

Emotional Distress, Psychological Distress, and Hopelessness in School Teachers During COVID-19 Pandemic

Saima Parwez, Zainab, and Sabeen Rahim

Shaheed Benazir Bhutto Women University

Corona virus a high transmittable diseases which is became a global health threat, has drastic negative psychological impact on human mental health. Aim of the study was to investigate hopelessness, emotional distress, and psychological distress in school teachers during corona virus pandemic. A sample of hundred was taken from different private and government schools of Peshawar which is equally divided to male ($n = 50$), and female ($n = 50$). Beck hopelessness scale, perceived emotional distress inventory, and Kessler Psychological Distress Scale were administered to analyze the result. Result of the study shows positive correlation between emotional distress, and psychological distress, negative correlation between hopelessness and emotional distress, and hopelessness and psychological distress. Result also revealed significant difference between male and female scores and shows that male scored higher on Beck Hopelessness Scale, female scored higher on Perceived Emotional Distress Inventory and on Kessler Psychological Distress Sale.

Keywords. Covid-19, hopelessness, emotional distress, and psychological distress

Human beings are the most superior of all the creatures (Holy Quran, 2001, 17:70), because of their intelligence, reasoning ability, and ability to strive against problems. Human beings are sent to earth with all these abilities, to test their abilities, different challenges comes in the form of disasters, diseases, pandemics etc. Pandemics were experience by human since of the world (Maziti & Majuru, 2020). Earthly life is a kind of test of human conduct on the basis of their strength, intelligence, poverty, fame, wealth, and illness, to test their intelligence superiority over all other creatures, but when the matter is about illness, humans successfully fight against these

Saima Parwez, Zainab, and Sabeen Rahim, Department of Psychology, Shaheed Benazir Bhutto Women University, Peshawar, Pakistan.

Correspondence concerning this article should be addressed to Saima Parwez, Department of Psychology, Shaheed Benazir Bhutto Women University, Peshawar, Pakistan. Email: samipervez82@hotmail.com

diseases and proved themselves best to threat such illnesses, it is whether Malaria, tuberculosis, leprosy, influenza, smallpox or cancer. Now human intelligence is challenged by covid-19 or corona virus, which is spread very fast in China, and from China move to other countries (Bao et al., 2020).

Corona virus is highly transmittable disease, it is transmitted through cough, sneezing, and people also be infected through eyes, nose, mouth (Liu et al., 2020). Old aged people and people with chronic conditions such as diabetes, and heart diseases, cancer, lung disease are more prone to this virus (Jaarsveld, 2020).

As researcher are not successful to find any treatment till now for the disease, because of its fast spreading, no treatment and leading to death capability people are more scared which leads to psychological issues. In the whole world Covid-19 pandemic kept every student out of their school in the 2020, this is true that every school give online services to their student, but students were affected by lack of resources, which hit every student very hard in the education sector, not only students learning effects negatively, this pandemic erase progress of years in the education sector, many students who may be dropout or leave their studies uncompleted because of economic impact on their parents. Teachers were also effect in so many ways, they were effect in terms of their professional lives, and work. They need to move from traditional physical classes to online mode of delivery of educational services, in order to keep engaged students with learning, which lead teacher to extreme work load, to move teaching content to online space, which is time consuming, and working hours have increased with all this difficulties which teachers face, they are unable to see the reactions of their students, when teacher interact physically to their students it is easy to deal with, or shape their personality. Teachers also facing economic issues, because when parents are unable to pay fees , low budged schools were also not able to manage their salaries, it is best to say that teachers are warriors who fighting for shaping our future. Now it is the time for second wave of the disease which will be consider a perfect storm of, for mental health of everyone.

According to American Psychological Association dictionary of psychology (n.d.) hopelessness is the feeling of experiencing negative emotions, or sometimes improvement in once condition. Individual who feel hopelessness have no expectations about future. Feeling of hopelessness leads to lose interest in life. Hopelessness are emotions that characterized by absence of hope, cheerfulness, and desires. Feeling of hopelessness leads individual to lose interest in every day functioning. Saricali et al. (2020) define it as important factor of

forming depressive symptoms and suicidal ideation. Hopelessness result from some mental health condition, but sometimes hopelessness may occur as a result of some major issue like coronavirus pandemic, this pandemic affected physical as well and mental health of people (Fiorillo & Gorwood, 2020). People experience hopelessness because of first wave of coronavirus lockdown (Hacimusalar et al., 2020), and also because of rapid spread of the pandemic, to control the pandemic, government of every country have implemented certain restriction to follow, because of these restriction people face many social, economic, financial problems (Qiu et al., 2020), and they become the risk factors for anxiety and depression (Freeston et al., 1994) which are common signs of psychological distress (Drapeau et al., 2012).

