

SOCIAL MEDIA USE AND THE LEVEL OF STRESS DURING THE COVID-19 PANDEMIC IN KOSOVO

Jeton Kelmendi, University College “ABB”, Faculty of Mass Communication jeton.kelmendi@aab-edu.net

Delvina Beka¹, Center for psychological treatments” HOPE”, delvina-b@live.com

Isa Spahiu, University of Tetova. Faculty of Philology, isa.spahiu@unite.edu.mk

¹ **Corresponding author: Delvina Beka**, Center for psychological treatments” HOPE”,
delvina-b@live.com

Abstract

The Covid-19 widespread is likely to extend the hazard of dependent social media utilize (SMU) as individuals spend more time online keeping up network when face-to-face communication is restricted. And all this can have consequences for the mental health of the population. The main purpose of this research was to examine the relationship between the use of news for Covid-19 transmitted in social media and the level of stress during the pandemic. The quantitative methodology was used to conduct a cross-sectional in Kosovo, distributing an online survey on social media use and stress measurement. The sample of this research were 278 people who fulfilled the online survey, of whom $n = 172$, or 61.9%, were female and $n = 106$, or 38.1%, were male. Data collected with online survey are elaborated and analyzed with SPSS. The results obtained from this research revealed a strong positive correlation between social media use and stress level ($r = .587^{**}$; $p = .001$). Regarding the age differences in the use of social networks, the results showed the difference $\chi^2 (2) = 7.053$, $p = .029$. In terms of gender differences in social media use and stress levels, there are no differences.

Keywords: *stress, mental health, social media use, Covid-19*

¹ Corresponding author: Delvina Beka, Center for psychological treatments” HOPE”

1. INTRODUCTION

The COVID-19 pandemic poses a global health threat (Wang et al., 2020). The World Health Organization (WHO) has declared the COVID-19 outbreak a public health emergency of international concern (Mahase, 2020). The COVID-19 pandemic has spread worldwide and has had a significant impact on public health, governments, and social systems (Pan et al., 2020). Experiencing quarantine can have multiple psychological symptoms, such as anxiety, depression, panic, and stress (Brooks et al., 2020). Widespread postures a critical stunt and challenge to mental wellbeing since it could be a long-term, broad, overpowering, and multidimensional danger (Gruber et al., 2020). Without a doubt, looking for data amid a widespread can be tricky since negative data is omnipresent and perpetual, and no sum of data can dispose of the unavoidable sense of uncertainty (Rettie and Daniels, 2020). Occasions related to COVID-19 have overwhelmed the news and have been broadly spread on social media since the starting of 2020, when COVID-19 was labeled a widespread by the World Wellbeing Organization. Each day, individuals are uncovered to various stories approximately: government directions and way of life confinements; individuals challenging against such confinements and breaking the rules; logical revelations and deficiencies in supply chain issues. Amid this time, normal levels of uneasiness and misery have expanded (Hamilton and Coates, 2020). Due to the strict measures of physical remove, individuals are exceedingly subordinate on the media to memorize the most recent news about the widespread and to preserve contact with others (Limaye et al., 2020).

1.1 STRESS

Stress can be defined as a real threat interpreted as a threat to the psychological integrity of an individual, resulting in physiological and behavioral responses. Stress is an important factor affecting the health of the population. It may increase the risk of developing mental and physical health conditions, including depression and cardiovascular disease (Slavich and Irvin, 2014).

Stress occurs when environmental demands exceed one's ability to cope (Cohen et al., 2007). There are different types of stress, such as routine stress associated with daily responsibilities and traumatic stress experienced during an event such as a major accident, war, assault or natural disaster where people may be at risk of injury or severely killed. People who experience traumatic stress can have temporary emotional and physical symptoms that are very distressing, but most recover quickly after that. Despite the positive stress coping skills, the impact of chronic stress can be challenging (National Institute of Mental Health, 2021).

In psychology, the transactional model of stress and coping by Lazarus considers stress as the result of bringing about the relationship between the coping resources a person has at their disposal and the demands of the situation in which they find themselves. Lazarus emphasizes the importance of individual differences in the experience of stress, understanding that the relationship between stress and change is constantly changing as a result of the constant interaction between the person and their environment (Lazarus, 1990).

