Mindfulness-Based Learning and Guidance Innovations to Improve Academic Resilience of Junior High School Students in the Digital Era

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ABSTRACT

Junior high school students are at a stage of development that is vulnerable to academic pressure due to high learning demands and the influence of the digital environment. Academic resilience is an important skill that enables students to persevere and bounce back from learning difficulties. One factor that plays a role in the formation of academic resilience is mindfulness, which is the awareness of the present moment in an open and non-judgmental manner. This study aims to analyze the relationship between mindfulness and students' academic resilience and to develop ideas for mindfulness-based learning and guidance innovations in schools. The study uses a correlational quantitative approach with the Spearman-Brown technique. The research population involved all eighth-grade students at SMP Negeri 12 Bandung, selected using a saturated sampling technique. The instruments used included the Kentucky Inventory of Mindfulness Skills (KIMS) to measure mindfulness and the Academic Resilience Scale (ARS-30) to measure academic resilience. The results showed that the students' mindfulness level was in the moderate category, while their academic resilience was in the high category. Data analysis shows a positive and significant relationship between mindfulness and academic resilience, albeit in the weak category. These findings provide a basis for developing innovative mindfulness-based learning and guidance services to strengthen students' academic resilience and emotional well-being in the digital age.

Keywords: *academic resilience, digital era, mindfulness, guidance and counseling, learning innovation.*

1. INTRODUCTION

The development of digital technology over the past decade has brought significant changes to the learning environment of junior high school students. Widespread access to digital devices, social media, and unlimited information has opened up opportunities for improved learning resources and collaboration, but it has also presented challenges in the form of distractions, mental fatigue, decreased focus, and increased academic pressure (Livingstone, 2012; Rosen et al., 2014; Twenge, 2017). The habit of digital multitasking has been shown to reduce learning effectiveness, disrupt long-term concentration, and negatively impact students' psychological well-being (Ophir et al., 2009; Lemola et al., 2015).

Junior high school students in early adolescence are highly vulnerable to academic stress and emotional instability due to simultaneous biological, cognitive, and social developmental changes (Santrock, 2018; Steinberg, 2014). In the context of increasingly complex digital learning, this condition increases the risk of prolonged

academic stress, decreased learning motivation, and the emergence of anxiety and emotional pressure (Pascoe et al., 2020).

In such situations, academic resilience becomes a key ability that enables students to persevere, adapt, and bounce back from learning difficulties. Academic resilience is understood as the capacity of students to maintain motivation, manage negative emotions, and respond constructively to academic failure (Cassidy, 2016; Martin & Marsh, 2009). Research shows that students with high academic resilience tend to have better academic achievement and optimal psychological well-being (Datu & Yuen, 2018; Yeager & Dweck, 2012).

One of the internal factors that play a role in strengthening academic resilience is mindfulness. Mindfulness refers to the ability to be consciously present in the current experience with an attitude of acceptance without judgment (Kabat-Zinn, 2003). In an academic context, mindfulness helps students improve emotional regulation, reduce distractions, and respond to learning pressures in a more adaptive manner (Bishop et al., 2004; Meiklejohn et al., 2012). Various studies show that mindfulness is associated with increased focus, cognitive flexibility, and reduced academic stress, including in digital learning environments (Bajaj & Pande, 2016; Zenner et al., 2014).

Although the effectiveness of mindfulness in the context of education has been extensively researched in Western countries, studies that specifically explore the relationship between mindfulness and academic resilience in junior high school students, particularly in facing learning challenges in the digital age, are still limited. Therefore, this study aims to analyze the relationship between mindfulness and academic resilience in junior high school students and formulate innovative learning ideas and mindfulness-based guidance services that are relevant to the educational context in the digital age.

2. METHODOLOGY

This study uses a quantitative approach. The quantitative approach in this study is used to obtain numerical data on the relationship between mindfulness and academic resilience in eighth-grade students at SMP Negeri 12 Bandung in the 2024/2025 academic year. The choice of a quantitative approach is based on Creswell's (2012) statement that in quantitative research, researchers identify research problems based on what is currently happening in the field or on the need to explain why something is happening.

2.1. Research Design

Correlational research design is used to examine the relationship between two variables without manipulating the conditions of the students. The correlational method is a method in quantitative research to measure the degree of relationship between two

or more variables using correlational analysis statistical procedures (Creswell, 2012). The research design used is a cross-sectional survey. Cross-sectional surveys are used to test the relationship between variables at a single point in time. This method can be used to establish patterns and correlations between variables (Creswell, 2014).

2.2. Participants of the Study

The research population consists of all eighth-grade students at SMP Negeri 12 Bandung in the 2024/2025 academic year. The technique used is a saturated sample, so that the entire population is used as the research sample.

2.3. Instruments

This article uses two instruments, namely (1) Mindfulness measured using the Kentucky Inventory of Mindfulness Skills (KIMS), consisting of four aspects: observing, describing, acting with awareness, and accepting without judgment. (2) Academic resilience measured using the Academic Resilience Scale (ARS-30), which covers the aspects of perseverance, reflecting and adaptive help-seeking, and negative affect & emotional response. These instruments have been tested for validity and reliability and are deemed suitable for use.

