

## THE EFFECTIVENESS OF MINDFULNESS DEEP BREATHING TO INCREASE STUDENTS' ACADEMIC WELL-BEING

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### Abstract

The study of positive psychology is currently an interesting part of efforts to form students who are active and happy in the learning process with meaningful activities. Mindfulness deep breathing in the learning process is not widely studied, because research is still limited to individual and group contexts. Thus, this research focuses on the application of classical mindfulness deep breathing format which is effective in improving students' academic well-being. The design used was multiple pretest post test with the research subjects being class X high school students. Data collection uses the Student Subjective Wellbeing Questionnaire (SSWQ). The results of the repeated measure test prove that the classical format mindfulness deep breathing is effective in improving students' academic well-being ( $f(1,72) = 272,80$ ;  $p < 0,001$ ). The findings in this study show the effectiveness of the mindfulness deep breathing technique implemented in a classical format in improving students' academic well-being.

**Keywords:** mindfulness, deep breathing, academic well-being

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### Introduction

Well-being according to the World Health Organization (2014) is a state where individuals realize their potential, can cope with the normal stresses of life, can work productively, and have the ability to contribute to their community. Every individual has 26 very large abilities, so when an individual is able to realize their existing potential and is able to overcome every pressure in the life process so that they are able to work productively then that is where the individual achieves prosperity. Williams, Thomas & Smith (2017) state that well-being is an understanding of one's potential and being able to overcome stress in life will later make individuals feel happiness and positive values. In various life contexts, the aspect of happiness is one of the achievements that is often used as a benchmark (Allen, 2018; Veenhoven, 2010). Besides that, educational activities such as in schools must have value that is more than academic achievement, such as building positive emotions in both students and academic staff (Turashvili & Japaridze, 2012). So the concept of student well-being emerged which must also be obtained.

Academic well-being according to Engels et al. (2004) is a positive emotional state obtained from harmony between certain factors and personal needs and expectations towards school. Academic well-being emphasizes the extent to which a student feels good in the school environment and the extent to which the student functions effectively within the school community (De Fraine et al, 2005; Frailon, 2004). In this situation, students' awareness of the importance of the school environment and participating in learning becomes an important part of supporting stable well-being. Where positive emotional conditions should be the school's hope. Learning that is fun, goal-based, full of hope, and without pressure is one of the characteristics of classroom activities with good academic well-being (Bonniwell, 2013; Phan

et al., 2016). It can also be said that learning with the concept of mindfulness means that the whole should have a purpose. In the context of positive psychology, happiness that originates from goals originating from the individual is also called eudaimonic happiness (Heintzelman, 2018; Ryff & Singer, 2008; Seligman et al., 2005; Singleton & Clifton, 2021)

Mindfulness emphasizes awareness of focusing on current goals (Kabat-Zinn, 2006) and accepting one's current conditions (Waskito, Loekmono & Dwikurnaningsih, 2018). Based on research conducted by Minkos, Chafouleas, Bray & LaSalle (2017), it was stated that mindfulness is effective in increasing students' academic engagement. Furthermore, research conducted by Black, Milam, & Sussman (2009) showed the same results, where teenagers who took part in a mindfulness program experienced an increase in engagement at school. In addition, mindfulness activities in schools have major preventive effects on stress, well-being and behavior in elementary school children (Van de Weijer-Bergsma et al., 2014).

Previous research findings by Brown, Marquis, & Guiffrida (2012) showed that mindfulness deep breathing was effective in improving students' academic well-being. This research is still limited to the individual level, so it is recommended for future researchers to carry out interventions on a larger scale, namely classical. Therefore, in this case the research is intended to clarify and emphasize the effectiveness of classical format mindfulness deep breathing in improving students' academic well-being. Apart from that, mindfulness interventions in improving academic well-being are effective for all students, however in the late teenage age range the impact is found to be the greatest compared to other ages (Carsley et al., 2018). Thus, the research seeks to present findings regarding mindfulness deep breathing to improve the academic well-being of high school students.

## Method

This research used a repeated measure design with a pretest and multiple posttest design involving 72 students from two science classes. Both groups will be given the same intervention and will be given repeated assessments three times, namely pretest, posttest and follow up, to test the consistency of the mindfulness deep breathing intervention.

Data collection on academic engagement used the Student Subjective Wellbeing Questionnaire (SSWQ) scale compiled by Tyler L. Renshaw. The instrument is presented in Indonesian, because the SSWQ instrument still uses English, back translation is used. This scale consists of 16 items. This instrument includes four sub-indicators, namely joy during the learning process, connectedness in school, educational goals and academic efficacy. This instrument uses 4 scale levels, starting from strongly disagree, disagree, agree, and strongly agree. The level of reliability is estimated to have an alpha coefficient of 0.805 so it is included in the very strong category.

