The Effect of Mindfulness and Gender on the English Achievement

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ABSTRACT


ARTICLE INFO

Article history:
Received May 22, 2023
Revised May 30, 2023
Accepted September 13, 2023
Available online September 25, 2023

Kata Kunci:
Mindfulness, Jenis Kelamin, Prestasi Bahasa Inggris

Keywords:
Mindfulness, Gender, English Achievement

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1. INTRODUCTION

During the pandemic, every part of the country around the world was forced into lockdown to avoid the spread out of Covid-19. For about 3 years the activities were run from offline transport to online activity where every people had to work from home, without exception to the educational field. As long as the pandemic was spread out, schools took place online at home (Hutauruk & Sidabutar, 2020; Yuzulia, 2021). Many students have to study and learn by themselves at home where the lesson materials were only given by the teachers from the platform and do teaching and learning process through Zoom or Google Meet. Many
News argued that the teaching and learning process at home were not effective. Some researchers mentioned that there were many problems associated with online learning that affect to students’ mental health, for example, anxiety, stress, and other psychological disorder (Conversano et al., 2020; Sundarasen et al., 2020). This kind of problems has existed as long as the pandemic. Many studies have reported that the most of crucial effect of pandemic that has influenced to students is mental health. Many students faced depression, burnout, and mental illness because they force to study at home, staring at their computer for a longer time which consumes lots of energy and affects to their learning motivation and academic achievement (McCloskey, 2015; Morrar et al., 2017). Then, when it turned in to offline learning, the students felt anxious and afraid to meet their friends because they usually meet through online. Researchers around the world have suggested one solution to overcome this kind of problem that students face. It is the use of mindfulness to overcome students’ mental health and help them to face the reality of being in present.

Mindfulness is the human being’s ability to keep their attention to stay in the present moment while maintaining a non-judgmental status. Mindfulness is defined as the skill of paying attention without giving judgmental to the present moment (Berry et al., 2020; Kerr et al., 2017). Mindfulness also encourages people to reduce psychological symptoms and burnout, and stress and boosts effective teaching and learning behavior in the class. In managing class, teachers sometimes need an effective way of handling the class to avoid burnout and stress, especially for students. Emotion regulation skills are also known as the ability to recognize, acknowledge, identify, and manage emotion systems. Emotional regulation is an intrinsic and extrinsic process of evaluating, monitoring and modifying the emotional system of a person. Emotional regulation also has a relation to mental health (Azizi et al., 2018; Hastari et al., 2020; Seibert et al., 2017). Emotional regulation can help enhance self-awareness and self-esteem. Mindfulness-based intervention has contributed to empowering the effectiveness of the five facets of mindfulness factors such as (1) nonreactivity to inner experience, (2) observing, (3) acting with awareness, (4) describing, (5) nonjudging of experience (Baer et al., 2014; Haenen et al., 2016; Iani et al., 2017).

Mindfulness also has been affected by gender. Many psychologists have proven that women and men tend to have different affection for mental health (Katz & Toner, 2017; Lenzo et al., 2016). It depends on how they manage their emotions. Low self-esteem can be one of the factors that trigger the development of depression and anxiety in men and women. When people are lack of self-esteem, they tend to think negatively about themselves. Low self-esteem can impact to the students’ mental disorder: depression, anxiety, and lack of motivation of the students (Jazaieri et al., 2014; Nguyen et al., 2019). When a negative thought comes, they become easily disappointed in themselves. The effect of COVID-19 to students has influenced to their mental health. Many students have experienced lower mental health and self-esteem. The studies conducted on schools mentioned that students experience depression, panic, loneliness, isolation, and anxiety (Ibadildin et al., 2021; Law, 2021; Uddin & Uddin, 2021). According to the theories and practices, younger students and females were at a higher risk affected by mental health caused by the lockdown and COVID-19 pandemic. So, in order to avoid the longer effect of the lockdown and pandemic on students, implementing mindfulness practice at home, at school, and the place where stress can be experienced is going to be a good choice. Mindfulness can be the solution for students to take a role in helping students maintain their emotional regulation, cultivate self-awareness, and self-focused attention, shifting their perspective on what they may see in the past and present (Miralles-Armenteros et al., 2019; Roesser et al., 2012).