Men and women report different reactions to stress. Findings suggest that women are more likely to report stress-related physical symptoms than men (APA, 2012). Psychological stress is often associated with a wide range of negative health outcomes (Nielsen et al., 2008). There is a scarcity of data on age-related perceived stress levels. Few studies have explored the perception of stress in older adults, and the results have been volatile (Diehl and Hay, 2010). Some studies have found reduced stress perception with increasing age, while others have shown no differences between adolescents and adults (Cohen and Janicki-Deverts, 2012). Daily stress studies, in particular, have produced inconsistent findings. Socio-emotional theories of aging (Carstensen, Fung and Charles, 2003) explain how adults maintain emotional well-being as they age.

1.2 SOCIAL MEDIA

Social media is defined as the electronic form of communication through which users share information, ideas, personal messages, opinions, knowledge, and experiences (Smith

and Duggan, 2013). Social media provides ample opportunities for social connections and interactions. The media serve to provide a virtual "social context" (Adams & Marshall, 1996), a social environment where individuals can shape individual behavior. Social networking sites, such as Facebook, Twitter, Snapchat, Instagram, and MySpace, are the most popular social networking sites that provide electronic communication within society. The use of social media platforms has spread in recent years. For many people, the use of social media has become a daily routine, especially for the younger generations for whom social media has become an integral part of their social lives (Liang and Turban, 2012).

Age differences in media structure may reflect different roles and responsibilities according to life stage. Social media use changes with age (Kuss and Griffiths, 2011). Although social media is accessible to almost everyone, young people are the most active users, with 87% of 18-to 29-year-olds using social networking sites. The focus of the other social networking site, Twitter, seems to be on sharing opinions and information (Kwak et al., 2010) rather than on social interaction (Huberman, Romero and Wu, 2009). One of the biggest findings of social gerontology in recent decades is that older people spend less time on their personal networks than younger people (Cornwell, 2011). In a survey conducted by Holt et al. (2012) on age groups and the use of media for political purposes, it was hypothesized that there were differences between age groups in the use of social media. Research has shown that the younger generations are more likely to be more active and communicative on the Internet, compared to the older generations.

In spite of the significance of the media in spreading pressing data amid times of collective injury occasions, various considers have proposed that media introduction to catastrophes can cause destitute mental wellbeing results. Social media has played a number of positive parts within the trade of data amid the COVID-19 emergency, counting the spread of wellbeing suggestions, empowering communication and mental to begin with help (Dealer and Lurie, 2020), appearing open demeanors, involvement, and illness recognition as well as sentiments towards government (Zhu, Fu, Grépin, Liang and Fung, 2020). On the other hand, social media has too cultivated the fast spread of deception and prattle, which can make a sense of panic and perplexity within the open (Garfin, Silver and Holman, 2020).

1.3 RELEVANT STUDIES

Information from a expansive cross-sectoral overview conducted with over 69,000 college understudies in France between April and May 2020, when numerous nations were forcing barricades and domestic remain orders, found that 45% of respondents went through more than half of their time on instructive substance related to the widespread that devours hours each day (Wathelet et al., 2020). Moreover, people who detailed investing more time counseling COVID-19 related news on a day by day premise too detailed higher levels of uneasiness, stress, stretch, and sadness. These discoveries are steady with a expansive cross-sectional ponder of over 6,300 Americans conducted in Walk 2020, which found that individuals went through an normal of 55 minutes each day on social media and were looking for data around COVID-19 through different conventional sources of news as well (Riehm et al., 2020). Time went through on social media and the number of news sources counseled autonomously anticipated more noteworthy mental trouble, indeed when checked for socioeconomics and demographics, previous depressive symptoms or psychiatric illness, and the perceived risk of catching the corona virus. Moreover, (Prowse et al., 2021) found that visit utilize of social media amid the widespread was related with negative mental

wellbeing impacts. Other thinks about have utilized longitudinal models to look at within-person changes in time utilize and well-being and have yielded comparative comes about. For illustration, two thinks about following time utilize amid the primary months of blockage within the UK (Bu et al., 2020) and Ireland (Lades et al., 2020) propose that drawn out presentation to COVID data is related with less well-being.