A study on anxiety and hopelessness levels in COVID-19 pandemic: a comparative study of healthcare professionals and other community sample in Turkey, find out that health care workers level of hopelessness and state of anxiety were higher than non-health care workers. Hopelessness, and anxiety level were high in female participants as compared to male participants, nurse hopelessness, and anxiety level was higher than the doctors (Hacimusalar et al., 2020).

A study on fear of COVID-19, mindfulness, humor, and hopelessness: a multiple mediation analysis aimed to measure the role of mindfulness and humor and its relationship with covid-19 related fear and hopelessness. Aim of the study was to find out the mediating role of mindfulness and humor with the association of fear of covid-19, and hopelessness. Seven hundred and eighty six subjects were included in the study. Beck Hopelessness Scale (1974), Mindful Attention Awareness Scale (Brown & Ryan, 2003), Fear of COVID-19 Scale (Ahorsu et al. 2022), and Coping Humor Scale (Martin & Lefcourt, 1983) were used. Result of the study showed that high level fear of corona virus leads to decreased mindfulness and humor and in turn lower mindfulness and humor leads to high level of hopelessness (Saricali et al., 2020).

Psychological distress is a mental state of discomfort, which make individual unable to deal with the situation, It is characterized by common symptoms of depression and anxiety (Drapeau et al., 2012). An individual experience psychological distress when unable to cope with everyday problems, such as job related stress, family problems, relationship, and health issues, and traumatic experiences, (Marchand et al., 2005). Currently the most traumatic situation or the serious health issue is Covid-19, which highly transmittable and rapidly spreadable, and make people unable to deal successfully with this serious illness.

Rahman et al. (2020) conducted a study on factors associated with psychological distress, fear and coping strategies during the COVID-19 pandemic in Australia. The study aim was to identify the relationship between coping strategies, psychological distress, and fear during COVID-19 pandemic in Australia. Results revealed that there was moderate to high level of psychological distress, high level of covid-19 related fear, and medium to high level of resilience.

A study conducted by Al-Hanawi et al. (2020) measured psychological distress among health workers and the general public during the COVID-19 Pandemic in Saudi Arabia. Aim of the study was to measure psychological distress among Saudi population during the covid-19 pandemic. The data was collected from 3036 participants. Peritraumatic Distress Index was used to assess covid-19 related psychological distress. Result showed that 40% general population were distressed due to covid-19, 33% are mildly distressed, and 7% are severely distressed due to covid-19, level of psychological distress were high among young, females, health care workers, and in private sector workers.

Emotional distress is a state of severe mental suffering or physical pain. According to dictionary of Merriam-Webster (1982) emotional distress is unpleasant emotional reaction. It is combination of anxiety and depression. Individual who experience emotional distress may feel guilty without any cause, feeling hopeless, all the time worrying, isolation (Cacioppo et al., 2010) no sleep or heavily sleeping. It may experience due to death of loved ones, or because of traumatic situation such as covid-19, which people all around leads to traumatic situation in form of deaths, and serious illness etc. People worrying about their own health, about loved one health (Forbes & Krueger, 2019; Frascuilho et al., 2015).

Man et al. (2020) conducted a study on disease perception and coping with emotional distress during COVID-19 pandemic among medical staff. Aim of the study was to evaluate emotional distress, level of stress, perception of disease and coping strategies used by medical staff. One hundred and fifteen subjects (both working in COVID-19 and non COVID-19 department) were included in the study. Scales of the study were brief illness perception questionnaire, perceived stress scale, the profile of emotional distress, and the cognitive coping evaluation questionnaire. Result showed that perception about the disease and coping styles were similar between the groups, and shows high level of emotional distress, and stress in the first month of the outbreak of disease in medical staff worked in Covid-19 department verses working in non COVID-19 departments.

