

Mental Well-Being Training for Mathematics Teachers to Deal with Online Learning Period

Submitted 1 December 2022, Revised 17 February 2023, Accepted 17 February 2023

Alfiandy Warih Handoyo^{1*}, Evi Afiati², Rochani Rochani³, Indah Juwita Sari⁴

^{1,2,3}Department of Guidance and Counseling, Faculty of Teacher Training and Education,
Universitas Sultan Ageng Tirtayasa, Serang, Indonesia

⁴Department of Biology Education, Faculty of Teacher Training and Education,
Universitas Sultan Ageng Tirtayasa, Serang, Indonesia
Corresponding Email: *alfiandywh@untirta.ac.id

Abstract

The online learning process leaves many problems in its implementation. One problem is the teacher's unpreparedness to manage stress due to implementing online learning activities. This study aimed to improve mathematics teachers' readiness to deal with pressure during online learning activities. The method used is action research which refers to 5 aspects of stress. The subjects in this study were 30 mathematics teachers who were members of the Serang Regency Subject Matter Teacher Forum. Indicators of success are participants who experience each aspect under eight people. Activities carried out in 2 cycles. The test results showed that the average score on the physical aspect changed from 15 people at the beginning of the assessment to 9 people in the first posttest and seven people in the second posttest. Furthermore, the emotional aspects of 14 people became nine people in the first posttest and six people in posttest 2. The mental aspect changed from 10 people in the pretest to 8 people in posttest 1 and five people in posttest 2. Behavioral aspects from 17 people to 10 people in the first posttest and seven people in the second posttest. The last aspect, spiritual, from 8 people, turned into four people in the first post-set and three people in the second post-set. Based on the data, training activities can reduce teacher stress levels during the online learning period.

Keywords: Mental health, Teacher stress, Online learning

INTRODUCTION

In 2020, the world experienced drastic changes due to the Covid-19 pandemic (Ramadhana, 2020). The government and society must make many changes and adjustments in life, including the world of education (Rahman & Bhakti, 2020). Since the beginning of the Covid-19 pandemic, the Ministry of Education and Culture has provided several guidelines for implementing learning (Kementerian Pendidikan dan Kebudayaan, 2020). Unfortunately, several references to changes in the governance of life and habits are only based on adaptation to physical habits. References and adjustments involving psychological aspects are hardly discussed in detail. When looking at the reality of life, the psychological aspect needs to be given serious attention considering the many psychological problems that have arisen due to the Covid-19 outbreak (Agung, 2020; Cao et al., 2020).

As part of Indonesian society, teachers also need to follow a habitual adaptation pattern in life. During the pandemic, teachers had to do several things (Arifa, 2020). Teachers must be role models in implementing health protocols during learning. Health protocols are habits during study activities that must be followed orderly to avoid the Covid-19 outbreak. The teacher also must accompany students during learning activities. One form of assistance that

teachers must carry out is dealing with students who are stressed due to difficulties during the online learning period. One subject that has many complaints is mathematics (Abdullah et al., 2020). During the study period, mathematics subjects experienced a tendency to decrease in grades in various schools (A'dadiyyah, 2021; Alfiah et al., 2021; Spitzer & Musslick, 2021)

To assist students with various kinds of stress and pressure situations, a teacher must be ensured to have a mental health condition to provide maximum service (Reinke et al., 2011; Sandra & Ifdil, 2015). Mental health can be translated as a person's way of thinking, feeling, and displaying an action/response efficiently and effectively in dealing with various life challenges and stressful situations (Hanurawan, 2012). The teacher, as an educator as well as a guide, is required to show maturity, maturity, and physical and spiritual health (Wardhani, 2017). Mental health is a fundamental aspect for a teacher in preparing to implement learning activities. Suppose the teacher experiences disturbances in the mental health aspect. In that case, it is feared that this condition will have an impact on the emergence of various disturbances during the learning process, and what is more worrying is that this condition will have a negative impact on the mental state of the students (Gray et al., 2017; Harding et al., 2019) Rusmana (2009) concluded, of the six criteria for PTSD, there are five types of disturbances in aspects of life. These five aspects are:

a) Physical aspect

Aspects that appear physically in sufferers of anxiety disorders include elevated body temperature, nausea, chills, lethargic body, nausea, dizziness, shortness of breath, and often feeling panicked.

