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The Effect of the Zoning System, Student Resilience and Student Self-Efficacy on Learning Achievement in Gresik Regency Public Junior High Schools

Sri Mulyaningsih¹, Karwanto², Muhammad Sholeh³

¹Master Program in Education Management, Surabaya State University, Indonesia, 24010845139@mhs.unesa.ac.id

²Master Program in Education Management, Surabaya State University, Indonesia.

³Master Program in Education Management, Surabaya State University, Indonesia.

Corresponding Author: 24010845139@mhs.unesa.ac.id¹

Abstract: Education is a fundamental element in the development of adaptive and competitive human resources, especially in the midst of globalization and rapid technological advances. To realize equal access and quality of education, the Indonesian government has implemented a zoning system policy, which aims to reduce the gap between schools. However, the implementation of this policy has raised new challenges, such as inequality in student academic input and a decline in quality in leading schools. On the other hand, student learning achievement is also influenced by internal psychological factors, including resilience in dealing with pressure and self-efficacy, namely students' belief in their academic abilities. This study aims to analyze the effect of the zoning system, student resilience, and self-efficacy on the learning achievement of junior high school students in Gresik Regency. This study uses a quantitative approach with an explanatory survey method. The population in this study were all grade VIII students at Junior High Schools in Gresik Regency, with a sample size of 250 students selected through proportional random sampling techniques. The research instrument was a Likert Scale questionnaire that had been tested for validity and reliability. The data were analyzed using multiple linear regression techniques to determine the partial and simultaneous effects between variables. The results of this study are expected to provide empirical contributions to zoning policies based on student characteristics, as well as support the development of psychopedagogical interventions to improve learning achievement evenly and fairly.

Keywords: Zoning System Policy, Learning Achievement, Resilience, Self-Efficacy.

INTRODUCTION

Education plays a strategic role in producing superior, adaptive and competitive human resources amid the challenges of globalization and digital transformation (Erlangga, 2023). More than just a means of transmitting knowledge, education aims to shape the character, skills and ethics of students who are intellectually, emotionally and socially balanced. Within this framework, learning achievement is a key indicator that reflects the success of an education

system. This achievement not only reflects students' cognitive achievements, but also the process of internalizing values and attitudes acquired through learning (Bloom et al., 1956; Zeng, 2023).

To create equitable access and quality of education, the Indonesian government implemented a zoning system policy in the admission of new students (PPDB), as stipulated in Permendikbud No. 51/2018. This policy requires public schools to prioritize prospective students from the nearest zone with a minimum quota of 90%. The aim is to eliminate the dichotomy between "favorite" and "non-favorite" schools and distribute students evenly to encourage collective improvement in school quality (Nurfakihiswara et al., 2024; Sidik, 2024).

However, the implementation of this policy is not free from challenges. Inequality in facilities, quality of teaching staff, and academic input between schools in one zone creates new problems (Sesanti, 2025). Many high-achieving students feel that they do not get a place that suits their academic potential, because the zoning system ignores achievement in the selection process (Zakaria, 2019). This condition can have an impact on decreased motivation to learn, the emergence of feelings of dissatisfaction, and lead to instability in student academic achievement (Setiawan & Usman, 2022).

In addition to external policies, internal individual factors also affect student learning achievement, specifically resilience and self-efficacy. Resilience refers to a student's ability to bounce back from academic pressures, failures and obstacles, and maintain a passion for learning. Students with high resilience are able to adapt and remain productive despite challenges such as a less than ideal school environment (Syam & Yusri, 2023; Backmann et al., 2019). On the other hand, self-efficacy describes an individual's belief in their ability to complete academic tasks independently and successfully. Self-efficacy has been shown to be positively correlated with motivation to learn and perseverance in the face of academic pressure (Bandura, 1977; Cassidy, 2015).

Previous research shows that these three factors, zoning policy, resilience, and self-efficacy contribute to student learning achievement. Mustari et al. (2021), for example, found that zoning policies affect students' mathematical literacy and self-efficacy. Meanwhile, a study by Yunita & Bahriah (2021) identified an interaction between the zoning system and self-efficacy on students' academic achievement. However, most studies have focused on the impact of zoning on school distribution or education quality, and few have directly examined its effect on students' psychological factors simultaneously (Wei, 2024).

