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Indonesian tenth graders' academic self-efficacy and English achievement admitted through zoning and achievement schemes

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ABSTRACT

The zone-based new student admission scheme for lower and secondary public schools has significantly changed education practices, not only in the admission policy but also in the teaching and learning practices. This study aims to describe and compare academic self-efficacy and the achievement of Indonesian tenth-graders admitted through the zoning and achievement admission schemes. Five public senior high schools were purposively selected as samples to represent different clusters of school preferences before the zoning scheme was implemented. Data were collected through an academic self-efficacy questionnaire specially prepared for the study and an achievement test conducted by the classroom teachers. A total of 483 tenth graders completed the questionnaire and an English achievement test; among them, 74.3% were admitted through the zoning scheme, 17.6% were through the achievement scheme, and the remaining 8.1%, were through affirmation, transfer of parent's job, and other schemes. Data were analyzed descriptively and inferentially using SPSS. The tenth graders had a high level of academic self-efficacy. However, there was a significant difference in academic selfefficacy and English achievement between the tenth graders admitted through the zoning scheme and those admitted through the achievement scheme. The causes of the difference and the implications are discussed.

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1. INTRODUCTION

Zone-based new student admission scheme, or zoning scheme for short, for lower and secondary public schools, which has been implemented in Indonesia since 2017, has significantly changed education practices, not only on the admission policy but also on the teaching and learning practices in the classrooms. Under the scheme, new student admission is based on the prospective student's home-to-school proximity distance. Prospective students living close to the school are prioritized no matter how poor their academic performance is. The closer the residence of a prospective student is to the school, the higher the position in the rank of being admitted is. The regulation stipulates that public schools allocate at least 50% of the total seats available for prospective students living in the zoning area. This policy has triggered heated controversies and debates at the beginning of its implementation. The government insisted that the zoning scheme was meant to ensure equal access to education and create a more even quality among schools by eliminating the dichotomous segregation of favorite and non-favorite schools [1]. Some groups of society, especially those who previously could take advantage of the achievement-based admission scheme, on the

other hand, claimed that the policy had erased equal rights to access quality education [2]. The zoning scheme has degraded learning motivation, leading to poor performance and achievement [3], [4].

After some years of its implementation, marked with complaints from teachers and parents [5]–[7], the debates subsided. Society, in general, accepts the policy as a fact they have to face. Those who reside far outside the zoning area can still enroll in the chosen school by taking the achievement admission scheme, which is administered based on the achievement scores the prospective students obtained in the previous school or performance records in regional and national competitions. Schools allocate up to 30% of the total admission for this scheme. Besides the two schemes, in 2023/2024, public schools also had two other schemes: affirmation and transfer of parental duty. The first scheme was designed to accommodate prospective students from poor families and those whose parent(s) passed away because of COVID-19, and the second one was prepared for prospective students who had to move geographically because of their parent's jobs.

Problems of education quality, however, are far from over. Complaints are voiced by teachers of the schools that used to be highly favorite. Without achievement and performance requirements in admission, classrooms now become academically more heterogeneous. Before the implementation of the zoning scheme, classrooms of favorite schools were relatively homogeneous academically. They were full of high-achieving, and motivated students who could study more independently. With a little teaching effort, they could still achieve satisfying results. Nowadays, those teachers must exert more effort to help many low-achieving students [7]. This, in turn, reduces the teacher's attention to the high-achieving group who needs enrichment and higher challenges to keep them motivated in learning.

Despite a lot of previous studies on the zoning scheme and its related aspects, such as zoning and education access [8], zoning and quality of education [9], the challenges and problems of the zoning scheme [7], the impacts of zoning on student achievement and school innovation [10], studies on zoning scheme and academic self-efficacy are still limited. Among a few studies on the topic was the study of Yunita and Bahriah [11]. The study, however, focused on general self-efficacy rather than on academic self-efficacy. In addition, it did not compare the self-efficacy of the students admitted through the zoning scheme and those admitted through other schemes. Therefore, this study aimed to fill the gap and extend the previous studies by focusing on academic self-efficacy and achievement of the students admitted through the zoning scheme and comparing them to those of the students admitted through other admission schemes, particularly the achievement scheme.