2.4. Data Analysis Techniques

The data were analyzed using Spearman-Brown correlation tests through the SPSS application. Descriptive analysis was used to determine the categories of mindfulness and academic resilience scores.

3. RESULT AND DISCUSSION

3.1 Result

This study produced three main findings that describe the conditions of mindfulness, academic resilience, and the relationship between these two variables among students at SMP Negeri 12 Bandung.

Table 1. Conditions of Mindfulness

Variabel	Kategori	Frekuensi	Persentase	Total
Mindfulness	Sangat Rendah	19	6,0	318 (100%)
	Rendah	13	4,1	
	Sedang	281	88,4	
	Tinggi	0	0,0	
	Sangat Tinggi	5	1,6	

The results of the frequency distribution analysis show that 88.4% (281 students) of mindfulness tendencies were in the moderate category, 6.0% (19 students) were in the very low category, 4.1% (13 students) were in the low category, and 1.6% (5 students) were in the very high category. Meanwhile, no students (0.0%) were in the high category.

Table 2. Conditions of Academic Resilience

Variabel	Kategori	Frekuensi	Persentase	Total
Resiliensi Akademik	Sangat Rendah	5	1,6	318 (100%)
	Rendah	7	2,2	
	Sedang	133	41,8	
	Tinggi	156	49,1	
	Sangat Tinggi	17	5,3	

The results of the study on the variable of academic resilience show that students have high academic resilience. The majority of students (67.3%) are in the high category, and 24% are in the very high category. Only a small proportion of students (8.7%) are in the moderate category, and no students are in the low or very low categories. These findings indicate that students have good adaptive abilities in coping with learning pressures, including the ability to persevere in the face of obstacles, engage in academic reflection, and seek help when needed.

Table 3. Relationship Between Each Aspect of Mindfulness and Academic Resilience

Spearman's rho		**Resiliensi Akademik**
Mindfulness (X)	Correlation Coefficient	0,143**
	Sig. (1 tailed)	0,005
	N	318
Mengamati	Correlation Coefficient	0,186**
	Sig. (1 tailed)	0,000
	N	318
Menggambarkan	Correlation Coefficient	0,143**
	Sig. (1 tailed)	0,005
	N	318

Spearman's rho		Resiliensi Akademik
Bertindak dengan Kesadaran	Correlation Coefficient	0,089
	Sig. (1 tailed)	0,057
	N	318
Menerima tanpa Menghakimi	Correlation Coefficient	-0,170**
	Sig. (1 tailed)	0,001
	N	318

Further analysis of the relationship between each aspect of mindfulness and academic resilience yielded the following results.

1. The aspect of observation has a correlation coefficient of 0.186 with a significant value of 0.000 ($p < 0.01$). These results indicate a significant positive relationship with a weak correlation strength between an individual's ability to consciously observe experiences and academic resilience. This shows that students' ability to observe internal and external experiences (such as emotions, thoughts, and the environment) has a real contribution to their academic resilience.
2. The describing aspect showed a correlation of 0.143 with a significance value of 0.005 ($p < 0.01$), indicating a significant but weak positive relationship between the ability to verbally express internal experiences and academic resilience. This indicates that students' ability to consciously label or describe experiences is also related to an increase in their resilience in facing academic challenges.
3. The aspect of acting with awareness has a correlation coefficient of 0.089, with a significance value of 0.057 ($p > 0.05$). These results indicate that there is a positive but insignificant relationship between the aspect of acting with awareness and academic resilience. This means that the ability of students to act with full awareness (focus on the present moment) has no relationship with academic resilience in this study.
4. The aspect of accepting without judging shows a coefficient value of -0.170 with a significance of 0.001 ($p < 0.01$). This negative correlation indicates that there is a significant but negative inverse relationship between the aspect of accepting without judging and academic resilience. In other words, the tendency to accept internal experiences without judging is associated with opposite academic resilience scores. This means that the more students show an attitude of accepting internal experiences without judging, the more likely they are to experience a decline in academic resilience.

Next, the coefficient of determination (CD) was calculated to determine the extent of mindfulness' contribution to students' academic resilience, using the following formula.

KD = R^2 x 100%

= $0{,}143^2$ x 100%

= 2,04%

Based on the calculation of the coefficient of determination, a coefficient of determination of 2.04% was obtained. This means that the contribution of mindfulness to academic resilience is very low, so that there are still 97.96% other factors outside of mindfulness that influence the academic resilience of students. This shows that although there is a significant relationship between the two variables, the direct influence of mindfulness on academic resilience is not dominant and needs to be examined together with other variables in a broader context.

Overall, the findings indicate that mindfulness contributes to students' academic resilience, but this contribution is not dominant and is influenced by other factors such as family support, school environment, classroom climate, and students' learning habits in the digital age.

3.2 Discussion

The results of the study show that junior high school students' mindfulness levels are in the moderate category, while academic resilience is in the high category. These findings indicate that students' academic adaptation abilities are relatively good, even though their mindfulness-based self-regulation capacities have not yet developed optimally. This condition is in line with the theory of early adolescent development, which states that attention control and emotional regulation abilities are still in the developmental stage, making adolescents prone to distraction and academic pressure, especially in a stimulus-rich digital environment (Santrock, 2018; Steinberg, 2014).