Shanahan et al. (2020) studied emotional distress in young adults during the COVID-19 Pandemic. Their study was aimed to examine previous stressors, stress, emotional distress and coping strategies during pandemic. Seven hundred and sixty eight participants, having age range of 20, were included in the sample. Result showed increased level of stress, and emotional distress during pandemic as compare to before and coping strategies were related with decreased stress and psychological distress.

Relationship between perceived stress and emotional distress during the covid-19 outbreak and the effects of boredom proneness and coping style was investigated by Yan and Duan (2020). Their study was aimed to measure the association between the corona virus, perceived stress, and emotional distress, whether boredom proneness is the mediator between perceived stress and emotional distress, and whether perceived stress and emotional distress would be moderated by individual coping style. Three thousand two hundred and thirty three participants participated in the study. Result showed severe emotional distress, increased perceived stress due to corona virus outbreak.

Rationale

COVID-19 is severe respiratory syndrome and common cold, it is highly transmittable disease (Lauxmann et al., 2020). Which affected more than two hundred and thirteen (213) countries in the whole world, with twenty eight million cases, and more than one million deaths. As COVID-19 pandemic is transmittable and it has serious threat to the physical health or sometimes result in death, when a disease has such serious consequences, psychological and mental health related factors also strongly associated with it. Keeping in mind the psychological factors, the current study aims is to measure psychological distress, emotional distress, and hopelessness among school teachers.

Objectives

1. To investigate relationship between hopelessness, psychological distress, and emotional distress among schools teachers during Covid-19 pandemic.
2. To find out impact of covid-19 among male and female teachers.
3. To measure the impact of covid-19 among private and government school teachers.

Hypotheses

1. Hopelessness, psychological distress and emotional distress will be positively related with each other among the school teachers.
2. The level of psychological distress, emotional distress will be high in private school teachers as compared to government school teachers during covid -19 pandemic.
3. Level of psychological distress, emotional distress, and hopelessness will be high in female school teachers as compared to male school teachers during covid-19 pandemic.

Method

Sample

The sample of the present study would consist of 100 (N=100) school teachers, with equal number of male and female school teachers ($n = 50$). School teachers were selected through convenient sampling technique from different schools. Age range varies from 20-55. Education level was from F.A/ F.S.C to M.A/ M.S.C.

The data was collected during the second wave of the covid-19 pandemic, during that situation most of the educational institutions were closed in Peshawar district. The educational activities were carried online, but in that situation few teachers/faculty members were coming on rotation for carrying out important administrative activities that is the reason that the researcher only collected data from the teachers who were physically present in the school/educational institutions premises and that is why small sample could be collected. but the sample is adequate enough to run the required statistical analysis.

Kessler Psychological Distress Scale (1992)

Kessler developed K10 Psychological Distress Scale (1992), which measures psychological distress on the basis of last 30 days experiences. The scale consists of 10 items with five responses. Scores below 20 will consider to be normal, between "20-24" indicate normal, and above 30 indicate severe psychological distress. Reliability of the scale is .88 (Andrew & Slade, 2001).

Beck's Hopelessness Scale (1988)

The Beck Emotional Distress scale was developed by Beck and Steer (1988). It measure negative expectations about future, which consist of 20 true false. It measure three aspects of hopelessness, feelings about the future, loss of expectation, and loss of motivation. The scale is designed for above 17 age, below 17 data will not be consider valid. Internal reliability of the scale is .93.

Perceived Emotional Distress Inventory (2010)

Moscoso and Reheiser (2010) developed perceived emotional distress inventory to find out the presence of emotional distress and to measure it severity. It is 15 item questionnaires which is rated on 4 point likert scale from 0-3. Answering is based on participant past month or today feelings. Internal consistency and reliability of the scale is .92.

Procedure

Data for the study was collected from different schools of Peshawar city. Formal permission was taken from concern authority, then participants were briefed about the objective of the study and ensured them about the privacy of their data, that it would be used only for research purpose. First demographic sheet was given to them, after that three scales Kessler Psychological Distress Scale (K10), the Perceived Emotional Distress Scale, and Beck's Hopelessness Scale were administered on them to measure their level of Psychological distress, Emotional distress and hopelessness.

Results

The data was collected from hundred school teachers to assess level of hopelessness, psychological distress and emotional distress in school teachers during covid-19 pandemic. The results indicate positive correlation between two variables, for example, psychological distress and perceived emotional distress (Table 2). Results also show negative correlation between hopelessness and emotional distress (Table 2).

