

## Mindfulness based therapy intervention for reducing stress among students in senior high school during covid-19 outbreak

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### Abstract

This study aims to analyze the level of stress and the effect of mindfulness based therapy in reducing stress in senior high school students. The subjects in this study were thirteen students in conditions of severe stress. This research method uses single subject research (SSR) with research design A-B-A. In determining the increase in stress, the DASS scale measurement model instrument was used. Furthermore, the data were analyzed with non-parametric statistics using the Wilcoxon signed rank test. The results showed that before being given mindfulness based stress therapy the students were in the heavy category. Then, after treatment of mindfulness based therapy, the students' stress levels decreased. Based on the results of the Wilcoxon test, it was also found that there was a decrease in student stress before and after being given mindfulness based therapy. Thus, it can be concluded that mindfulness based therapy is effective in reducing stress levels in students during the Covid-19 outbreak.

**Keywords:** Mindfulness based therapy, reducing stress, among student, covid-19

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### Introduction

Some life-long events can cause stress, they are referred to as life events which are largely inevitable and we must be able to adapt to deal with them (Niazov, Hen, & Ferrari, 2021; Teixeira, Brandão, & Does). These life events must be present, for example illness, loss, financial problems and one of them is someone who is facing learning changes that are usually face-to-face in class, switching to online during the Covid-19 pandemic which can be a stressor for students (Permadi & Aditya, 2021; Van de Velde et al., 2021). In an effort to prevent the spread of covid-19, the government recommends stopping activities that have the potential to cause crowds, one of which is by shifting the direct learning process at school to online learning so that students are encouraged to study at home. This aims to prevent the spread of covid-19 which can be transmitted by students in schools (Purwaamijaya, Masri, & Purwaamijaya, 2021). The feeling of stress that students face when facing online learning can be seen from the responses of students who are uncomfortable affirming, difficult signals, limited quota and difficult networks in their area of residence (Moore, Dickson-Deane, & Galyen, 2011; Yulia, 2020).

The distance learning method by studying at home during the Covid 19 pandemic causes students to feel stressed by the conditions of online learning. (Aliyyah et al., 2020). Even at home, they also feel less

rested. There are many tasks given by the teacher that are assessed as heavy and assignments are often without interaction. These findings are from a survey conducted by the Indonesian Child Protection Commission with student and teacher respondents on 13-21 April 2020. The survey was conducted in 20 provinces and 54 districts / cities in Indonesia. It turned out that 79.9 percent of children said that the distance learning process was without interaction and student fell bored to learning. 77 percent of students admit that the highest difficulty is the accumulation of assignments, then students find it difficult to understand the subject matter, and fear that this decline in grades makes students stress (Giatman, Siswati, & Basri, 2020; Yuliandri & Wijaya, 2021).

Moreover, the stress condition experienced by students occurs when there is a lot of pressure and guidance that exceeds the mental capacity of a regular person (Yang, Chen, & Chen, 2021). According to Lamotte, stress can arise when an individual experiences violence, besides events that bring about changes in the individual can cause stress (LaMotte & Murphy, 2017). Lastly, environmental factors can also lead to the emergence of symptoms of stress. Instances of this include workplace noise, an unfavorable atmosphere around the house, stress-caused academic situation, environmental factors can also trigger stress symptoms. Examples of this include workplace noise, unfavorable atmosphere around the house, academic situations caused by stress.

Stress is an important psychosocial factor in the educational process that can affect academic performance and student well being in schools (Jimenez, Navia- Osorio, & Diaz, 2010; Paul Ritvo et al., 2021). Stress is a psychological condition that experiences tension by involving emotions, thought processes and the condition of the person himself (Cianci, Klein, & Seijts, 2010). Stressful events can be derived from many situations, such as those involving school, family, or work. Stressful events can come from various situations in life, such as involving school, family or work. Likewise, students can experience stress due to pressure from tutors at school, especially during online learning (Alizamar et al., 2018). Students experience stress because they are worried that they will fail when they achieve test results or are afraid when they get low scores on exams (Ifdil & Bariyyah, 2015).

Mindfulness based therapy is seen not as how much something is obtained in life but as an internal resource or strength that is in life, which can be brought back to life (Fung et al., 2019). Increased attention was found to be associated with better psychological functioning, and this led to less distress and feelings of stress which were predictors of stress experienced by students (Braun et al., 2020; Carmody, Baer, LB Lykins, & Olenzki, 2009). However the main benefits of mindfulness based therapy are reducing stress and increasing awareness of the meaning of life among high school students. Therefore the aim of this study is to analyze effective and potential mindfulness based therapy in reducing stress and increasing mindfulness in high school students experienced during the Covid-19 pandemic.

## Method

The research used the single subject research (SSR) method (Cook, Tankersley, & Landrum, 2009; Neuman & McCormick, 2000). This method is used in the study of psychotherapy by investigating individuals based on two views, either as an object or as a unit of analysis (Horner et al., 2005). The subjects of this study were three high school students who experienced severe stress. The subjects were obtained based on the results of measurements using the DASS (Depression Anxiety Stress Scale which has been validly tested. This instrument can measure the dimensions of depression, anxiety and stress. Furthermore, the research design used can be this research is ABA (Baseline (A1) - Intervention (B) - Baseline (A2)). Collections under the intervention conditions were carried out until the data reached a clear trend and level, after which each condition at baseline (A1) was repeated with the same subject. measure the decrease in conditions before and after given mindfulness based therapy.

