

Świdziński, Rafał, Gryc, Anna, Golemo, Jagna, Nowińska, Aleksandra, Lipiec, Jakub. Social media and the possibility of depressive states in young adults. *Journal of Education, Health and Sport*. 2022;12(12):104-112. e-ISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2022.12.12.016>
<https://apcz.umk.pl/JEHS/article/view/39865>
<https://zenodo.org/record/7325208>

The journal has had 40 points in Ministry of Education and Science of Poland parametric evaluation. Annex to the announcement of the Minister of Education and Science of December 21, 2021. No. 32343.

Has a Journal's Unique Identifier: 201159. Scientific disciplines assigned: Physical Culture Sciences (Field of Medical sciences and health sciences); Health Sciences (Field of Medical Sciences and Health Sciences).

Punkty Ministerialne z 2019 - aktualny rok 40 punktów. Załącznik do komunikatu Ministra Edukacji i Nauki z dnia 21 grudnia 2021 r. Lp. 32343. Posiada Unikatowy Identyfikator Czasopisma: 201159.

Przypisane dyscypliny naukowe: Nauki o kulturze fizycznej (Dziedzina nauk medycznych i nauk o zdrowiu); Nauki o zdrowiu (Dziedzina nauk medycznych i nauk o zdrowiu).

© The Authors 2022;

This article is published with open access at Licensee Open Journal Systems of Nicolaus Copernicus University in Torun, Poland

Open Access. This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author (s) and source are credited. This is an open access article licensed under the terms of the Creative Commons Attribution Non commercial license Share alike.

(<http://creativecommons.org/licenses/by-nc-sa/4.0/>) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited.

The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 07.09.2022. Revised: 29.10.2022. Accepted: 10.11.2022.

Social media and the possibility of depressive states in young adults

Rafał Świdziński, Anna Gryc, Jagna Golemo, Aleksandra Nowińska, Jakub Lipiec

Rafał Świdziński; rafalumswi@gmail.com, swidzinog@gmail.com; ORCID: 0000-0002-8535-0936

Anna Gryc; annclaris27@gmail.com; ORCID: 0000-0002-6258-1168

Jagna Golemo; jagnavlog@gmail.com; ORCID: 0000-0002-2785-858X

Aleksandra Nowińska; olanowinska565@gmail.com; ORCID:0000-0002-2235-1130

Jakub Lipiec; jlipiec98@gmail.com; ORCID: 0000-0001-6711-4684

Abstract:

Social media (SM) is now a popular place for content creation and a means of communication between young adults. Their increasing participation in our lives means that they replace us face to face contacts (FTF), which can affect our mental health. The above changes in communication habits may correlate with the occurrence of depressive states and a sense of social isolation.

The aim of the study is to analyze the relationship between the use of MS and the occurrence of depressive states in young adults on the basis of selected literature. The topic of emotional support and a sense of social isolation will also be discussed. PubMed and Google Scholar databases were used to select the appropriate literature, and only research was used.

The cited studies on the use of MS and depression showed that people who spent the most time on social media showed an increased risk of experiencing a depressed mood. Another study analyzed the likelihood of depression depending on the method of emotional support. The comparison of emotional support in FTF (face to face)

communication with the support obtained through MS showed that the possibility of depressive symptoms was lower for FTF communication and higher for the second method, respectively.

The use of social media among young adults contributes to an increased risk of depression, perceived social isolation and reduced emotional support. Moreover, it has been proven that addiction to MS positively correlates with the presence of depressive symptoms.

Keywords: depression; social media; mental health; young adults; emotional support; social isolation.

1. Introduction.

Social Media (SM) can be defined as "a group of web applications that enable the creation and exchange of user generated content". [1] They have become an integral element of communication between friends and family, a place to share personal content, get news, or provide entertainment. [2] The use of SM services like Facebook and Twitter has particularly increased among young adults who find themselves at critical moments related to the development of their identity and the establishment of social norms. [3] As many as 90% of young adults in the US, they have SM at least once a day. Their increasing participation in our lives and popularity mean that they partially replace our contacts „face to face” (FTF), which can affect our mental health. [4]