The analysis further concluded that level of psychological and emotional distress in government school teachers is high as compared to the private school teachers (Table 3). It was also found that level of hopelessness, psychological and emotional distress in female school teachers is high as compared to male school teachers (Table 4).

Table 1
Psychometric Properties of Scales

Scale	items	<i>M</i>	<i>SD</i>	Range		α
				Potential	Actual	
K10	10	32.10	9.31	0-50	0-37	.93
PEDI	15	24.99	9.37	0-45	0-45	.92
BHS	20	11.20	3.45	0-20	0-15	.65

Note. k10 = Kessler psychological scale, PEDI = Perceived emotional distress scale, BHS = Beck hopelessness scale.

Table 1 shows mean, standard deviation, range and alpha reliability of the scales, which indicated that PEDI and K10 has high internal consistency whereas BHS showing satisfying internal consistency. In the initial phases of research the value of alpha as low as .70 is acceptable (Field, 2013).

Table 2
Correlation between Psychological Distress, Hopelessness and Emotional Distress

Variables	1	2	3
1 Psychological Distress	-	.64**	-.57**
2 Hopelessness		-	-.64**
3 Emotional Distress			-

** $p < .01$.

Result of Table 2 shows positive correlation between two variables, e.g. Psychological distress and perceived emotional distress. Result also shows negative correlation between hopelessness and emotional distress and hopelessness and psychological distress.

Results in Table 3 show significant difference between government and private school teachers on Kessler psychological distress scale with large size effect, also shows significance difference between government and private school teachers on emotional distress inventory with medium size effect.

Table 3
Mean Differences in Government and Private Sector Employees Among Study Variables (N=100)

Variables	Government (n = 50)		Private (n = 50)		t(98)	p	95%CI		Cohen's d
	M	SD	M	SD			LL	UL	
Psy. Distress	28.60	9.30	35.70	7.80	4.11	.00	-10.5	-3.68	.80
Emo. Distress	22.60	10.00	27.30	8.10	2.55	.01	-8.28	-1.03	.50

Note. CI = confidence interval, UL = upper limit, Psy. Distress = Psychological distress, Emo. Distress = Emotional distress

Table 4
Mean Differences in Gender Among Study Variables (N=100)

Variables	Male (n = 50)		Female (n = 50)		t(98)	p	95%CI		Cohen's d
	M	SD	M	SD			LL	UL	
K10	28.40	8.70	35.80	8.40	4.31	.00	-10.80	-3.90	.80
PED	22.20	9.50	27.70	8.40	3.05	.01	-8.99	-1.80	.60
BHS	12.30	3.40	10.10	3.10	3.21	.01	0.80	3.40	.60

Note. K10 = Kessler psychological distress, PED = Perceived emotional distress inventory, BHS = Beck hopelessness inventory.

Result in Table 4 shows significant difference between the scores of male and female on Kessler psychological distress scale, emotional distress scale, and beck hopelessness scale.

Discussion

Corona virus is a large family of fast spreadable virus between human and animals, which causes illness from usual cold to severe breathing problems such as severe acute respiratory syndrome, and Middle East respiratory syndrome (Liu et al., 2020). The present study aim was to find out the impact of corona virus on mental health of school teachers having online classes during corona virus pandemic. With the outbreak of corona virus pandemic all over the world people forced for stay at home, social distancing, social isolation in the form of lock down, travel restrictions severe physical and mental health problems, leads from individual to country then whole world to severe economic crises, so in the whole world this pandemic kept everyone, and everything in lose, and the biggest lose which we all are facing is, in the education sector. Progress of years in

the education sector erase this pandemic in a few months, where this pandemic erase progress of decades, there it also greatly affect teachers mental health too, because teachers are those who make possible this progress in the education sector.