Several studies have proven that mindfulness can help students to pay attention and stay focused to reach their goals. Mindfulness helps students to stay focused in the classroom and keep them away from distraction (Bringus, 2016). While the teacher gives them exercise, they pay attention to the instruction and they do the same as the instruction. Mindfulness also trains students to pay attention to nature and open greater awareness, clarity, and acceptance of the present moment reality. Mindfulness participants are allowed to expand their feeling through the emotion that they have as a human. Moving their life with the experience of the present moment through meditation lets them understand the purpose of life and be mindful. Mindfulness helps people to pay attention to the present moment, cultivate the habits of awareness, and refocus their minds to encounter negative thoughts caused by overwhelming and burnout (Burmansah et al., 2020; Zhang et al., 2016). The effect of mindfulness on language learning performance has been examined in depth. The study analyzed various empirical studies that investigated the relationship between mindfulness and language learning outcomes. The findings revealed a consistent positive impact of mindfulness on English achievement. The study concluded that incorporating mindfulness techniques in foreign language classrooms can effectively support students in their language-learning journey and ultimately enhance their English achievement (Lomas et al., 2017; Zeilhofer, 2023). The training of mindfulness was found to enhance students’ focus, attention, and cognitive abilities, leading to improved reading, writing, speaking, and listening skills in English.
English is one of the major subjects that students have to learn at school. English achievement is the ability of students to master language skills such as speaking, reading, writing, and listening skills. English language proficiency is the measurement level of language mastery of an individual. Several levels determine how good their proficiency such as beginner level, intermediate, and advanced level (Fidyati, 2017; Yuyun et al., 2018). In this study, the use of English achievement tests is to measure the students’ English achievement after being given the treatment of mindfulness. Some researchers believe that giving mindfulness training to students will help them reach their goals, especially in English tests. Mindfulness training is associated that has a contribution to reduced anxiety and stress levels among students, creating a conducive learning environment for language acquisition. Mindfulness is proposed that can assist students to prevent anxiety, panic, and burnout while they were having English tests such as speaking tests and written tests.

Based on the explanation above, the researcher finds out that the effect of the pandemic COVID 19, have influenced students in their social environment. They feel anxious, stress and burnout through the transition from online learning to offline learning. These conditions are affected students’ academic achievement. For this reason, the researcher intends to conduct a study to analyze whether mindfulness can help students overcome these problems and improve their academic achievement, especially English achievement, and to see whether mindfulness is affected by gender in the application of mindfulness training.

2. METHOD

In this study, the type of research is an experimental research design with pre-test and post-test applied. Factorial design is used to see the effect of treatment. Factorial design is the design that allows two or more variables to examine the independent variables and the effects of the treatment variables (John W Creswell, 2014). In this design, the researcher sets the experimental group and control group. The group that would be accepted for the training of mindfulness was the experimental group. The sample of this study was the ninth-grade students at one of Junior High School in Indonesia. A clustered sampling technique is a single-stage sampling procedure where the researcher has access to the name of the population and samples the participant directly. The reason why the researcher takes this grade is because the researcher is the teacher of the class and understands the class condition at the time. The variables of the study were divided into two independent variables and one dependent variable. Mindfulness is the independent variable, gender is the independent variable and also as the moderator variable, and English achievement is the dependent variable. The factorial design would be designed as show in Table 1.

Table 1. Factorial Design

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>O₁</th>
<th>X</th>
<th>Y₁</th>
<th>O₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>O₃</td>
<td>-</td>
<td>Y₁</td>
<td>O₄</td>
</tr>
</tbody>
</table>

The data collection of this study will be used English Tests and mindfulness video. The English Test consists of 20 items of multiple choices questions. The question is taken based on the lesson that is taught by the teacher in the class namely “What Were You Doing at 9 am Yesterday Morning?”. The reliability of the test item is 0.8. The instrument used to apply mindfulness is using one of the mindfulness videos from YouTube called “Sering Merasa Overthinking? Lakukan Meditasi Mindfulness ini untuk Mengatasinya!” with the YouTube channel SKWAD Health. The students of the experimental group would be given about 8 meetings to have mindfulness training which would be applied every time before the class started. The training would take about 5-8 minutes for each meeting because it was considered to start before the class to make sure the intervention was affected. The researcher will teach the students the topic that have already been provided same as the curriculum is stated at the time, so it will not disturb the learning and teaching process in the class. In analyzing the data, the statistical analysis of this study will be used a t-Test and Two Ways ANOVA using the SPSS program. If the significant value is lower than 0.05, the data shows there is a significant interaction effect. If the significant value is higher than 0.05, the data shows there is no a significant interaction effect. To measure the English achievement test, the author will use the following formula.

Total Score = Correct number x 5
After the result of the English achievement test is measured, the researcher will classify the grade of the student’s score from the lowest to the highest score. The interval categories of the English achievement test will be classified same as the Table 2.