b) Emotional Aspect

Aspects that appear in the emotional aspect include irritation, loss of passion for life, fear, unable to control emotions, and feeling inferior.

c) Mental Aspect

Aspects that appear in the mental aspect include often feeling confused, having difficulty concentrating, not being able to remember well, and being unable to solve problems.

d) Behavioral aspects

Several forms of behavioral disorders or new behaviors that appear include difficulty sleeping, loss of appetite, overeating, smoking a lot, consuming excess alcohol, anxiety, a lot of movement, irritability, suicidal thoughts, repetitive limb movements, excessive shame, self-isolation, and blaming others.

e) Spiritual aspect

Some forms of spiritual disturbance include despair, loss of hope, blaming God, stopping worship, helplessness, doubting beliefs, being unable to be sincere, and so on.

Seeing the phenomena and needs that exist, there is a need to train in mental health skills for teachers. This need is increasingly urgent considering the increasing number of problems in the learning process in adapting new habits. The purpose of writing this article is to examine appropriate methods to be given in training teachers to avoid stress during learning during the adaptation period to new habits. Furthermore, it is hoped that the study in this paper will inspire several further researchers to apply the form of training studied in this paper.

METHOD

Activities are carried out in action research, which refers to the Kemis and Tagart action research scheme (Arikunto, 2021). Participants in this activity were 30 mathematics teachers in Serang District who were active in Subject Matter Teacher Forum. The success criteria in this study were teachers/participants who experienced aspects of stress less than 25% or less than eight people in each aspect. Initially, the activities themselves were planned in one cycle by conducting discussion activities and workshops on efforts to reduce stress during online learning. However, the test results in the first cycle still did not reach a success indicator score, so a second cycle was held involving several teachers who were considered to have the same experience and abilities is good during online learning.

RESULTS AND DISCUSSION

Stress management is a skill everyone generally owns in managing pressure and problems that arise in life (Afiati et al., 2020). Individual skills for managing inner anxiety and its causes will show a person's potential, whether they tend to experience stress easily or not (Suranadi, 2012). The ability to manage stress is a comprehensive individual effort because it involves cognitive abilities and behavioral control to adapt the individual in dealing with and managing sources of stress. Someone's success in managing stressful situations will be able to reduce the severity and impact of stress (Hanum et al., 2016). Stress management techniques can be used to anticipate self-stress. If stress management techniques are applied with expert assistance, these techniques can also be used to overcome stress problems (Hakim et al., 2017).

The implementation of training activities in the first cycle refers to the stages in the implementation of training on stress management techniques (Hakim et al., 2017), there are:

- 1) In the first meeting, participants will be invited to identify aspects of stress and how to recognize the causes of stress in themselves. Identification data is also used as a pretest in

research. The approach used in this stage is psychoeducation, where the first meeting is conducted online.

- 2) Two days after the first meeting, it was followed by a workshop session held offline. At this stage, participants are invited to discuss ways to reduce stress and are allowed to practice coping skills using cognitive restructuring techniques, stress management, problem-solving, and relaxation. Furthermore, participants will be given independent assignments to practice the material that has been taught independently.
- 3) Independent assignments are carried out for about one week, and then an assessment is made of the condition of the participants.

Table 1 shows the data results of the pretest and post-end testing of the first cycle.

Table 1. The Result of Pretest and Posttest Cycle 1

	Pretest 1		Posttest 1	
	People	%	People	%
Aspect 1	15	50.00	9	30.00
Aspect 2	14	46.67	9	30.00
Aspect 3	10	33.33	8	26.67
Aspect 4	17	56.67	10	33.33
Aspect 5	8	26.67	4	13.33

In the application of stress management training activities, there is a decrease in the score for each aspect. This condition is a marker that stress management training activities can help survivors of stress cases in several outcomes. This condition is in line with the results of existing research. One of the research projects that shows the success of stress management techniques is an effort to reduce the tendency to delay assignments in students. After being given stress management techniques, students can speed up the completion of the final assignment (Miskanik et al., 2019).