II. RESEARCH METHODOLOGY

The purpose of this research is to identify the relationship between the use of news for Covid-19 transmitted in social media and its effect in the level of stress during the pandemic. With the aim of conducting this research we have selected the quantitative methodology for identifying the practices in the use of news for Covid-19 transmitted in social media and the stress that caused from the use of this news. In order for the objectives of the research to be met, we have raised this research question: Which is the correlation between the use of news for Covid-19 broadcast on social media and the level of stress during the pandemic?

For the realization of this research, as measuring instruments were used, the questionnaire that measures the relevant variables, including age and gender, was used. At the beginning of the questionnaire are placed some of the demographic questions such as age, gender, place of residence, and education, followed by the selected questionnaire. Use of social media for COVID-19- Participants appreciated the frequency of using social media to inform themselves about the current COVID-19 situation. Participants were inquired to review the normal number of add up to hours per day they had went through on utilizing social media amid the widespread period. Particularly, they were inquired to rate their time went through getting to COVID-19 related data through the social media stages utilized. Response times can range from less than 2 hours to more than 8 hours. Longer response times indicate more social media usage. The following question gathered information about the media as follows: "Do you use social media?" (Yes/No); On average, how much time do you spend each day following news and information

about COVID-19? 1 = "Less than 2 hours", 2 = "2-4 hours", 3 = "5-6 hours", 4 = "6-8 hours" and 5 = "over 8 hours"). The questionnaire used in this research is for measuring stress level, the DASS-21 (Lovibond and Lovibond, 1995). This is a 21-item self-report questionnaire. Seven items (e.g., "I tend to overreact to situations") are rated on a 4-point Likert scale (0 = does not apply to me at all; 3 = applies to me a lot or most of the time). Higher scores denote higher levels, while lower scores denote normal or easy levels. Cronbach's proposed questionnaire is =.925 with 7 questions. The higher the sum score, the higher the level of stress symptoms.

Data was collected between the end of November and the beginning of December 2020. The only specific requirement for participation was that the participants be over the age of 18. The participation was voluntary and uncompensated. All participants were instructed and given informed consent to participate via an online form. Surveys are provided in the national sample language. The procedure for completing the questionnaires took about 7 minutes. If there was any ambiguity, participants could contact us via the email address provided.

2.1 POPULATION AND SAMPLES

The target population of the study were all residents of Kosovo, more specifically, all citizens of the Republic of Kosovo. The research sample consists of about 278 respondents that participated in this research, of which $n = 172$ or (61.9%) were female and $n = 106$ of them or (38.1%) were male. Starting from the age of 18-30 were $n = 97$ (34.9%), 31-45 were $n = 140$ (50.4%) and over 46 years old were $n = 41$ (14.7%), of which 207 or (74.5%) were resident in the city and 71 or (25.5%) of them were with residence in the village, 24 or (8.6%) of them were in high school, 118 or (42.4%) in college, 22 or (7.9%) in specialization, 100 or (36%) in master and 14 or (5%) in doctorate. Below are tables to describe the distribution of respondents (see Table 1a.).

2.2 STATISTICAL ANALYSES

Data was analyzed using IBM SPSS v.20. Relevant analyses were performed upon completion of the SPSS data entry procedure. The normality test was used as a starting point to look at the data distribution where abnormal

distributions resulted. Spearman correlation analysis was used to explore the relationship between stress and social media use. To explore age-based changes in the level of stress and social media use participants were divided into

three age groups: 18-30 years old ($n = 97$), 31-45 years old ($n = 140$) and over 46 years old ($n = 41$). Cronbach's Alpha coefficient level was used to determine the reliability or consistency of the proposed questionnaires.

III. RESULTS

Below are the tables with the relevant analyses where table 1 contains the descriptive table.

Table 1. *Descriptive statistics for all study variables*

	N	Minimum	Maximum	Mean	SD.
Gender	278	-	-	-	-
Age	278	18.00	60.00	34.56	.67637
Stress	278	.00	21.00	8.6475	5.50138
SM use	278	1.00	5.00	1.9712	1.03681
Valid N (listwise)	278				

Notes. M = Mean, SD = Standard Deviation, Min = Minimum, Max = Maximum;

From table no. 1 it is seen that the total number of 278 is the number of participants, the minimum age is 18 years old and the maximum age is 60 years old with an average of $M = 34.56$ and with standard deviation $SD = .67637$. In

terms of the maximum level of stress severity is seen to be 21 points, while the maximum use of social media is seen to be number 5 which corresponds to the answer over eight hours.