First hypothesis of the study stated that hopelessness, psychological distress and emotional distress will be positively related with each other among the school teachers. Results showed positive correlation between psychological distress, and emotional distress whereas negative correlation between hopelessness and psychological distress, and hopelessness among school teachers. The psychological distress and coping styles in the early stages of the 2019 COVID-19 epidemic in the general mainland Chinese population: A web-based survey by Wang et al. (2020) is similar to our result. One thousand six hundred and seven (age 18 years or older) participants were included in the sample. Result indicated that outbreak of corona virus pandemic cause high level of psychological distress. Yu et al. (2020) investigated Coping style, social support and psychological distress in the general Chinese population in the early stages of the COVID-19 epidemic. Objective of the study was to find out psychological distress among general population. One thousand five hundred and eight eight participants responded to online forms. Result showed high level of psychological distress among Chines population. Talib and Mahmood (2015) investigated level of stress, and hopeless among care givers of severe diseases. One hundred and eighty participants participated in the study. Their age range was 17 to 60 years. Findings of the study shows high level of stress and hopeless among caregivers with low socioeconomic status. Maziti and Mujuro (2020) measured levels of hopelessness during COVID-19 imposed lockdown. Objective of the research was to find out level of hopelessness in general population in Zimbabwe. One hundred and three participants, above age 18 years were included in the study. Result of the study indicates moderate level of hopelessness in the sample. According to Suris et al. (1996) that females with chronic illness report high level of emotional distress, depression, and emotional problems, they feel sad all the time, or feeling bad, they think all the time about suicide. Pouwer et al. (2012) reported that patients with chronic illness, and diabetic patients have high level of emotional distress.

Second hypothesis of the study stated that the level of psychological distress, emotional distress will be high in private school teachers as compared to government school teachers during COVID-19 pandemic. Result of the study supported our hypothesis and revealed significance difference between private and government school teachers on psychological distress and emotional distress scale.

Gautam et al. (2020) measured self-reported psychological distress during the COVID-19 outbreak in Nepal. Data for the survey was collected by on line forms from two thousand and eighty two respondents. The survey was aimed at finding out psychological effects of COVID-19 in Nepal. Result showed high level of psychological distress among Nepalese. Feng et al. (2020) measured psychological distress in the shadow of the COVID-19 pandemic. The study was aimed at developing COVID-19 related psychological distress scale, and to measure psychological distress in unaffected healthy population. Six hundred and fifty two participants participated in the study. Result showed high internal consistency and revealed that general public have common COVID-19 related psychological distress. Margetic et al. (2021) measured predictors of emotional distress during COVID-19 pandemic in Croatia. Study was aimed to find out COVID-19 related psychological distress and its predicative factors. Two thousand eight hundred and sixty adults filled online responses. Result indicate 10.7% anxiety, 15.9% depression, 26.2% stress, and revealed high emotional distress with lower emotional stability, higher scores of agreeableness, avoidant coping, lack of active coping, and perceived social support. Sanchez-teruel, et al. (2021) measured role of gender in psychological strengths to protect college students confined by COVID-19 to emotional distress. Sample of the study consisted of six hundred and ninety nine participants, aged between 18 to 73. Result shows 28.6% distress, 18.9% anxiety, 28.3% depression on hospital anxiety and depression scale, and women have high level of self-efficacy, with higher level of resilience as compared to men.

Third hypothesis of the present study stated that level of psychological distress, emotional distress, and hopelessness will be high in female school teachers as compared to male school teachers during COVID-19 pandemic. Result of present study revealed significant difference between male and female scores. Result of Qiu et al.'s (2020) nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic are consistent with our results. Fifty two thousand seven hundred and thirty seven responses were received by on line forms access. Result of the study showed that females (24.87%) had high level of psychological distress and fear of corona virus then male (21.41%). Psychological distress and COVID-19 fears during the Initial phase of the pandemic in the United States was explored by French, et al. (2020). Two thousand online responses were collected from the United States. Results of the study showed that female gender is higher predictor for psychological distress. According to Montemurro (2020), with the

outbreak of infectious spreadable diseases like COVID-19 or other health issues cause emotional distress and severe anxiety. Juchnowicz et al. (2021) investigated the outbreak of SARS-CoV-2 pandemic and the well-being of Polish students and the risk factors of emotional distress during COVID-19 Lockdown. Objective of the study was to investigate anxiety, depression, emotional distress, and stress level among university students during COVID-19 lockdown. Sample of the study was consisted of two thousand one hundred and seventy two participants. Result showed higher emotional distress in females as compared to males, level of anxiety is also higher in females as compared to males, women's depression level is higher than men, and females showed higher stress than males. Result of our study did not support our hypothesis that females score higher on hopelessness scale as compare to males. In our result males scored higher on hopelessness scale as compare to females. Franza et al. (2020) explored the role of fatigue of compassion, burnout and hopelessness in healthcare employees and their experience in the time of COVID-19 outbreak. One hundred and two healthcare workers were included in the study. Researchers aimed to evaluate vicarious trauma, burnout and hopelessness, fatigue of compassion during lockdown due to COVID-19. Result showed higher level of hopelessness, significant fatigue was found in every healthcare workers. Lee (2020) measured COVID-19 anxiety among seven hundred and seventy five adults. Result revealed association between Covid-19 related anxiety with extreme hopelessness, suicidal ideation, negative religious coping, and alcohol drug coping.