1.1. Depression.

Depression is a disease characterized by negative self-perception in two aspects. The first is the cognitive aspect that is associated with the emergence of pessimistic beliefs and expectations in an individual. The second of them, emotional, is a consequence of negative self-esteem and manifests itself in sadness, depression or guilt. According to psychiatric nomenclature, we can distinguish a "depressive episode", that is, a single mood disorder, and "recurrent depressive disorders" - the appearance of subsequent such episodes. To diagnose a depressive episode, a patient must have at least 4 symptoms characteristic of depression for a minimum period of 2 weeks. [5]

SM is a place that affects, in part, our mental health as well as our social relationships. It influence, among other things, the feeling of social isolation, which may be aggravated by the problematic use of SM. Similar processes concern emotional support or a sense of loneliness. These conditions increase the risk of depression and mental health problems. [6] Young adults are a group that frequently uses social networking sites, and they belong to the population group most often diagnosed with depression (20-40 years old). [5] The increased risk of mental disorders concerns especially those attending university. This prompts us to take a closer look at this part of the population. Up to 24% of students in low- and middle-income countries report symptoms of depression. [7]

The aim of the study is to analyze the relationship between the use of SM and the occurrence of depressive states in young adults on the basis of selected literature. The

topic of emotional support and a sense of social isolation will also be discussed. The works were selected using the PubMed and Google Scholar databases from which only research works were selected.

2. Social tendencies in the way of communication.

Young adults spend on average two to three hours a day on social networks as opposed to on average 39 minutes a day for socializing and personal communication. Nearly 20% of those living in the US prefer to communicate through SM rather than in person or over the phone, and 24% report that they are missing important moments in their lives because they have tried to capture and share them through SM. [8] The most engaged SM users can replace FTF relationships over time. Some research to date suggests that SM users may experience less depression as a result, possibly due to an increase in perceived social support. Others say that frequent use of SM may be associated with a decline in well-being and satisfaction with life. [9]

3. Depressive states and the use of social media.

The term depressive disorders refers to the complexes of depressive symptoms occurring in the course of affective disorders (also called affective disorders). These syndromes are manifested mainly by low mood, i.e. sadness, depression, low self-esteem, anhedonia, pessimism, disturbance of the circadian rhythm (insomnia or excessive sleepiness), psychomotor slowing down or decreased appetite. Depression is the most common cause of medical disability. [5,10]

In the US, a study was conducted on a group of 1,787 young adults aged 19 to 32 years for depression and use of SM. Social media use (SMU) was investigated in 3 aspects - (1) estimation of daily time spent in SM, (2) use of 11 most popular social media platforms, and (3) weekly number of visits to SM. Depression was assessed using a 4-point PROMIS (Patient-Reported Outcomes Measurement Information System) scale, which asked participants how often they had experienced depression in the last 7 days, including how they felt hopeless, worthless, helpless or depressed. [4,11] These items were rated on the 5-point Likert scale.

The results were divided into "low", "medium" and "high" tercyles. [12] People qualified to the "low" group constituted 44.5% of the surveyed population. In turn, the respondents from the "high" group with a high probability of depression constituted 26.3% of the population. Participants in the highest quartile for total time spent in SM each day were significantly more likely to develop depression compared to those in the lowest quartile. People with the highest quartiles for the number of visits to social media sites per week and the total frequency of visits also reported more depression. [4]

Another research work concerns the relationship between the occurrence of depressive symptoms and the closeness of real contacts with friends from SM. Ultimately, 1,124 students aged 18 to 30 from the US, who had SMU and depression

levels assessed, participated in it. Participants reported no live contacts with an average of 38.7% of their SM friends, distant real-world relations with 37.7%, and close FTF relations with 34.5% of their SM friends. The study showed that every 10% more contacts from SM that participants had no real relationship with was associated with a 9% greater possibility of moderate or severe symptoms of depression. However, a higher percentage of close contacts with friends from SM positively correlated with a lower depression in the respondents. This suggests that, in this case, communicating through social networks is an extension of the real relationship. [13]

Another study on the correlation of problematic SMU with symptoms of depression among young adults was conducted in the US on a sample of 1,796 people aged 19-32. The problematic SMU was assessed using a set of items adapted from the Bergen Facebook Addiction Scale (BFAS) replacing the word "Facebook" with "social media". A significant link has been shown between the use of SM and depressive symptoms. Problematic SMU was associated with a 9% higher risk of developing depressive symptoms. In addition, general SMU also turned out to be positively correlated with depressive symptoms, but interestingly, only in the case of increased frequency of visits to these sites, not in terms of time. This suggests that the way of using SM may be more important to depressive symptoms in young adults than the time you spend there. [14]