Table 1a. *Demographic structure of the sample*

Variable	N	Percent %
Gender		
Female	172	61.9%
Male	106	38.1%
Age		
18-30	97	34.9%
31-45	140	50.4%
above 46	41	14.7%
Where do you live		
Urban	207	74.5%
Rural	71	25.5%
Level of education		
High school	24	8.6%
Faculty	118	42.4%
Specialization	22	7.9%
Master	100	36.0%
Doctoral	14	5.0%

Total	278	100.0%
-------	-----	--------

Table 1b. *Statistics on levels of conventional severity of stress*

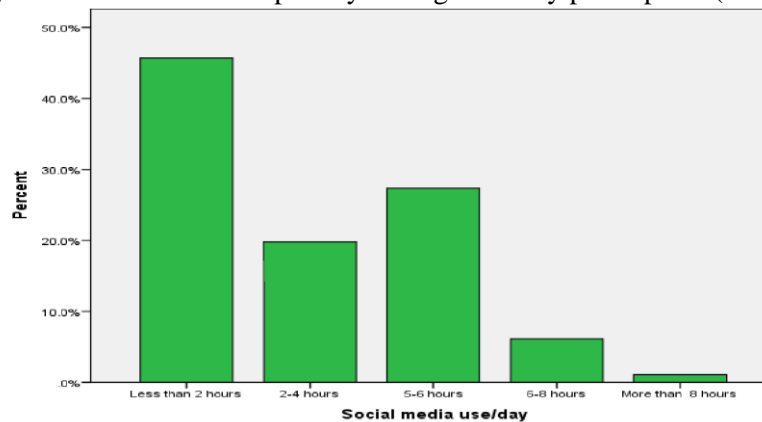
Variable	N	Percent %
Stress		
Normal	214	76.9%
Mild	56	20.2%
Moderate	8	2.9%
Severe		
Extremely Severe		
Total	278	100%

Table 1b shows the distribution of participants depending on the severity level of stress, resulting in lower values for lower levels of severity and vice versa. Depending on the values of the severity levels of the stress questionnaire, the participants resulted in the

following levels of stress: as a result, for stress 214 (76.9%) people were found to have stress with values considered normal, 56 (20.2%) mild stress, 8 (2.9%) people with moderate stress, and 0 people with severe or extremely severe stress.

Table 1c. *Duration of social media use*

Variable	N	Percent %
Social media use		
Less than 2 hour	127	45.7%
2-4 hours	55	19.8%
5-6 hours	76	27.3%
7-8 hours	17	6.1%
More than 8 hours	3	1.1%
Total	278	100.0

Figure 1. Social media use per day among the study participants (n=278).

Among the study participants, the use of SM per day was less than 2 hour in 45.7% ($n = 127$), 2-4 hours in 19.8% ($n = 55$), 5-6hours in 27.3% ($n = 76$), 7-8 hours 6.1% ($n = 17$) and more than 8 hours in 1.1% ($n = 3$) (Table 1c and Figure 1).

Table 2. *Spearman correlation analysis between stress and social media use*

Spearman's rho		Social media use	Stress
Social media use	Correlation Coefficient	1.000	.587**
	Sig. (2-tailed)	.	.001
	N	278	278
Stress	Correlation Coefficient	.587**	1.000
	Sig. (2-tailed)	.001	.
	N	278	278

** Correlation is significant at the 0.01 level (2-tailed). From the correlation analysis of Spearman, it is seen that social media use and stress have a high positive significant correlation, which means with the increase of one variable the other variable increases too ($r = .587^{**}$; $p = .001$).

Table 3. *Kruskal-Wallis analyze for age difference on social media use and stress*

	Social media use	Stress
Chi-Square	7.053	5.577
Df	2	2
Asymp. Sig. (2-tailed)	.029	.062

Grouping variable: age

Test results show that there are significant age differences in social media use $\chi^2(2)=7.053$, $p = .029$. While in terms of the average level of social media use from 278 participants, age 18–30 years showed the highest use of social media with an average $M = 152.23$, followed by age 46–60 with an average $M = 149.94$, and finally,

age 31–45 resulted in the lowest use of social media with an average $M = 127.62$. Regarding the level of stress, it turned out that there were no significant differences in terms of ages, although on average, the age of 18–30 resulted in a higher level of stress.