Correlation analysis shows that mindfulness has a positive and significant relationship with academic resilience, albeit with a weak relationship strength. This finding is consistent with the research by Bajaj and Pande (2016), which states that mindfulness contributes to resilience through improved emotional regulation and reduced stress responses, but not as a single factor. Martin and Marsh (2009) and Cassidy (2016) also emphasize that academic resilience is a multidimensional construct influenced by the interaction between intrapersonal and environmental factors, so the relatively small contribution of mindfulness in this study can be understood theoretically.

From the perspective of mindfulness, observing shows the strongest relationship with academic resilience. This is in line with the concept of mindfulness proposed by Kabat-Zinn (2003), which emphasizes awareness of current experiences as the

foundation of self-regulation. The ability to observe thoughts, emotions, and learning situations allows students to recognize academic stress earlier and respond to it adaptively. These findings are supported by research by Moore and Malinowski (2009) and Chambers et al. (2009), which shows that mindfulness increases cognitive flexibility and emotional regulation, which are important components of academic resilience.

The aspect of describing also shows a positive and significant relationship with academic resilience. The ability to name and express internal experiences helps students understand learning difficulties more objectively and encourages the use of constructive coping strategies. Bishop et al. (2004) state that the ability to describe experiences is part of metacognitive awareness that supports psychological adaptation. Thus, students who are able to express their thoughts and feelings related to academic challenges tend to be more resilient in facing learning pressures.

Conversely, the aspect of acting with awareness did not show a significant relationship with academic resilience. These findings indicate that focusing on current activities does not necessarily contribute directly to academic resilience if it is not accompanied by reflection and environmental support. In addition, the aspect of non-judging showed a significant negative relationship with academic resilience. This finding can be explained through the perspective of Neff et al. (2005), who emphasize that self-acceptance needs to be accompanied by self-compassion so that it does not develop into a passive attitude towards failure. In the context of adolescents, an accepting attitude without adaptive reflection can be interpreted as resignation, thus not encouraging efforts to solve academic problems.

The low coefficient of determination value indicates that students' academic resilience is more influenced by factors outside of mindfulness. Research by Datu and Yuen (2018) and Suharti and Nugraha (2023) confirms that social support, relationships with teachers and peers, and school climate play a dominant role in shaping academic resilience. Thus, mindfulness functions as an internal protective factor that strengthens self-awareness and emotional regulation, but its effectiveness is highly dependent on a supportive learning environment.

The implications of these findings suggest that the development of mindfulness-based learning innovations and guidance services needs to be carried out in an integrated manner. The integration of simple mindfulness exercises into learning, such as mindful breathing and guided reflection, is in line with the findings of Meiklejohn et al. (2012) and Zenner et al. (2014), which show that mindfulness practices in schools can improve students' focus, emotional well-being, and resilience. In the context of guidance and counseling, mindfulness-based intervention approaches have also been shown to be effective in helping students manage academic stress and emotional pressure (Felver et al., 2016; Klingbeil et al., 2017).

Overall, this study reinforces previous findings that mindfulness plays an important but limited role in building students' academic resilience. Therefore, mindfulness needs to be positioned as part of a holistic approach combined with environmental support, strengthening of social-emotional skills, and healthy digital literacy in order to have a more optimal impact on students' academic resilience in the digital age.

4. CONCLUSION

This study concludes that mindfulness has a positive and significant relationship with the academic resilience of junior high school students, although the strength of the correlation is in the weak category. These findings indicate that mindfulness still plays a role in supporting students' ability to cope with learning pressures, maintain motivation, and recover from failure, but it is not a major determining factor. Each aspect of mindfulness shows a different relationship pattern, where observing and describing have a significant contribution to academic resilience, while acting with awareness shows no significant relationship and non-judging shows a negative relationship. This variation indicates that mindfulness works in a complex manner and is influenced by the context of adolescent development and the dynamics of learning in the digital age.

In addition, the low contribution of mindfulness to academic resilience (2.04%) indicates that resilience is largely shaped by a combination of intrapersonal and social environmental factors. Factors such as family support, peer relationships, interactions with teachers, and school culture have a greater influence in shaping students' resilience to academic challenges. However, mindfulness still provides an important foundation in helping students increase self-awareness, manage emotions, and respond to digital distractions in a more adaptive manner. This is in line with the literature which confirms that mindfulness can be a protective mechanism for adolescents in dealing with academic stress and the pressures of the modern learning environment.

Based on these findings, this study emphasizes the importance of developing mindfulness-based learning innovations and guidance services in schools. Integrating mindfulness exercises into learning activities, such as conscious breathing, reflection breaks, or full attention when completing tasks, can help students improve their focus and emotional regulation. Meanwhile, school counselors can develop mindfulness-based counseling programs to strengthen students' academic resilience and emotional well-being. Thus, mindfulness is not only a self-management strategy, but also a relevant pedagogical and psychological approach to be applied in facing the complexities of academic and digital challenges in today's youth.

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