The mindfulness deep breathing intervention was carried out for 10 to 15 minutes before the mathematics lesson started. Students are asked to follow every instruction given regarding deep breathing. Students are given instructions to inhale slowly several times. Data analysis in this study used a repeated measure test with the help of SPSS 23. The repeated measure test was used to see the differences in the effects of classical format mindfulness deep breathing in improving students' academic well-being as seen from the differences over time.

## Result and Discussion

The description of the data in this study shows that the average level and standard deviation of students' academic engagement has increased on average from the pretest (M=44.50; SD=5.27), posttest (M=48.97; SD=5, 56) and follow-up (M=55.24; SD=3.13). presented in table 1.

**Table 1.** Data Description

	<b>M</b>	<b>SD</b>
<i>Pretest</i>	44,50	5,27
<i>Posttest</i>	48,97	5,56
<i>Pollow up</i>	55,24	3,13

Analysis of the classic format mindfulness deep breathing data was carried out using the repeated measure test. This technique was used to test the effectiveness of classical format mindfulness deep breathing in improving students' academic well-being in the pretest, posttest and follow up.

**Tabel 2.** Repeated Measure Test Analysis Results

<b>Effect</b>	<b>F</b>	<b>df</b>	<b>P</b>
<i>Time</i>	272,80	1,72	<0,0001
<i>Male</i>	115,12	1,32	<0,0001
<i>Female</i>	163,71	1,40	<0,0001
<i>Gender</i>	2,10	1,72	>0,05

Based on table 2, the results of the repeated measure analysis show that there is an effect over time on increasing academic well-being ( $F(1,72)=272,80$ ;  $p<0,001$ ). Other findings also showed an inter-time effect for male students ( $F(1,32)=115,12$ ;  $p<0,001$ ). Iso in female students ( $F(1,40)=163,71$ ;  $p<0,001$ ). Furthermore, regarding the gender effect, it was discovered that both experienced an increase in academic well-being and there was no difference between the two ( $F(1,72)=2,10$ ;  $p>0,05$ ).

These findings are in accordance with the results of previous research relating to mindfulness deep breathing to improve academic well-being. Research conducted by Schonert-Reichl & Lawlor (2010) shows that MBE (mindfulness based education) in a classroom format has a significant influence on well-being, social and emotional competence. This research found that students experienced an increase in academic well-being, especially in the aspect of school connectedness after being given mindfulness intervention in a classical format.

Meanwhile, research by Doss and Bloom (2017) states that deep breathing techniques can improve students' academic well-being, especially related to social and emotional aspects. Where students who have problems related to academic well-being show improvements related to social and emotional relationships with the school environment. This research found that mindfulness with deep breathing techniques is effective for improving academic well-being.

The application of mindfulness deep breathing in classical format seeks to improve academic well-being. This is considering that students' academic well-being in the learning process at school is very important to have. In aspects that include students' attachment to the school environment, learning objectives, learning efficacy and students' joy in participating in every learning process at school.

Providing mindfulness deep breathing in a classical format to students will be able to improve academic well-being. Where in the mindfulness deep breathing intervention process, students will be directed to focus on their current condition and focus on the goals they want to achieve (Kabat-Zinn, 2006). Mindfulness deep breathing is successful in improving students' academic well-being because in the implementation process students become relaxed and are able to gradually manage unfavorable conditions such as pressure and stress (Kottler & Chen in Erford, 2016). The classical format of mindfulness deep breathing in this research was carried out for 10-15 minutes before the implementation of learning in mathematics subjects, this had an impact on students in following the learning process, namely by actively involving students in the learning process that was being followed.

Based on the findings of this research, the implication for counselors is that they recommend using the classical format of mindfulness deep breathing to improve students' academic well-being. Apart from that, several important things that counselors need to pay attention to when implementing counseling services using the deep breathing technique are the availability of sufficient service time to modify the services provided. When counselors use mindfulness interventions, the first aspect that must be known is to focus on current awareness and goals (Kabat-Zinn, 2006). This will have an impact on aspects of improving students' academic well-being.

The findings of this research prove that mindfulness deep breathing is effective in improving students' academic well-being. Research findings show that mindfulness deep breathing intervention in a classical format is effective in improving students' academic well-being. However, these findings still have limitations in that the results were obtained from groups who both received the mindfulness deep breathing intervention. Therefore, the results of this study did not find any differences between experimental and control groups.

### **Conclusion**

The findings in this study show that the classical format of mindfulness deep breathing is effective in improving students' academic well-being. Based on the findings of this research, it is recommended for counselors to use mindfulness deep breathing in a classical format to improve students' academic well-being. Meanwhile, for future researchers, to find differences if held in experimental and control (placebo) groups. Then, this study only provided follow-up to research subjects for two weeks. Therefore, future studies are expected to provide more than two weeks of follow-up.

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### **Author Contributions Statement**

This research is a collaboration between lecturers and students. NK as first author developed the idea and direction of the research, controlled the quality of research implementation and data collection. MFT as a second author carried out data analysis based on research evidence and collected supporting references. LP as a third author assisted in collecting data at the school and in compiling research findings.

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