Table 4. Mann-Whitney U test for gender differences in stress and social media use

	Social media use	Stress
Mann-Whitney U	8830.00	8148.00
Wilcoxon W	23708.00	23026.00
Z	-.469	-1.490
Asymp. Sig. (2-tailed)	.639	.136

From the obtained results, it can be seen that there are no significant differences since $p > 0.05$ in both cases. From this, we conclude that there are no gender differences regarding the level of stress and the use of social media. The Mann-Whitney test for the use of social media shows these values ($U = 88300.00$, $p = .639$), where in terms of averages, it turned out that there were differences and that women were more users of social networks than men. As for stress, the result is ($U = 8148.00$, $p = .136$), where in terms of averages, it turned out that women have a higher level of stress than men.

IV. DISCUSSION

Open mental wellbeing after the outbreak of COVID-19 could be a major issue of concern. Intemperate social media introduction to this open wellbeing emergency can cause intense stretch as well as long-term mental trouble (Garfin et al., 2020). Our main goal in this study was to examine the relationship between the use of news for Covid-19 transmitted in social media and the level of stress during the pandemic. According to the findings, the use of social media and the level of stress have a high positive correlation ($r = .587^{**}$; $p = .001$), implying that during the pandemic, the use of social media related to COVID-19 information caused high levels of stress. These results are also consistent with previous findings showing that frequent use of social media was positively associated with higher chances of anxiety and depression (Gao et al., 2020). The special part of social media utilize in mental wellbeing can be clarified by the characteristics of social media. Within the course of the widespread, social media has become one of the foremost vital channels for spreading data with awesome speed (Vendor & Lurie, 2020), and in all likelihood, this has led to high levels of stress. Regarding age differences in the use of social networks, the results showed differences and that the age group 18–30 years showed the highest use of social media, $\chi^2 (2) = 7.053$, $p = .029$. This is due to the fact that perhaps people at this age have more time than older people to use social media. While in terms of stress level, the results showed that there were no significant differences in terms of age groups, $\chi^2 (2) = 5.577$, $p = .062$. Compared to using

traditional media, young people are more likely to use social media resources to get information. Information on social media with text, photos, and videos enables people to stay informed on the latest events related to COVID-19 (Garfin et al., 2020). As for gender differences in the use of social networks and stress levels, there are no differences. Mann-Whitney U value for social media use is ($U = 8830.00$, $p = .639$), while for stress levels in men and women, the value is ($U = 8148.00$, $p = .136$). Some studies have found reduced stress perception with increasing age, while others have shown no differences between adolescents and adults (Cohen and Janicki-Deverts, 2012). Our discoveries too shed light on techniques for avoiding and interceding in falling apart mental wellbeing. It is basic for policymakers, open wellbeing organizations, guardians, analysts, and healthcare staff to stay delicate to the potential negative results of omnipresent social media introduction. The common open, particularly those who have been straightforwardly or by implication traumatized by COVID-19, may be exhorted to maintain a strategic distance from intemperate utilize of social media and learn compelling feeling direction methodologies to diminish the negative feelings caused by news scope.

LIMITS

The main limitation of this study is that we have not differentiated the types of media (i.e., traditional media, online), and this can be seen as a recommendation for the future to differentiate between traditional media and social media. The study only measured the sum of time went through utilizing social media and did not endeavor to break down media substance (e.g., positive versus negative data, writings, illustrations, or recordings), in spite of the fact that most of the news around COVID-19 have been with negative substance. At last, it must be recognized that plan moreover plays a major part in our case, cross-sectional plan limits causal deductions. Longitudinal ponders with long time delays are essential to clarify the mental forms that can be impacted by social media introduction, as well as to track mental wellbeing side effects over time after COVID-19. Therefore, for future research, it is

recommended to do both a longitudinal and an experimental study.