Excessive SMU can also be defined as a behavioral addiction that manifests itself in increased interest in SM, uncontrolled desire to use it and neglect of other areas of life for this reason. [15] Such an approach to the SMU issue is presented in the following study by Haand R., Shuwang Z. It was conducted in Afghanistan on a final sample of 329 students from local universities. Their level of addiction to SM and the level of depression were measured in them. The first was measured with the internet addiction test (IAT), which was used to measure the tendency to overuse SM. The analyzes performed in this study showed that addiction to SM has a positive correlation with the occurrence of mental health problems such as depression, loneliness, anxiety, stress and decreased self-esteem, but it is not a strong correlation. It has also been shown that the higher a student's level of addiction, the greater his depression level. [16]

4. Factors that may induce the occurrence of depressive states associated with the use of social media.

The American psychologist Martin Seligman has created a group of so-called determinants of an optimal life, the fulfillment of which brings us closer to achieving an ideal mental state. These are: positive relationships with others, personal development, positive attitude towards oneself, adequate perception of reality, competence in action and individual autonomy. The degree of their satisfaction determines the individual's well-being. [5] SM influence some of these determinants, such as the user's self-esteem or his relationships with others. [17] Their excessive

use may negatively affect the sense of social support, loneliness or the perceived social isolation, which causes disturbances in the mentioned sphere of optimal life.

4.1 Emotional support through social media and in face-to-face relationships.

Emotional support (ES) is usually obtained through close relationships with other people and is the type of social support most strongly associated with mental health outcomes. High ES protects against anxiety, stress, and depression. Data from the Behavioral Risk Factor Surveillance System (BRFSS) showed that those who reported high levels of perceived ES were 87% less likely to report their current depression. [18]

Research has been conducted to clarify the previously mixed findings on SM-based support and FTF relationships in terms of their impact on depressive states. These studies had two main exploratory goals: (1) assessing the independent relationships between each ES domain and depression, and (2) determining whether SM-based emotional support (SM-ES) is an extension or a separate construct from FTF emotional support (FTF-ES). 2,375 people aged 18-30 participated in the final sample. [8] Risk of depression was assessed using the nine-point Patient Health Questionnaire (PHQ-9). The risk of depression was divided in two groups: low and high, including moderate to severe symptoms, based on the recommended clinical cut-points. [19]

In bivariate logistic regression models, an increase in ES by 1 unit was significantly associated with a 44% lower probability of depression, while an increase by 1 unit in SM-ES was significantly associated with a 24% higher probability of depression. In a multivariate model that includes both ES, SM-ES and all personal covariates and sociodemographic, an increase in ES by 1 unit was significantly associated with a 43% lower probability of depression, while an increase in SM-ES by 1 unit was associated with a 20% higher probability of depression. [7]

4.2 Perceived social isolation and the use of social media.

Social isolation is a state in which an individual experiences a lack of social belonging, real commitment to relationships with others and satisfaction with these relationships, which is associated with increased morbidity. [20, 21] The construction of social isolation includes both objective social isolation - the actual lack of social ties - and subjective social isolation - a sense of a lack of connection with others. [22] Perceptions of being socially isolated and lonely were especially related to our mental and physical well-being. It also appears that loneliness appears to be related to worse health outcomes, both due to genetic predisposition and epigenetic factors. [21]

In the US, a study was conducted that focused on Perceived Social Isolation (PSI). The aim of this study was to assess the relationship between SMU and PSI in a nationally representative sample of young adults. Participants aged 19-32 completed the questionnaire for SMU and PSI, and responses were received from 1787 people. [20] Respondents presented: estimates for hours minutes per day in SM, and how

often you use each from 11 commonly used SM platforms. Other environmental and personal factors that may affect SMU and PSI were also assessed. [11]

The results of these studies, taking into account the weighting of the questionnaires, showed that PSI classified as low occurred in 42%, and high in 27% of the participants. Respondents in the highest quartile of daily time spent in SM were approximately twice as likely to increase their PSI in comparison with people from the lowest quartile. Likewise, those who visited social media platforms the most times a week had about three times the chance on the increase in PSI. Additionally, single people and those with the lowest income were more likely to feel social isolation. [20]