Self-efficacy is a construct derived from the social cognitive theory of Bandura. It is defined as people's beliefs and judgment on the capability to successfully perform tasks and control events that affect their lives [12], [13]. This construct is domain-specific in the sense that people's perception of their ability is different across content areas [14]. It varies depending on the general nature of the task at hand and across situations [15]. For example, a student's belief in his ability to perform successfully in the academic field can be different from his belief in sports. As a subset of self-efficacy, academic self-efficacy is people's belief in their ability in an academic domain. It refers to students' beliefs about educational capabilities relevant to their learning behavior and outcomes [16], [17]. It is a student's confidence in his abilities to successfully perform and achieve academic tasks and goals [18]–[20]. Family's social economic status, such as parents' jobs, education, income, and social capital, such as mentor or teacher support, was found to correlate directly to academic self-efficacy [21], [22]. Furthermore, motivation, performance expectations, peer support, and facilitating conditions play essential roles in enhancing students' academic self-efficacy [23], [24].

Academic self-efficacy predicts academic achievement and performance [25], [26]. Students with a higher sense of academic self-efficacy develop a higher interest in academic activities [27] and have better courage to set demanding academic goals [28]. They can also exercise more strenuous efforts to achieve goals, exhibit more persistence and perseverance, and more quickly recover from failures [29]. High-efficacious students see difficult academic tasks as challenges to be mastered rather than threats to be avoided. Furthermore, they feel less stress and have better psychological and emotional health. On the contrary, less efficacious students see academic tasks as harder than they really are [30]. This perspective further leads them to the feeling of stress, depression, anxiety, and unwillingness to try. Consequently, they will never develop mastery experience, competence, and skills.

Given its important role in the success of learning, this study explored the academic self-efficacy of the tenth graders as they started their first few weeks at senior high school. Three research questions were set: i) How was the academic self-efficacy of the tenth graders as they started studying at their new schools?; ii) How did the academic self-efficacy of the tenth graders admitted through the zoning scheme differ from those admitted through the achievement scheme?; and iii) How did the achievement of the tenth graders admitted through the zoning scheme differ from the one admitted through the achievement scheme?

Congruence with the research questions, the study aimed to describe the tenth graders' academic self-efficacy as they started studying at their new school. In addition, it compared the academic self-efficacy and achievement of the tenth graders admitted through the zoning system to those admitted through the achievement scheme. The research was crucial for some reasons. First, during the first few weeks of studying

at a new school, students establish new relationships and simultaneously set academic expectations. This critical period will determine how the rest of the year will go and the academic achievement students would expect [31]. Secondly, the absence of a standardized test either at the end of junior high school, previously known as the national exam, or the admission test conducted by the school makes students have no clear idea of their academic ability relative to their classmates. Thirdly, there has been an assumption in the public that students admitted through the zoning scheme perform lower academically than those admitted through the achievement scheme. This study would be able to offer proof to validate or refute the assumption.

2. RESEARCH METHOD

2.1. Research design

This study belonged to survey research as it collected data to answer the research questions [32]. It described and explained the tenth graders' academic self-efficacy and English achievement. Next, the academic self-efficacy and achievement of the tenth graders admitted through the zoning scheme were compared to those admitted through the achievement scheme.

2.2. Respondents

A total of 483 tenth graders from five public schools were recruited as respondents for the study. They were among 4,397 tenth graders in 16 public schools in Semarang City, Indonesia who started their first year at senior high schools in the 2023/2024 academic year. The five schools were purposively selected to represent the used-to-be clusters of the highly favorite to less favorite schools. Besides, they also represented the geographic locations as they were located in different subdistricts. From each school, three classes of grade X were randomly selected. Then, the students were requested to serve as respondents by filling out the academic self-efficacy questionnaire and completing an English achievement test. Table 1 presents the demographic characteristics of respondents. For anonymity, the schools were labeled A, B, C, D, and E.

Table 1. The demographic characteristics of the respondents

Varial	Frequency	%	
Gender	Male	211	43.7
	Female	272	56.3
Age	14	30	6.2
	15	333	68.9
	16	106	21.9
	17	11	2.3
	18	3	0.6
Schools	SMAN A	97	20.1
	SMAN B	106	21.9
	SMAN C	92	19.0
	SMAN D	101	20.9
	SMAN E	87	18.0
Admission scheme	Zoning	359	74.3
	Affirmation	10	2.1
	Transfer of job	20	4.1
	Achievement	85	17.6
	Other	9	1.9

Note: SMAN=public senior high school

2.3. Instruments

The study used two instruments to collect data. The first was a questionnaire to measure the tenth graders' academic self-efficacy adapted from Byrne *et al.* [26]. It was a Likert-type questionnaire with seven scales of confidence level from "totally not confident" (scale 1) to "absolutely very confident" (scale 7). There were 20 "can-do" statements [33] written in Indonesian were used to measure the tenth graders' beliefs in their ability to accomplish various academic tasks. Before its use, the statements and the language in the questionnaire were validated through a focus group discussion between the researchers and five teachers from the five schools whose students were recruited as the respondents. This was to ensure that the language in the questionnaire was appropriate and easy to understand. In addition, the questionnaire was also consulted by an expert in psychometrics, and it was declared that no statement in the questionnaire potentially harms or offends the respondents. The questionnaire was also free from any gender or racial biases.