Based on the findings of the score on aspect 1 of physical impairment, initially felt by 15 people or 50% of participants, it could decrease to 9 people or 30%. This condition is also in line with other aspects. For aspect 2, initially felt by 14 participants or 46.6%, emotional disturbance could decrease to 9 people or 30%. As for aspect 3, mental disorders, initially felt by ten people or 33.3%, decreased to 8 or 26%. Aspect 4 of behavioral disorders, initially felt by 17 people or 56%, this aspect is the most widely felt because, in practice it includes many forms of stressful people's behavior such as smoking or increased smoking activity, changes in diet, reduced physical activity, and anger without reason. After cycle one, the participants who experienced this aspect were reduced to 10 people or 33.3%. Furthermore, aspect 5 of spiritual disturbance has decreased from 8 people to 4 people. This aspect was the least

experienced by the participants since the beginning of the activity, namely only 8 people or 26.3%, and decreased to 4 people or 13.3%. The score on aspect five has achieved indicators of success while the other four are under the indicator of success, namely the number of survivors in each aspect. This condition is of note considering that the indicators for the success of this research are all aspects below 25%. However, this condition is of note where the decline in all aspects indicates that action has led to success.

We analyzed the conditions of the participants. One conclusion shows that the previous speaker's presentation is that academics on campus are considered to have a different point of view than what is experienced by the teacher. This reason is rational, considering the different learning demands and situations between school and higher education levels (Khairani et al., 2021). The researcher then proposes to carry out another cycle by holding discussion activities with teachers who are quite experienced and have sufficient knowledge of online learning. Furthermore, the researchers held discussion activities that presented expert teachers. The activity was held offline one week after the first posttest activity. After the activity was over, the participants were also given the opportunity for one week to practice the discussion results and then carry out the posttest stage 2. It can be seen in Table 2.

Table 2. The result of pretest and posttest Cycle 2

	Pretest 2		Posttest 1		Posttest 2	
	People	%	People	%	People	%
Aspect 1	15	50.00	9	30.00	7	23.33
Aspect 2	14	46.67	9	30.00	6	20.00
Aspect 3	10	33.33	8	26.67	5	16.67
Aspect 4	17	56.67	10	33.33	7	23.33
Aspect 5	8	26.67	4	13.33	3	10.00

Based on these data, all aspects are below 25% or eight people, so they are the indicators of success. Based on the findings of the score on aspect 1 of physical impairment, initially felt by 15 people or 50% of participants, it decreased to 9 people or 30% in cycle one, and it could drop again to 7 people or 23% in post-set 2. This condition is also in line with other aspects. For aspect 2, emotional disturbance, initially felt by 14 participants or 46.6%, decreased to 9 people or 30%, and in the end, it could decrease to 6 people or 20%. The results on aspect 3, mental disorders, initially felt by 10 people or 33.3% decreased to 8 people or 26% and ended up being 5 people or 16.6%. Aspect 4 behavior disorder, initially felt by 17 people or 56%, reduced to 10 people or 33.3% and could eventually decrease to 7 people or 23.3%. Aspects of physical and behavioral disturbances were the most experienced by the participants. There are several factors, such as many aspect indicators, and the conditions in this aspect can be related to other situations. One example is that in terms of

physical disorders, there are indications such as experiencing dizziness, diarrhea, weakness, and several other disorders. These conditions can be influenced by other situations besides stress, such as the weather during the activity, or there are conditions of the participants that the researcher cannot control. Furthermore, aspect 5 of spiritual disturbances decreased from 8 people or 26.6% to 4 people or 13.3% and ended up being three people or 10%. Since the beginning, this aspect has been the least experienced and has even approached the indicator of success before action was taken. This situation can arise because the items in this aspect are the fewest. In addition, the elements in this indicator are considered not very appropriate to the context of the Serang people, who are known to be religious (Ariani et al., 2022).

The application of stress management techniques can also be combined with counseling service methods. One of the applications of this combination is the application of stress management techniques accompanied by a systematic desensitization method that has been proven to reduce academic stress levels in students (Dalimunthe & Rahmawati, 2019).