Table 2. The Interval Categories of the English Achievement Test

<table>
<thead>
<tr>
<th>Score Interval</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>81 - 100</td>
<td>Highest</td>
</tr>
<tr>
<td>61 – 80</td>
<td>High</td>
</tr>
<tr>
<td>41 – 60</td>
<td>Medium</td>
</tr>
<tr>
<td>21 – 40</td>
<td>Low</td>
</tr>
<tr>
<td>0 - 20</td>
<td>Lowest</td>
</tr>
</tbody>
</table>

The result of the data analysis of English achievement will be classified according to the findings. The result will show the differences of the English achievement scores based on the experimental and control group.

3. RESULT AND DISCUSSION

Result

The data statistic is obtained after about 8 meetings the mindfulness is given. In the beginning of the experiment, the researcher has taken the pre-test in both groups. At the end of the meeting, the post-test is given to the experimental and control group. 30 students in the experimental group and 30 students in the control group are given the post-test to see whether there is a significant intervention among the variables and a significant difference between the pre-test and post-test. The purpose of giving the pre-test is to have background knowledge of how good their English academic achievement is before the training is given. After the training is given to the experimental group, the researcher starts to analyze the data collection. The result of the English achievement test between the experimental and control group can be seen in Table 3.

Table 3. The Description of the English Achievement Test

<table>
<thead>
<tr>
<th>Interval</th>
<th>Predicate</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td>Pre-test</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
</tr>
<tr>
<td>81 - 100</td>
<td>1</td>
<td>3.3</td>
<td>1</td>
</tr>
<tr>
<td>61 – 80</td>
<td>6</td>
<td>20.0</td>
<td>2</td>
</tr>
<tr>
<td>41 – 60</td>
<td>14</td>
<td>46.7</td>
<td>19</td>
</tr>
<tr>
<td>21 – 40</td>
<td>9</td>
<td>30.0</td>
<td>7</td>
</tr>
<tr>
<td>0 - 20</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Base on Table 3 in the experimental group, there are 9 students who get low scores, 14 students who get medium scores, 6 students who get high scores, and 1 student who get the highest score in the pre-test. However, there are 18 students who get high scores and 12 students get the highest scores in the post-test. In the control group, there is 1 student who gets the lowest score, 7 students get low scores, 19 students get medium scores, 2 students get high scores, and 1 student gets the highest score. However, there is 2 students who get low scores, 13 students get medium scores, 14 students get high scores, and 1 student gets the highest score in the post-test.

To see whether there is a difference in English achievement between the experimental and control group. The independent sample t-Test is used to analyze the data collection. As it can be seen on Table 4.

Table 4. Independent Samples t-Test of the Post-test in the Experimental and Control Groups

<table>
<thead>
<tr>
<th></th>
<th>Equal Variances Assumed</th>
<th>Equal Variances Not Assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene’s Test for Equality of Variances</td>
<td>F</td>
<td>4.278</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.043</td>
</tr>
<tr>
<td>t-test for Equality of Means</td>
<td>t</td>
<td>6.411</td>
</tr>
<tr>
<td></td>
<td>df</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>df</td>
<td>49.254</td>
</tr>
</tbody>
</table>
As shown in Table 4, the mean difference of the post-test on each group is 18 and the t-value is 6.411. The significant difference is 0.000 which is lower than 0.05. It meant there is a significant difference in English achievement that are shown in the experimental group and control group. To see the interaction effect between mindfulness and gender on English achievement, the result of the analysis is seen in Table 5.

Table 5. Interaction Effect on Students’ English Achievement between Gender and Mindfulness

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1382.822</td>
<td>3</td>
<td>460.941</td>
<td>19.929</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>171918.356</td>
<td>1</td>
<td>171918.356</td>
<td>7433.137</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender</td>
<td>116.081</td>
<td>1</td>
<td>116.081</td>
<td>5.019</td>
<td>0.034</td>
</tr>
<tr>
<td>Mindfulness</td>
<td>1172.908</td>
<td>1</td>
<td>1172.908</td>
<td>50.712</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender1 * Mindfulness</td>
<td>6.133</td>
<td>1</td>
<td>6.133</td>
<td>0.265</td>
<td>0.611</td>
</tr>
<tr>
<td>Error</td>
<td>601.345</td>
<td>26</td>
<td>23.129</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>199625.000</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>1984.167</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 5 show the result of two ways ANOVA shows that the F-Value is 5.019 and the significant value is 0.034 which is lower than 0.05 on gender. Then, the result of the test between mindfulness and students’ English shows that the F-value is 50.712 and the significant value is 0.000 which is lower than 0.05. However, the interaction effect between gender and mindfulness is 0.265 and the significant value is 0.611 which is higher than 0.05. It meant that gender and mindfulness do not have an interaction effect or join effect to English achievement. Furthermore, the result of the t-Test also indicated that there is no significant difference between male and female students in doing mindfulness. It is shown in Table 6.