## Results and Discussions

This research was conducted by measuring students' stress levels three times in the baseline phase (A1) then given it was measured again three times in the intervention phase (B), and three times measured in the next baseline phase (A2). The central tendency shows a stable trend direction in the initial baseline phase, then the median value of 9 at the beginning of the observation until the end of the baseline observation (A1), and decreases in the intervention phase (B). Whereas for median values of 7 to 4, as well

as in the baseline phase (A2), the trend shows a steady decline to median 3. Students' stress levels at the end of baseline were 9 and then 5 before being given intervention, which continued to decline to baseline phase 3 (A2). This shows that the intervention carried out can reduce stress conditions experienced by students.

In the calculation in the baseline conditions (A1) at the measurement of the 9th related session and in the first session in the intervention condition (B), getting the difference between the baseline data points, the result of the treatment is 2. This means that student stress has decreased. The results of graph analysis show that mindfulness based therapy is effective in reducing stress levels in students. Furthermore, the measurement was carried out using the DASS scale. Re-measure with the DASS scale to measure stress levels after receiving mindfulness-based therapy. The measurement results show significant results in the observation process. Then three students entered the stress category based on the results of the measurement scale before getting treated with mindfulness based therapy.

Based on the results of the Wilcoxon signed-rank test statistical data comparison between the DASS measurement scale model data before and after treatment with mindfulness based therapy, using a total of 3 students, all came back negative. That is, the stress level of students after receiving mindfulness based therapy was lower than before the treatment was given. This shows that the level of stress experienced by students has decreased, especially after treatment interventions with mindfulness based therapy. The results of testing the differences in student stress levels through the DASS pretest and posttest scale measurement models also show findings that support the results of the previous analysis. When compared between the pretest and posttest data, the Z value is  $-1,720$  which has a probability of  $0.105 (<0.25)$ , meaning that  $H_0$  is rejected. There was a significant difference in students' stress levels between the pretest and posttest DASS scale models. In other words, there was a significant decrease in students' stress levels after receiving treatment with mindfulness based therapy.

Based on the results of the research conducted, it showed that three students experienced a decrease in stress levels after treatment with mindfulness based therapy (Ahmad et al., 2020). The emergence of stress in each student has various causes that can be identified from the various symptoms that appear, such as physical symptoms of shortness of breath, dry mouth and throat, sweaty hands; feeling hot, muscle tense, indigestion, diarrhea, constipation, unnatural fatigue, headache, rough muscles. Then behavioral symptoms such as confusion, anxiety, and sadness; distraction; feeling misunderstood; helplessness category; inability to do anything; worried; feeling like a failure; not interested; and feel hopeless. The symptoms above can be recognized by the counselor through the provision of the DASS instrument. The provision of the DASS instrument is a necessity in learning to help identify psychological conditions, especially measuring the dimensions of depression, stress and anxiety experienced by students which can then be followed up by the counselor to provide services. It can be identified that the phenomenon of student stress during the Covid-19 pandemic was caused by several causes such as the demands of a lot of assignments, boredom, anxiety because they did not understand the subject matter, inadequate suggestions and infrastructure, and lack of student interaction with the teacher to discuss the subject matter. which is not understood. The use of mindfulness based therapy can help students reduce the level of stress they feel (De Man et al., 2021).

Stressful events derived from many situations, such as those involving school, family, or work (Yusufov, Nicoloro-SantaBarbara, Grey, Moyer, & Lobel, 2019). This condition gives rise to various other psychological problems that start with stress. In the world of education, for example, the phenomenon of stress in students can cause the Ashock event to occur (Alizamar et al., 2018). This stress phenomenon experienced by students can be in the form of worrying that they will fail when they do not achieve adequate results on exams or feel annoyed when they get low scores on exams. Then during the pandemic Covid-19 students experience a change in the learning system from offline learning to online learning which forces students to study at home. This creates pressure when students find it difficult to understand the subject matter, feel bored, and there is a decrease in grades which causes stress on students (Alblwi, McAlaney, Al Thani, Phalp, & Ali, 2021; Wong, Dosanjh, Jackson, Runger, & Dudovitz, 2021).

Mindfulness based therapy shows a positive effect on the quality of life of students and is effective in reducing stress symptoms in students (Ahmad, et al., 2020). Mindfulness based therapy contains the theory that intention, attention and attitude are the main pillars in directing life for the better, which is more accepting and overcoming the problems and pressures of every life experience (Braun, et al., 2020; P. Ritvo, Ahmad, Morr, Pirbaglou, & Moineddin, 2021). Continuous stress may lead to unproductive

rumination and worry that consumes energy, The stress that continues to be felt by students can cause anxiety which results in unproductive life and consumes energy, strengthens the stressful experience itself and often triggers depression and anxiety. Mindfulness based therapy has shown positive effects on the mood and emotions and can restore mental health to a healthier state (De Man, et al., 2021).

The application of mindfulness based therapy aims to reduce stress levels through training in awareness of positive life experiences. The phase is oriented towards giving and training positive thinking to students. The provision of this therapy can make students' lives more fulfilled and can live a happier life and be more able to overcome the pressures that arise in their lives, especially academic problems experienced during the Covid-19 pandemic.

## Conclusions

The results of this study indicate that mindfulness based therapy is beneficial and effective in reducing stress in high school students. This is indicated by a decrease in the student's stress score before and after being given mindfulness-based therapy treatment where the student's stress level is lower. This shows that mindfulness based therapy is effective in reducing student stress levels. Mindfulness based therapy can thus be recommended for experts in helping students reduce stress. Future research needs to be done to further investigate the potential of mindfulness based therapy training from psychological health service providers to be of benefit to students and service providers themselves

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