REFERENCES:

- Adams, G.R. and Marshall, S.K., 1996. A developmental social psychology of identity: Understanding the person-in-context. *Journal of adolescence*, 19(5), pp.429-442.
- American Psychological Association, 2012. Stress and Gender. Taken from: <https://www.apa.org/news/press/releases/stress/2010/gender-stress.pdf>
- Brooks, S.K., Webster, R.K., Smith, L.E., Woodland, L., Wessely, S., Greenberg, N. and Rubin, G.J., 2020. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The lancet*, 395(10227), pp.912-920.
- Bu, F., Steptoe, A., Mak, H.W. and Fancourt, D., 2020. Time-use and mental health during the COVID-19 pandemic: A panel analysis of 55,204 adults followed across 11 weeks of lockdown in the UK. *MedRxiv*.
- Carstensen, L.L., Fung, H.H. and Charles, S.T., 2003. Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and emotion*, 27(2), pp.103-123.
- Cornwell, B., 2011. Age trends in daily social contact patterns. *Research on aging*, 33(5), pp.598-631.
- Cohen, S. and Janicki-Deverts, D.E.N.I.S.E., 2012. Who's stressed? Distributions of psychological stress in the United States in probability samples from 1983, 2006, and 2009 1. *Journal of applied social psychology*, 42(6), pp.1320-1334.
- Cohen, S., Janicki-Deverts, D. and Miller, G.E., 2007. Psychological stress and disease. *Jama*, 298(14), pp.1685-1687.
- Diehl, M. and Hay, E.L., 2010. Risk and resilience factors in coping with daily stress in adulthood: the role of age, self-concept incoherence, and personal control. *Developmental psychology*, 46(5), p.1132.
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Wang, Y., Fu, H. and Dai, J., 2020. Mental health problems and social media exposure during COVID-19 outbreak. *Plos one*, 15(4), p.e0231924.
- Garfin, D.R., Silver, R.C. and Holman, E.A., 2020. The novel coronavirus (COVID-2019) outbreak: Amplification of public health consequences by media exposure. *Health psychology*, 39(5), p.355.
- Gruber, J., Prinstein, M.J., Clark, L.A., Rottenberg, J., Abramowitz, J.S., Albano, A.M., Aldao, A., Borelli, J.L., Chung, T., Davila, J. and Forbes, E.E., 2021. Mental health and clinical psychological science in the time of COVID-19: Challenges, opportunities, and a call to action. *American Psychologist*, 76(3), p.409.
- Hamilton, M. and Coates, S., Coronavirus and anxiety, Great Britain: 3 April 2020 to 10 May 2020. Office for National Statistics. 2020.
- Holmes, E.A., O'Connor, R.C., Perry, V.H., Tracey, I., Wessely, S., Arseneault, L., Ballard, C., Christensen, H., Silver, R.C., Everall, I. and Ford, T., 2020. Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*, 7(6), pp.547-560.
- Holt, K., Shehata, A., Strömbäck, J. and Ljungberg, E., 2013. Age and the effects of news media attention and social media use on political interest and participation: Do social media function as leveller?. *European journal of communication*, 28(1), pp.19-34.
- Huberman, B.A., Romero, D.M. and Wu, F., 2008. Social networks that matter: Twitter under the microscope. *arXiv preprint arXiv:0812.1045*.
- Kuss, D.J. and Griffiths, M.D., 2011. Online social networking and addiction—a review of the psychological literature. *International journal of environmental research and public health*, 8(9), pp.3528-3552.
- Kwak, H., Lee, C., Park, H. and Moon, S., 2010, April. What is Twitter, a social network or a news media? In *Proceedings of the 19th international conference on World wide web* (pp. 591-600).
- Lazarus, R.S., 1990. Theory-based stress measurement. *Psychological inquiry*, 1(1), pp.3-13.
- Buchanan, K., Aknin, L.B., Lotun, S. and Sandstrom, G.M., 2021. Brief exposure to social media during the COVID-19 pandemic: Doom-scrolling has negative emotional consequences, but kindness-scrolling does not. *Plos one*, 16(10), p.e0257728.