Table6. Independent Sample t-Test Analysis Between Male and Female in Experimental Groups

<table>
<thead>
<tr>
<th>Levene’s Test for Equality of Variance</th>
<th>t-Test for Equality of Means</th>
<th>95% Confidence Interval of The Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal Variance Assumed</td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td>0.810</td>
<td>0.376</td>
</tr>
<tr>
<td>Equal Variance not Assumed</td>
<td>1.637</td>
<td>0.113</td>
</tr>
</tbody>
</table>

Based on Table 6, the t-value is 1.609 and the significant value is 0.119 which is higher than 0.05. The mean difference between female and male students' scores are 4.774. It can be concluded that there is no significant difference in English Achievement between male and female students after they get the mindfulness training.

Discussion

The result of the data analysis corresponds to the previous studies that mindfulness can help students in achieving their academic studies. Mindfulness is the ability of a person to be aware of the present...
moment can help students maintaining their emotional ability, overcome distress and anxiety (Kerr et al., 2017; Whiting et al., 2021). The studies also mention that mindfulness can help students increase their academic performance at school. The study analyzed various empirical studies that investigated the relationship between mindfulness and language learning outcomes. The findings revealed a consistent positive impact of mindfulness on English achievement. The practice of mindfulness was found to enhance students’ focus, attention, and cognitive abilities, leading to improved reading, writing, speaking, and listening skills in English. Mindfulness training also contributed to reduced anxiety and stress levels among students, creating a conducive learning environment for language acquisition. Previous study concluded that incorporating mindfulness techniques in English classrooms can effectively support students in their language-learning journey and ultimately enhance their English achievement (Lomas et al., 2017). Based on previous study the regression analysis results also showed that mindfulness was predicted to have a significant relationship between mindfulness and students’ GPA and flourishing (Bambacus, 2018). The reduction of stress was showed relatively decreased during the intervention. The result had shown there was an improvement after the intervention in students’ academic achievement where the increase in GPA showed differences between the pretest and posttest.

The research about the role of mindfulness in reducing foreign language anxiety states that students who follow mindfulness training is reported to have higher level of trait and state mindfulness while speaking English (Morgan & Katz, 2021; Wu et al., 2022). They tend to experience low anxiety during their speech. This finding suggests that mindfulness can absorb the positive effect of their circumstance, developing positive moods while learning a foreign language. The positive energy that they obtain help them cultivate an emotional regulation system, and self-awareness, and reducing negative thought where their circumstances are able to trigger anxiety and depression.

In the beginning of the experiment, both the experimental and control group was given a pre-test to see the English achievement score before the training of mindfulness was started. After that, the researcher will decide to start the training on the next meeting. The researcher explained the procedure that they have to follow as long as the training begins and tell them what should they do on the experimental. In the second meeting, the experimental group would receive Mindfulness. Before the class was started, the researcher would explain what was Mindfulness and how useful it was for helping them in the lesson. After that, the researcher would play a video about Mindfulness with a duration of five to eight minutes. The students had to follow what the video explained and asked them to do. Then, the class would be begun. However, the control group would not receive the mindfulness. They just began the class as usual. As long as the video was played, the researcher asked them to stay quiet and relax, so they can focus on doing mindfulness. After the video ended, the researcher would start the teaching and learning process. In the third meeting until the seventh meeting, the teacher would start the class with the opening to do Mindfulness. If the students while in the middle of the lesson bothered by the environment or not focused, the teacher asked the students to do Mindfulness again by using their five senses such as finding five things that they could find at that moment. At the meeting eighth, both groups, the control group and the experimental group, would be given the post-test to see whether there was an interaction effect of the training on the result of the test.