Apart from being applied to individuals, this technique can also be applied in group/community services. One community vulnerable to stress is female prisoners because they face more complex situations and pressures, such as stereotypes. Stress management training can be proven to reduce stress levels in the female convict community (Segarahayu, 2013). Stress control techniques have also been shown to reduce stress levels in the elderly at Social Institutions in Mataram (Santosa, 2017). The effectiveness of providing stress management techniques has also been proven by giving them to individuals who work with high-stress levels, such as the Basarnas team (Ramadhani & Ardias, 2020).

Seeing the current conditions, stress management training is good for teachers. The training itself is a structured and planned effort to impart knowledge and skills to individuals (Handoyo, 2017). The training will have several techniques and methods according to the participants' conditions and the training's objectives. With stress management training, it is hoped that teachers will be able to control their psychological condition and provide the best service to students even amid a pandemic that puts a lot of pressure on them.

CONCLUSION

Based on the existing findings, mental health skills training activities for teachers can reduce stress while carrying out online learning activities. The activity begins with conducting an assessment and presentation of stress and how to detect stress in yourself. Furthermore, participants need to be taught efforts to reduce self-stress. This activity can be used to reduce teacher stress but has yet to reach an indicator of success. One of the notes is the speaker's condition, which is different from the situation experienced by the teachers. This problem is

followed up by involving teachers who are experienced in online learning activities, and the results can be under the indicators of success. Each aspect is experienced by less than 25% of participants, or eight people.

REFERENCES

- A'dadiyyah, N. L. (2021). Dampak Pembelajaran Daring Terhadap Hasil Belajar Matematika Siswa Kelas V MI NU Wasilatut Taqwa Kudus Tahun 2020/2021. *Laplace: Jurnal Pendidikan Matematika*, 4(1), 40–49.
- Abdullah, A. W., Achmad, N., & Fahrudin, N. C. (2020). Deskripsi hasil belajar matematika siswa melalui pembelajaran daring pada pokok bahasan bangun ruang sisi datar. *Euler: Jurnal Ilmiah Matematika, Sains Dan Teknologi*, 8(2), 36–41.
- Afiati, E., Handoyo, A. W., Muhibah, S., & Al Hakim, I. (2020). TERAPI BERMAIN BAGI SISWA KORBAN BENCANA TSUNAMI DI KECAMATAN SUMUR BANTEN. *Jurnal Penelitian Bimbingan Dan Konseling*, 5(1).
- Agung, I. M. (2020). Memahami Pandemi Covid-19 Dalam Perspektif Psikologi Sosial. *Psikobuletin: Buletin Ilmiah Psikologi*, 1(2), 68–84.
- Alfiyah, Z. N., Hartatik, S., Nafiah, N., & Sunanto, S. (2021). Analisis Kesulitan Belajar Matematika Secara Daring Bagi Siswa Sekolah Dasar. *Jurnal Basicedu*, 5(5), 3158–3166.
- Ariani, A., Christiawan, O., Prihatno, P., & Witara, I. M. (2022). Tourism Attraction Development Strategy of Banten Lama as Religious Tourism in Serang City. *UNCLLE (Undergraduate Conference on Language, Literature, and Culture)*, 2(01), 148–156.
- Arifa, F. N. (2020). Tantangan Pelaksanaan Kebijakan Belajar Dari Rumah Dalam Masa Darurat Covid-19. *Info Singkat;Kajian Singkat Terhadap Isu Aktual Dan Strategis*, XII(7/I), 6. http://berkas.dpr.go.id/puslit/files/info_singkat/Info_Singkat-XII-7-I-P3DI-April-2020-1953.pdf
- Arikunto, S. (2021). *Penelitian tindakan kelas: Edisi revisi*. Bumi Aksara.
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 112934.
- Dalimunthe, R. Z., & Rahmawati, R. (2019). Penggunaan Teknik Desentralisasi Sistematis Dalam Manajemen Stres Mahasiswa Program Studi Bimbingan dan Konseling Universitas Sultan Ageng Tirtayasa. *Jurnal Penelitian Bimbingan Dan Konseling*, 4(1).
- Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education and student learning: A review. *Canadian Psychology/Psychologie Canadienne*, 58(3), 203.
- Hakim, G. R. U., Tantiani, F. F., & Shanti, P. (2017). EFEKTIFITAS PELATIHAN MANAJEMEN STRES PADA MAHASISWA. *Jurnal Sains Psikologi*, 6(2), 75–79.
- Handoyo, A. W. (2017). *EFEKTIVITAS PELATIHAN PENGASUHAN ANAK BAGI IBU*