With this background, this study aims to examine in depth the effect of the zoning system policy, student resilience, and self-efficacy on student learning achievement in public junior high schools in Gresik Regency. This research is expected to make theoretical and practical contributions in formulating educational policy strategies that are not only oriented towards equal access, but also pay attention to aspects of students' character and psychological potential in supporting their overall academic achievement.

METHOD

This research uses a quantitative approach with the type of explanatory research, which aims to explain the influence between the independent variable and the dependent variable simultaneously or partially. The main focus of this research is to analyze the extent to which the zoning system policy, student resilience, and self-efficacy affect student learning achievement at the State Junior High School (SMP) level in Gresik Regency.

The research data were collected through a Likert scale questionnaire instrument, which had been tested for validity and reliability before being used in data collection. This instrument was designed to measure three independent variables, namely the zoning system, student resilience, and self-efficacy, and one dependent variable, namely student learning achievement. The learning achievement scores were taken from the documentation data of the even semester report card scores of class VIII in the 2024-2025 academic year.

The population in this study were all grade VIII students in public junior high schools in Gresik Regency. The research sample amounted to 250 students, who were taken using proportional random sampling technique to ensure proportional representation of all schools in the population.

After the data is collected, the processing is done using quantitative statistical analysis techniques. The analysis stage starts from the prerequisite analysis test (normality, linearity, and multicollinearity tests), followed by multiple linear regression analysis to see the simultaneous and partial effects of each independent variable on the dependent variable. This data processing process uses the help of statistical software programs to increase the accuracy and effectiveness of the analysis.

All analysis results are presented in the form of interpretative tables and graphs to facilitate understanding of the effect of the zoning system, resilience, and self-efficacy on learning achievement. In addition, the results of this study are interpreted to produce important findings that can provide implications for educational policy decision making, especially in implementing a zoning system that is equitable and adaptive to the psychological conditions of students.

Thus, the quantitative approach in this study not only provides empirical evidence of the relationship between variables, but is also expected to strengthen the formulation of educational zoning policies based on student characteristics and needs at the junior secondary school level.

RESULTS AND DISCUSSION

Effect of Zoning System on Learning Achievement

The regression analysis results show that the zoning system variable (X1) has a negative effect on student learning achievement with a coefficient of -0.168. However, this effect is not statistically significant, with a significance value of 0.899 (> 0.05). This finding indicates that the zoning system has not had a real impact on increasing or decreasing student academic achievement. Theoretically, the zoning system is designed as an affirmative policy to eliminate the dichotomy between excellent and non-excellent schools, as well as to bring students closer to the nearest school to reduce the economic burden and strengthen parental supervision. However, in reality, the implementation of this policy has not been accompanied by an equal improvement in the quality of education services, so it has not been able to significantly boost academic achievement.

Table 1. Regression Results of Zoning System on Learning Achievement

Variables	B	Std. Error	Beta	t	Sig.
Zoning System (X1)	0,168	1,327	-0,075	-0,127	0,899

The Effect of Resilience on Learning Achievement

Resilience (X2) or student resilience to academic pressures and challenges, in this study also shows a negative influence on learning achievement with a regression coefficient of -0.163 and a significance value of 0.847 (> 0.05). These results indicate that resilience does not have a statistically significant influence on students' academic achievement. Conceptually, resilience is an important ability in character building and student success, but in the context of the data analyzed, its influence is not strong enough. This could be due to differences in students' understanding of the meaning of resilience or due to its complex and long-term nature that is difficult to capture by simple quantitative analysis.

Table 2. Regression Results of Resilience on Learning Achievement

Variables	B	Std. Error	Beta	t	Sig.
Resilience (X2)	0,163	0,840	0,089	0,193	0,847

Although theoretically resilient students have better adaptation skills, in the context of this study, this has not had enough impact on improving learning achievement. This could be due to the influence of the learning environment or the lack of support from the learning system.