Limitations

1. The first limitation of the present research is that the sample size is very low.
2. Sample was selected from Peshawar city only, which may not represent all the school teachers.
3. Another limitation of the current study is financial status of school teacher and their affects were not considered, because this pandemic effect finance on great level.
4. Sample of the study is limited to school teachers, college and university teachers are not included in the sample.

Recommendations

1. Sample was selected from Peshawar city only, it is suggested that other universities, colleges and schools of different cities should also be included.

2. It is very important to investigate the closers of school's effects on teacher's financial status (on salary) in future studies.
3. In future study can be carried out across different age groups and educational levels.

Conclusion

As corona virus is pandemic which spread very fast in the whole world and restrict people to their home cages, in the form of lockdown, when lockdown end, still school closures continue, but teacher are those who fulfill their duties and taking online classes. As the virus spread fast and became serious threat to physical health, it also has profound negative psychological impact on human mind to, negative effects such as anger, sadness, worry, frustration, loss of interest, cause difficulty in concentrating, financial stress, anxiety, panic. It leads teachers to mental health issues too because these are our most brave worriers fighting with the serious circumstances to fulfill their duties, to make the carriers of their students. The current study concluded high level of psychological distress, emotional distress and hopelessness in school teachers of Peshawar.

References

- Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2022). The fear of COVID-19 Scale: Development and initial validation. *International Journal of Mental Health and Addiction*, 20, 1537-1545. <https://doi.org/10.1007/s11469-020-00270-8>
- Al-Hanawi, M. K., Mwale, M. L., Alshareef, N., Qattan, A. M., Angawi, K., Almbark, R., & Alsharqi, O. (2020). Psychological distress amongst health workers and the general public during the COVID-19 pandemic in Saudi Arabia. *Risk Management and Healthcare Policy*, 13, 733-742. <https://doi.org/10.2147/rmhp.s264037>.
- American psychological association. (n.d.). APA dictionary of psychology. <https://dictionary.apa.org/hopelessness>.
- Andrew, G., Slade, T. (2001). Interpreting scores on Kessler Psychological Distress Scale (k10). *Australian and New Zealand journal of public health*, 25, 494-497.
- Arvidsdotter, T., Marklund, B., Kylén, S., Taft, C., & Ekman, I. (2015). Understanding persons with psychological distress in primary health care. *Scandinavian Journal of Caring Sciences*, 30(4), 687-694. <https://doi.org/10.1111/scs.12289>.

- Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: Address mental healthcare to empower society. *The Lancet*, 395 (10224), e37–e38. [https://doi.org/10.1016/S0140-6736\(20\)30309-3](https://doi.org/10.1016/S0140-6736(20)30309-3).
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology*, 42(6), 861–865. <https://doi.org/10.1037/h0037562>.
- Beck, A. T., & Steer, R. A. (1988). *Manual for the Beck Hopelessness Scale*. Psychological Corp.
- Cacioppo, J. T., Hawkley, L. C., & Thisted, R. A. (2010). Perceived social isolation makes me sad: 5-year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago health, aging, and social relations study. *Psychology and aging*, 25(2), 453-63. <https://doi.org/10.1037/a0017216>
- Drapeau, A., Marchand, A., & Beaulieu Pre'vost, D. (2012). Epidemiology of psychological distress. In LAbate, L. (Eds.). (2012). *Mental illnesses—understanding, prediction and control* (pp. 155-34). In Tech. <https://doi.org/10.5772/30872>.
- Feng, Lin-sen., Dong, Zheng-jiao., Yan, Ruo-yu., Wu, Xiao-qian., Zhang, Li; Ma, Jun., & Zeng, Yong (2020). Psychological distress in the shadow of the COVID-19 pandemic: Preliminary development of an assessment scale. *Psychiatry Research*, 291, 1-6. <https://doi.org/10.1016/j.psychres.2020.113202>.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Sage Publishers.
- Fiorillo, A., & Gorwood, P. (2020). The consequences of the COVID-19 pandemic on mental health and implications for clinical practice. *European Psychiatry*, 63(1), e32. <https://doi.org/10.1192/j.eurpsy.2020.35>
- Franza, F., Basta, R., Pellegrino, F., Solomita, B., & Fasano, V. (2020). The role of fatigue of compassion, burnout and hopelessness in healthcare: Experience in the time of COVID-19 outbreak. *Psychiatria Danubina*, 32(suppl. 1), 10-14.
- Freeston, M. H., Rhéaume, J., Letarte, H., Dugas, M. J., & Ladouceur, R. (1994). Why do people Worry. *Pers Individ Dif*, 17(6), 791-802. [https://doi.org/10.1016/0191-8869\(94\)90048-5](https://doi.org/10.1016/0191-8869(94)90048-5).
- Forbes, M. K., & Krueger, R. F. (2019). The Great Recession and mental health in the United States. *Clinical Psychological Science*, 7(5), 900-913. <https://doi.org/10.1177/2167702619859337>.
- Frasquilho, D., Matos, M. G., Salonna, F., Guerreiro, D., Storti, C. C., Gaspar, T., & Caldas-de-Almeida, J. M. (2015). Mental health outcomes in times of economic recession: a systematic literature review. *BMC Public Health*, 16(1), 1-40.

