcc4.12041

57. Yang, C. C., & Brown, B. B. (2016). Online self-presentation on Facebook and self-development during the college transition. Journal of youth and adolescence, 45(2), 402-416. doi: 10.1007/s10964-015-0385-y