The Effect of Self-Efficacy on Learning Achievement

In contrast to the previous two variables, self-efficacy (X3) shows a positive and statistically significant effect on learning achievement. The regression analysis results show a coefficient of 1.395 with a significance value of 0.000 (<0.05). This means that the higher students' confidence in their academic ability, the more likely they are to achieve better learning outcomes. This finding is in line with previous studies which confirm that academic efficacy is an important factor in increasing students' motivation, perseverance and learning strategies in facing academic challenges.

Table 3. Regression Results of Self-Efficacy on Learning Achievement

Variables	B	Std. Error	Beta	t	Sig.
Self-efficacy (X3)	1,395	0,045	0,843	30,842	0,000

These results reinforce that students with high confidence in their academic abilities tend to show better learning outcomes. It also shows the importance of learning approaches that can motivate and increase students' self-confidence.

Simultaneous Effect of Zoning System, Resilience, and Self-efficacy on Learning Achievement

Simultaneously, the three independent variables, namely the zoning system (X1), resilience (X2), and self-efficacy (X3), show a significant influence on learning achievement, with a significance value of 0.000 (<0.05). This result is supported by the coefficient of determination (R²) value of 0.711, which means that 71.1% of the variation in student learning achievement can be explained by the three variables together. This reinforces the view that improving academic achievement cannot be done through structural approaches alone, but must be integrated with psychological and social approaches that support students' overall development.

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,843	0,711	0,709	2,99741

Thus, an integrated approach to educational policy and psychology is essential to comprehensively boost academic achievement.

The Interaction Effect of Zoning System and Self-Efficacy on Learning Achievement

The results of testing the interaction between the zoning system and self-efficacy (X1*X3) show a positive effect, with a coefficient of 0.003, but not statistically significant (sig. = 0.900). This means that although self-efficacy is proven to play an important role in boosting academic achievement, it is not strong enough to strengthen the effect of the zoning system policy structurally. This result suggests that the synergy between the zoning policy and students' psychological factors has not been optimally realized, possibly due to weaknesses in the implementation of zoning, the uneven quality of education between schools, and the lack of support for strengthening self-efficacy in non-excellence schools.

Table 5. Interaction Test Results of Zoning System and Self-Efficacy

Interaction Variable	B	Std. Error	eta	t	Sig.
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X1*X3 (Zoning x Efficacy)	0,003	0,020	0,097	0,126	0,900
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This finding suggests that self-efficacy does not strengthen or mediate the effect of the zoning system on learning achievement. While self-efficacy is important individually, its collaboration with a policy structure such as zoning has not provided any real synergy.

CONCLUSION

The zoning system policy at the junior secondary school (SMP) level in Gresik district in the Indonesian education system shows that simultaneously this policy has a significant influence on student learning achievement, along with resilience and self-efficacy factors. However, when analyzed partially, only self-efficacy is shown to have a positive and significant influence on student academic achievement.

In terms of resilience, the zoning policy has not had a significant impact on learning achievement. While zoning can reduce emotional stress as students attend school closer to home and strengthen social interactions between students in the same geographical environment, the results of this study show that resilience has not been a major determinant in improving learning outcomes. This indicates the need for additional strategies to strengthen students' mental resilience and adaptation at school.

Academically, the zoning system has also not directly improved student learning achievement. The low significance of the effect of the zoning system on learning outcomes shows that there are still structural challenges, such as inequality in school quality and facilities between zones, that need to be addressed immediately so that the zoning policy is not only administrative, but also functional in encouraging equitable distribution of education quality.

Meanwhile, self-efficacy has been shown to be a key factor affecting students' academic achievement. Students with high levels of confidence in their learning abilities tend to have better academic outcomes. Therefore, strengthening self-efficacy through motivating learning approaches, giving appreciation, and a supportive learning environment is very important in supporting student success, especially in schools affected by zoning policies.

Thus, in order to optimally achieve the policy objectives of the zoning system, efforts are needed to improve the quality of education equally in all schools in one zone, including equitable distribution of infrastructure facilities, improving teacher competence, and learning approaches oriented towards strengthening student character and self-confidence.

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