- French, M. T., Mortensen, K., & Timming, A. R. (2020). Psychological Distress and Corona virus Fears during the Initial Phase of the COVID-19 Pandemic in the United States. *National Library of Medicines*, 23(3), 93-100.
- Gautam, K., Adhikari, R. P., Gupta, A. S., Shresstha, R. K., Koirala, P., & Koirala, S. (2020). Self-reported psychological distress during the COVID-19 outbreak in Nepal: Findings from an online survey. *BMC Psychology*, 8(127). <https://doi.org/10.1186/s40359-020-00497-z>
- Holy Qur'an. (A. Y. Ali, Trans.). (2001). Wordsworth.
- Hacimusalar, Y., Kahve, A. C., Yasar, A. B., & Aydin, M. S. (2020). Anxiety and hopelessness levels in COVID-19 pandemic: A comparative study of healthcare professionals and other community sample in Turkey. *Journal of Psychiatric Research*, 129, 181-188. <https://doi.org/10.1016/j.jpsychires.2020.07.024>
- Jaarsveld, J.M.V., (2020). The effects of COVID-19 among the elderly population: A case for closing the digital divide. *Frontiers in Psychiatry*, 11, 1-7. <https://doi.org/10.3389/fpsy.2020.577427>
- Juchnowicz, D., Baj, J., Forma, A., Karakula, K., Sitarz, E., Bojucki, J., & Juchnowicz, D.H., (2021). The Outbreak of SARS-CoV-2 pandemic and the well-being of Polish students: The risk factors of the emotional distress during COVID-19 lockdown. *Journal of Clinical Medicine*, 10, 944. <https://doi.org/10.3390/jcm10050944>
- Lauxmann, M. L., Santucci, N. E., & Aufrán-Gómez, A. M. (2020). The SARS-CoV-2 Coronavirus and the COVID-19 Outbreak. *International Brazjurol*, 46(1), 6-18. <https://doi:10.1590/S1677-5538.IBJU.2020.S101>.
- Lee, A. S., (2020). Coronavirus anxiety: A brief mental health screener for covid-19 related anxiety. *Taylor & Francis online*, 44, 393-401. <https://doi.org/10.1080/07481187.2020.1748481>
- Liu, J., Liao, X., Qian, S., Yuan, J., Wang, F., & Liu, Y., (2020). A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person to person transmission: A study of a family cluster. *Lancet*, 395, 14-23.
- Man, M. A., Toma, C., Motoc, N. S., Necrelescu, O. L., Bondor, C. I., Chis, A. F., & Rajnoveanu, R. M. (2020). Disease Perception and Coping with Emotional Distress During COVID-19 Pandemic: A Survey among Medical Staff. *International Journal of Environmental Research and Public Health*, 17(13), 4899. <https://doi:10.3390/ijerph17134899>
- Marchand, A., Demers, A., & Durand, P. (2005). Do occupation and work conditions really matter? A longitudinal analysis of psychological distress experiences among Canadian workers. *Social Health Illn*, 27, 602-27.
- Martin, R. A., & Lefcourt, H. M. (1983). Sense of humor as a moderator of the relation between stressors and moods. *Journal of Personality and Social Psychology*, 45(6), 1313-1324. <https://doi.org/10.1037/0022-3514.45.6.1313>