In the result of the data analysis can be seen from the result of the independent sample t-test between the experimental and control group stated that there is a difference in the result of English achievement between the experimental group and the control group. The students who is associated with the treatment showed a different score of English achievement. This is related to the study that mention the differences between students who get mindfulness has different performance and achievement to students who do not (Bringus, 2016; Lomas et al., 2017). The application of mindfulness shows the result that mindfulness can help them increase students’ English achievement from pre-test to post-test. At first, the students both the experimental and control group get the same result in the pre-test. Both the experimental and control group shows that almost all the students get medium scores and low scores. However, after the experimental is given to the experimental group, the result shows that in the post-test 60% of the students get high scores and 40% of the students get higher scores. It means that after the experiment, the result of students’ English achievement increases significantly than before the experiment. The result shows the same to the previous studies that mindfulness is able to enhance students’ learning motivation and academic performance (Hermana et al., 2021; Ulivia et al., 2022). Because mindfulness boosts students’ learning motivation and performance, it makes the differences between the result on pre-test and post-test.

In the control group, the result of the post-test shows there is an increasing score in students’ English achievement. But, the result shows 43.3% of the students get medium scores, 46.7% of the students get high scores, 6.7% of the students get low scores, and 3.3% of students get higher scores. Even though there is an increasing achievement, but it is not significant.
However, the Analysis of Variance two Ways of the Interaction effects of mindfulness and gender to English achievement shows different. That there is no significant interaction together or join effect between mindfulness and gender, and in the result of the independent sample t-test shows that there is no significant difference in achievement between male and female students in doing mindfulness. It means that mindfulness is not influenced by gender. Different with the previous study that gender also can influence the triumph of mindfulness. On doing mindfulness, young female students have better emotional regulation than male students. They also are indicated had greater awareness and attention to the present moment and can express their emotion very well than male students (MacDonald & Baxter, 2017; Tang & Braver, 2020). Many researchers argue that gender differences have different factors that could lead to mental health problems. Females have high-risk affection of mental illness such as anxiety, depression, and negative moods than males. Previous related studies also mention that women have a high-risk intervention on doing mindfulness due to the low self-management on stress, and female students had a higher risk affected by mental health problems (Conversano et al., 2020). Because of that theory, the expectation of the result the data analysis will show that female students will have greater mindfulness than male students. On the other hand, a study mention that mindfulness is not influenced by gender in the practice (Alispahic & Hasanbegovic-Anic, 2017; Tasneem & Panwar, 2019). Female and male students show that they are good at acting with awareness and nonjudgmental of inner experience, demonstrate a higher degree of emotional control and focus on the present moments. Then female male college students demonstrate that having a greater score of mindfulness (Dyah & Fourianalistyawati, 2020; Wang & Chopel, 2017). The analysis shows that the students are good at distress control and emotional control.

Furthermore, in the effectiveness of using mindfulness as a therapy method, female students reported having high effectiveness than male do (Katz & Toner, 2017; Singh et al., 2011). Male needs a longer treatment of mindfulness to manage from the disorder than female. This may be the reason why some studies reported that gender is influenced mindfulness intervention. The difference to the result of the analysis in this study shows that mindfulness is not influenced by gender. Male and female students get equal scores in their post-test scores. It is shown that the mean difference between male and female students is only 4.7. As this study finds in the class, male and female students can do mindfulness properly even though there are so many obstacles that may be found during the training which bothered their concentration (Alispahic & Hasanbegovic-Anic, 2017; Kang et al., 2018). For example, the students easily got distracted by the bell changing hours, the condition of the class was very hot, and the noise that other classes made. Those can be the factors that may bother their concentration, and it is better to the teacher to know the condition of the class, so the teacher could manage the class properly and find a way to overcome the distractions. During the training, the researcher finds out that the condition of the class really affects the way of the learning process. At that time, in the number of 30 students in one class make the learning and teaching process sometimes distract the focus of the students.

This research can provide a better understanding of how the level of awareness (mindfulness) can influence achievement in English. The results of this study can be used by educators to develop more effective learning strategies. This research also discusses the role of gender in English achievement. The implication is that these findings can help identify gender differences in English language learning contexts, which can be used to design more inclusive learning approaches. This study may have limitations in generalizing the results. The results found may apply only to the sample used in this study, and may not be considered representative of the larger population.

4. CONCLUSION

In conclusion, mindfulness significantly can help students’ English achievement. It is shown from the result that the score of pre to post-test shows a difference. However, in the interaction effect between mindfulness and gender to English achievement shows there was no significant interaction effect or join effect. It means that mindfulness is not influenced by gender. That can be seen in the result that male and female students do not show significant differences between them. So, male and female students can do mindfulness properly at the training. The writer hopes that this study can help students to increase their academic achievement, to teachers is to help students increase their academic performance and develop their emotional regulation, and other researchers can use this study as reference for them doing further research.

5. REFERENCES