KORBAN ERUPSI MERAPI. Universitas Pendidikan Indonesia.

- Hanum, L., Daengsari, D. P., & Kemala, C. N. (2016). Penerapan Manajemen Stres Berkelompok dalam Menurunkan Stres pada Lanjut Usia Berpenyakit Kronis. *Jurnal Psikologi*, 43(1), 42–51.
- Hanurawan, F. (2012). Strategi pengembangan kesehatan mental di lingkungan sekolah. *Jurnal Bimbingan Dan Konseling*, 14(2), 93.
- Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., Evans, R., Bell, S., Grey, J., & Brockman, R. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing? *Journal of Affective Disorders*, 242, 180–187.
- Kementerian Pendidikan dan Kebudayaan. (2020). *Penyesuaian Kebijakan Pembelajaran di Masa*.
- Khairani, Y., Marjohan, M., & Ahmad, R. (2021). The differences of work stress on teachers based on demographic factors. *International Journal of Applied Counseling and Social Sciences*, 3(1), 1–8.
- Miskanik, M., Krisnanda, V. D., & Albab, S. (2019). EFEKTIVITAS TEKNIK MANAJEMEN STRES DALAM KONSELING KELOMPOK UNTUK MENCEGAH PERILAKU PROKASTINASI AKADEMIK MAHASISWA TINGKAT AKHIR. *Simposium Nasional Ilmiah & Call for Paper Unindra (Simponi)*.
- Rahman, F. A., & Bhakti, C. P. (2020). Implementasi Eksplorasi Karier Siswa di Era New Normal. *Prosiding Seminar Bimbingan Dan Konseling*, 36–42.
- Ramadhana, M. R. (2020). MEMPERSIAPKAN KETAHANAN KELUARGA SELAMA ADAPTASI KEBIASAAN BARU DI MASA PANDEMI COVID-19. *Jurnal Kependudukan Indonesia*, 61–68.
- Ramadhani, M., & Ardias, W. S. (2020). EFEKTIVITAS PELATIHAN MANAJEMEN STRES DALAM PENURUNAN STRES KERJA PADA ANGGOTA BADAN SEARCH AND RESCUE NASIONAL (BASARNAS) KOTA PADANG. *PSYCHE: Jurnal Psikologi*, 2(1), 28–39.
- Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly*, 26(1), 1.
- Rusmana, N. (2009). *Konseling Kelompok bagi Anak Berpengalaman Traumatis*. Rizqi Press.
- Sandra, R., & Ifdil, I. (2015). Konsep Stres Kerja Guru Bimbingan dan Konseling. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 1(1), 80–85.
- Santosa, I. M. E. (2017). Pengaruh Teknik Manajemen Stress Terhadap Penurunan Tingkat Stress Pada Lansia Di Panti Sosial Tresna Werdha Puspakarma Mataram. *PrimA: Jurnal Ilmiah Ilmu Kesehatan*, 2(2).

- Spitzer, M. W. H., & Musslick, S. (2021). Academic performance of K-12 students in an online-learning environment for mathematics increased during the shutdown of schools in wake of the COVID-19 pandemic. *PloS One*, 16(8), e0255629.
- Suranadi, L. (2012). MANAJEMEN STRES MAHASISWA BARU. *Jurnal Kesehatan Prima*, 6(2).
- Wardhani, R. D. K. (2017). PERAN KESEHATAN MENTAL BAGI GURU DALAM PROSES BELAJAR MENGAJAR DI SEKOLAH. *Prosiding Seminar Nasional Pendidikan FKIP*, 1(2).