- Liang, T.P. and Turban, E., 2011. Introduction to the special issue social commerce: a research framework for social commerce. *International Journal of electronic commerce*, 16(2), pp.5-14.
- Limaye, R.J., Sauer, M., Ali, J., Bernstein, J., Wahl, B., Barnhill, A. and Labrique, A., 2020. Building trust while influencing online COVID-19 content in the social media world. *The Lancet Digital Health*, 2(6), pp.e277-e278.
- Mahase, E., 2020. China coronavirus: WHO declares international emergency as death toll exceeds 200. *BMJ: British Medical Journal (Online)*, 368.
- Merchant, R.M. and Lurie, N., 2020. Social media and emergency preparedness in response to novel coronavirus. *Jama*, 323(20), pp.2011-2012.
- National Institute of Mental Health. Major Depression. Take on 10.2021 from: www.nimh.nih.gov/health/statistics/prevalence/major-depression-among-adults.shtml
- Nielsen, N.R., Kristensen, T.S., Schnohr, P. and Grønbaek, M., 2008. Perceived stress and cause-specific mortality among men and women: results from a prospective cohort study. *American journal of epidemiology*, 168(5), pp.481-491.
- Pan, X., Ojcius, D.M., Gao, T., Li, Z., Pan, C. and Pan, C., 2020. Lessons learned from the 2019-nCoV epidemic on prevention of future infectious diseases. *Microbes and infection*, 22(2), pp.86-91.
- Prowse, R., Sherratt, F., Abizaid, A., Gabrys, R.L., Hellemans, K.G., Patterson, Z.R. and McQuaid, R.J., 2021. Coping with the COVID-19 pandemic: examining gender differences in stress and mental health among university students. *Frontiers in psychiatry*, 12, p.439.
- Rettie, H. and Daniels, J., 2021. Coping and tolerance of uncertainty: Predictors and mediators of mental health during the COVID-19 pandemic. *American Psychologist*, 76(3), p.427.
- Riehm, K.E., Holingue, C., Kalb, L.G., Bennett, D., Kapteyn, A., Jiang, Q., Veldhuis, C.B., Johnson, R.M., Fallin, M.D., Kreuter, F. and Stuart, E.A., 2020. Associations between media exposure and mental distress among US adults at the beginning of the COVID-19 pandemic. *American Journal of Preventive Medicine*, 59(5), pp.630-638.
- Slavich, G.M. and Irwin, M.R., 2014. From stress to inflammation and major depressive disorder: a social signal transduction theory of depression. *Psychological bulletin*, 140(3), p.774.
- Smith, A. and Duggan, M., 2013. Social media update 2013. *Pew Research Center*. Available at: file:///C:/Users/Lenovo/Downloads/PIP_Social-Networking-2013.pdf
- Spahiu, I., & Spahiu, E. (2016). teacher's role in classroom management and traditional methods. *ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies*, 2(3), 91-100.
- Spahiu, I., & Spahiu, E. K. (2018). THE ROLE OF SOCIAL INTERACTION IN LANGUAGE ACQUISITION. *Knowledge International Journal*, 23(5), 1399-1401.
- Wang, C., Horby, P.W., Hayden, F.G. and Gao, G.F., 2020. A novel coronavirus outbreak of global health concern. *The lancet*, 395(10223), pp.470-473.
- Wathelet, M., Duhem, S., Vaiva, G., Baubet, T., Habran, E., Veerapa, E., Debien, C., Molenda, S., Horn, M., Grandgenèvre, P. and Notredame, C.E., 2020. Factors associated with mental health disorders among university students in France confined during the COVID-19 pandemic. *JAMA network open*, 3(10), pp.e2025591-e2025591.
- Yeung, N.C., Lau, J.T., Yu, N.X., Zhang, J., Xu, Z., Choi, K.C., Zhang, Q., Mak, W.W. and Lui, W.W., 2018. Media exposure related to the 2008 Sichuan Earthquake predicted probable PTSD among Chinese adolescents in Kunming, China: A longitudinal study. *Psychological trauma: theory, research, practice, and policy*, 10(2), p.253.
- Zhu, Y., Fu, K.W., Grépin, K.A., Liang, H. and Fung, I.C.H., 2020. Limited early warnings and public attention to coronavirus disease 2019 in China, January–February, 2020: a longitudinal cohort of randomly sampled Weibo users. *Disaster medicine and public health preparedness*, 14(5), pp.e24-e27.