- Margetic, B., Peraica, T., Stojanovic, K., & Ivanec, D. (2021). Predictors of emotional distress during covid-19 pandemic; a Croatian study. *Personality and Individual Differences, 175*, 110691. <https://doi.org/10.1016/j.paid.2021.110691>.
- Merriam-Webster (1982). Merriam Webster.com dictionary. <https://www.merriam-webster.com/legal/emotional%20distress>.
- Montemurro, N. (2020). The emotional impact of COVID-19: From medical staff to common people. *Brain, behavior, and immunity, 87*, 23-24. <https://doi.org/10.1016/j.bbi.2020.03.032>
- Moscoso, M. S., & Reheiser, E. C. (2010). Construct validity of the emotional distress inventory in patients with cancer. *Ansiedad Estrés, 16* (1), 83-94.
- Maziti, E., & Mujuru, A. (2020). Level of hopelessness during covid-19 imposed lockdown. *Business Excellence and Management, 10*(5), 155-167.
- Pouwer, F., Wijnhoven, H. A. H., Ujcic-Voortman, J. K., de Wit, M., Schram, M. T., Baan, C. A., & Snoek, F. J. (2012). Ethnic aspects of emotional distress in patients with diabetes - the Amsterdam Health Monitor Study. *Diabetic Medicine, 30*(1), e25-e31. <https://doi.org/10.1111/dme.12031>.
- Qiu J., Shen B., Zhao M., Wang Z., Xie B., & Xu, Y. (2020) A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. *General psychiatry, 33*(2). e100213. doi:10.1136/gpsych-2020-100213.
- Rahman, M. A., Hoque, N., Alif, S. M., Salehin, M., Islam, S. M. S., Banik, B., ... & Cross, W. (2020). Factors associated with psychological distress, fear and coping strategies during the COVID-19 pandemic in Australia. *Globalization and health, 16*(1), 1-15. <https://doi.org/10.1186/s12992-020-00624-w>.
- Sanchez-teruel, D., robles-bello, M. A., & Valencia-Naranjo, N. (2021). Psychological strengths protect college students confined by COVID-19 to emotional distress? The role of gender. *Personality and individual differences, 171*. 110507. <https://doi.org/10.1016/j.paid.2020.110507>.
- Saricali, M., Satici, S. A., Satici, B., Gocet-Tekin, E., & Griffiths, M. D. (2020). Fear of COVID-19, mindfulness, humor, and hopelessness: A multiple mediation analysis. *International journal of mental health and addiction, 1*-14. <https://doi.org/10.1007/s11469-020-00419-5>
- Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A. L., Nivette, A., Hepp, U., & Eisner, M. (2020). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. *Psychological Medicine, 1*-32. <https://doi.org/10.1017/s003329172000241x>.

- Talib, A., & Mahmood, K. (2015). Stress and hopelessness among caregivers of life threatening illnesses. *Research on Humanities, and Social Sciences*, 5(9), 2224-5766.
- Wang, H., Xia, Q., Xiong, Z., Li, Z., Xiang, W., Yuan, Y., & Li, Z. (2020). The psychological distress and coping styles in the early stages of the 2019 coronavirus disease (COVID-19) epidemic in the general mainland Chinese population: A web-based survey. *PLOS ONE*, 15(5), e0233410. <https://doi.org/10.1371/journal.pone.0233410>.
- Yan, L., & Duan. (2020). The relationship between perceived stress and emotional distress during the covid-19 outbreak: Effects of boredom proneness and coping style. *Journal of anxiety disorder*, 77, 102328. <https://doi.org/10.1016/j.janxdis.2020.102328>.
- Yu, H., Li, M., Li, Z., Xiang, W., Yuan, Y., Liu, Y., ... & Xiong, Z. (2020). Coping style, social support and psychological distress in the general Chinese population in the early stages of the COVID-19 epidemic. *BMC psychiatry*, 20(1), 1-11. <https://doi.org/10.1186/s12888-020-02826-3>

Received 16 August 2021

Revision received 25 February 2022