5. Results – discussion.

Each of the aspects described - depressive states, PSI and ES have shown a relationship with the use of SM. In the case of the first two, increased SMU had a negative impact on the results, while in the latter, communication via SM resulted in a decrease in ES compared to FTF communication. Also, having a lot of friends in SM who you don't have contact with in real life is associated with increasing depression. It is possible that people who are already suffering from low well-being caused by any of these mechanisms reach for SM more often and prefer to form relationships through it. Perhaps due to the lack of the need for FTF interaction while maintaining ease of communication and high availability. [4] The presented studies have shown that the addictive use of SM can be defined both as one of the symptoms of depression and one of the causes of its exacerbation. This may be mediated by the presence of lower perceived social support, violence, and greater loneliness in SM. [6,12,15] Passive consumption of content as opposed to active communication is associated with negative effects of being in the SM space. Additionally, peers tend to publish idealized content in SM, which may lead to the misconception that others lead a more successful life. [23] Feeling "wasted time" by engaging in insignificant activities in SM also negatively affects mood. [24] Finally, it is possible that a more intense presence in SM increases the risk of cyberbullying, which increases the possibility of depression. In the future, it is worth assessing both passive and active interactions on social media platforms, their nature and impact on well-being. [4] SM offer support expression features such as liking a post or leaving an encouraging comment. Such ES gestures may not function in the same way as verbal or bodily expressions of support.

For certain groups of people, SMU may reduce the PSI by facilitating communication and creating bonds with one another. This is the case, for example, of people with rare or stigmatizing medical conditions. SM helps them create support groups that would otherwise be difficult to bring to life. People with certain personality types or geographically isolated people may also benefit more from SMU. Some studies have shown value for this type of communication. [25] Communication through social networks of close friends meeting FTF may be an extension of this relationship with a positive effect on the mental condition of these people. [13]

The link found between SM use and depression may prove important for future research and interventions. Among other things, a more detailed assessment of the content and factors influencing behavior in SM would be useful, which would ultimately improve our understanding of these actions. There may also be some useful ways to use social media platforms. Identifying people at risk of depression or socially isolated ones could make it easier for them to connect with loved ones, make new friends, or find support groups.

6. Limitations

In an attempt to capture the correlation between SMU and depression, a number of studies on this topic have been cited. Unfortunately, one of the limitations is the lack of Polish publications about it. On the other hand, some of the foreign research used in this work included the use of a total of 11 social media platforms, and it would be useful to analyze each platform separately with the well-being of young adults. Another limitation is the lack of information on diagnosed depression in the respondents, which makes it difficult to determine the direction of the relationship between SMU and deterioration of mental health. Therefore, the results of the research should be interpreted with caution. Finally, it is worth remembering that the works cited concerned a group of young adults, so they cannot be generalized to the younger or older generation.

7. Conclusions

The impact of communicating through SM, its use on depression and the factors that can cause it in young adults was assessed. The above studies, conducted on a representative group of people, showed that increased SMU may have a negative impact on the risk of depression and every of the listed factors - PSI and perceived ES. Moreover, it has been proven that addiction to SM and numerous virtual friendships positively correlate with the presence of depressive symptoms. As a consequence, there is a real risk of worsening the mental health of young adults, resulting in a sense of loneliness, depression, sadness, lack of self-confidence or low self-esteem among others. However, maintaining contact with loved ones not only through FTF, but also through SM, can positively affect these bonds and the well-being of the people who create them.

Reference

1. Kaplan AM, Haenlein M; *Users of the world, unite! The challenges and opportunities of Social Media*. Business Horizons 2010;53(1):59-68,
2. Subrahmanyam K, Reich SM, Waechter N, Espinoza G; *Online and offline social networks: Use of social networking sites by emerging adults*. Journal of Applied Developmental Psychology 2008;s.420–33,
3. Roisman GI, Masten AS, Coatsworth JD, Tellegen A; *Salient and emerging developmental tasks in the transition to adulthood*. Child Development 2004;s.75:123–33,
4. Lin LY, Sidani JE, Shensa A, Radovic A, Miller E, Colditz JB, Hoffman BH, Giles L, Primack BA; *Association between social media use and depression among U.S. young adults*. Depression and Anxiety 2016 Apr; 33(4), 323–331,
5. Gałęcki P, Szulc A: „Psychiatria” Wrocław: Edra Urban & Partner 2018, s.3,

6. <https://pacjent.gov.pl/zapobiegaj/zadbaj-o-swoje-zdrowie-psychiczne> [data dostępu 24.08.2022],
7. Chen Y, Liu X, Chiu DT, Ying Li, Mi B, Zhang Y, Ma L, Hong Yan; *Problematic Social Media Use and Depressive Outcomes among College Students in China: Observational and Experimental Findings* International Journal of Environmental Research and Public Health 2022;19;19(9):4937,
8. Shensa A, Sidani JE, Escobar-Viera CG, Switzer GE, Primack BA; Choukas-Bradley S, *Emotional support from social media and face-to-face relationships: Associations with depression risk among young adults*. Journal of Affective Disorders;2020 Jan 1;260:38-44,
9. Kross E, Verduyn P, Demiralp E; *Facebook use predicts declines in subjective well-being in young adults*. PLOS One 2013;Aug 14;8(8):e69841,
10. Rybakowski, Pużyński S, Wciórka J: *Psychiatria*. T. 2. Wrocław: Elsevier Urban & Partner, 2010, s. 305–375,
11. Pilkonis PA, Choi SW, Reise SP, et al. *Item banks for measuring emotional distress from the Patient-Reported Outcomes Measurement Information System (PROMIS®): depression, anxiety, and anger*. Assessment 2011 Sep;s.18(3):263–83,
12. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. *Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication*. Archives Of General Psychiatry 2005;Jun;62(6):617-27,
13. Shensa A, Sidani JE, Escobar-Viera CG, Chu KH, Bowman ND, Knight JM, Primack BA; *Real-life closeness of social media contacts and depressive symptoms among university students*; Journal of American College Health; 2018;Nov-Dec;66(8):747-753,
14. Shensa A, Escobar-Viera CG, Sidani JE, Bowman ND, Marshal MP and Primack BA; *Problematic Social Media Use and Depressive Symptoms among U.S. Young Adults: A Nationally-Representative Study*; Social Science & Medicine; 2017;Jun;182:150-157,
15. Hilliard J (2019). *Social media addiction - addiction center*. <https://www.addictioncenter.com/drugs/social-media-addiction/> [data dostępu 27.08.2022],
16. Haand R, Shuwang Z: *The relationship between social media addiction and depression: A quantitative study among university students in Khost, Afghanistan*. International Journal of Adolescence and Youth. 2020;25:780–786,
17. Kalpidou M, Costin D, Morris J; *The relationship between Facebook and the well-being of undergraduate college students*; Cyberpsychology, Behavior, and Social Networking. 2011 Apr;14(4):183-9,
18. Brinker J, Cheruvu VK; *Social and emotional support as a protective factor against current depression among individuals with adverse childhood experiences*. Preventive Medicine Reports 2016 Nov 25;5:127-133,
19. Kroenke K, Spitzer RL, Williams JB; *The PHQ-9: validity of a brief depression severity measure*. Journal of General Internal Medicine 2001 Sep;16(9):606-613,
20. Primack BA, Shensa A, Sidani JE, Whaite EO, Lin LY, Rosen D, Colditz JB, Radovic A, Miller E. *Social Media Use and Perceived Social Isolation Among*

- Young Adults in the U.S.* American Journal of Preventive Medicine. 2017 Jul;53(1):1-8,
21. Pantell M, Rehkopf D, Jutte D, Syme SL, Balmes J, Adler N. *Social isolation: a predictor of mortality comparable to traditional clinical risk factors.* American Journal of Public Health. 2013;103(11):2056–2062,
 22. Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. *Loneliness and social isolation as risk factors for mortality a meta-analytic review.* Perspectives on Psychological Science 2015;10(2):227–237,
 23. Burke M, Marlow C, Lento T. *Social network activity and social well-being.* CHI '10: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems 2010;Apr;s.1909–1912,
 24. Sagioglou C, Greitemeyer T. *Facebook's emotional consequences: Why Facebook causes a decrease in mood and why people still use it.* Computers in Human Behavior. 2014;35:359–63,
 25. Craig D, Strivens E. *Facing the times: A young onset dementia support group: Facebook TM style.* Australasian Journal on Ageing. 2016;35(1):48–53.