An exploratory factor analysis (EFA) was then run to measure its validity. Before EFA, Kaiser-Meyer-Olkin (KMO) and Bartlett's tests were run. The KMO measure of sampling adequacy (MSA) value was 0.954 - far above the threshold suggested by Hair *et al.* [34], and the Sig. for Bartlett's test of sphericity

was 0.000. Further, the MSA of the indicators ranged between 0.922 and 0.975. These indicate that EFA can be run. With 483 respondents, this study also met the requirement for the minimum EFA sample size [35]. The scores of extractions of the indicators were above 0.05, and the initial Eigenvalues and extraction sums of squared loading and the scree plot suggest three factors that could explain 60.028% of the variance.

The second instrument was an English achievement test. This research did not use a single model of achievement test. Instead, it allowed the classroom teachers to design and administer the test themselves and then shared the scores with the researchers for analysis. In this way, the content validity of the test [36] was better guaranteed.

2.4. Data collecting procedure

The questionnaire was distributed to the respondents through a Google Form during the English class. The teacher and the researchers were present in the classroom and explained the research purpose and the questionnaire statements. For the test, the English teachers announced the test a week before the test was administered so that the students could prepare for it. It was a close-book test done on the test sheet.

2.5. Data analysis

The data on academic self-efficacy and English achievement was scrutinized to ensure that all data were complete. Respondents who did not collect the questionnaire and complete the achievement test were excluded from further analysis. To answer research question 1, the data on academic self-efficacy were analyzed descriptively. The mean score and the standard deviation (SD) were calculated, and based on the mean, the level of academic self-efficacy was categorized into low, moderate, or high. To answer research question 2, after descriptive analysis, the mean score of academic self-efficacy of the tenth graders admitted through the zoning system was compared to that of the tenth graders admitted through the achievement scheme. A similar procedure was applied to answer research question 3, but the data being compared were the English achievement test scores. As the data were not normally distributed, the Mann-Whitney U test in SPSS version 25 was used.

3. RESULTS AND DISCUSSION

3.1. The tenth graders' academic self-efficacy as they started studying at their new schools

The first research question of this study was how the academic self-efficacy of the tenth graders was like when they started their new schools. This academic self-efficacy was measured by twenty statements requiring responses from scale 1 to scale 7 of confidence level. Based on EFA analysis, the twenty indicators were grouped into three factors. Factor 1 was the tenth graders' ability to manage learning activities. Factor 2 was the tenth graders' ability to demonstrate the acquired lessons, and factor 3 was the tenth graders' ability to work and compete with other students. The factors, the number of respondents (N), the mean scores (mean), the SD of each indicator, and the level category are presented in Table 2.

Table 2 shows that 483 students completed the questionnaire. The mean scores of the statements are between 4.714 (If my teacher speaks in English, I can understand) and 6.097 (I can use the internet to look for more information about my lessons), while for the SD, they are between 1.133 (During group work, I can participate and contribute) and 1.603 (If my teacher speaks in English, I can understand). Based on the mean scores, the respondents' belief in their ability to successfully execute an academic task is categorized into three levels: low (mean score 1 to 2.999), moderate (mean score 3.000 to 4.999), and high (mean score 5.000 to 7.000).

Table 2 shows that the respondents mostly had high academic self-efficacy. They had a high belief in following the lessons, completing assignments and homework, understanding the materials in the books, participating in group work and discussion, memorizing important things, managing time, achieving high scores, competing to be the best, and so on. However, there are six academic tasks with moderate levels of confidence. Besides, the statements "If my teacher speaks in English, I can understand," that fall into the moderate level are: i) If the teacher asks me to do a task in front of the class, I can do it; ii) I can use the library to search for information and knowledge; iii) I can answer my teacher's questions; iv) I am not nervous when preparing for my exams; and v) I can explain the lessons to my classmates. These suggest that the Indonesian tenth graders had moderate beliefs in their ability to practice, express, and share their academic ability (1, 3, and 5). Although they believed that they could follow and understand the lessons and achieve high scores, they were not entirely confident that this academic knowledge could be easily communicated. Students might suffer from communication apprehension, indicated by their immature skill to express what they have already learned. The moderate level of self-efficacy in library use could be because of their little inexperience in visiting the school's library. These tenth graders were just starting their new schools and had not had enough opportunities to explore school facilities. Some students from one of the schools explained that the break time was very short and usually they used the time to relax and socialize.

Going to the library was not a priority. In addition, the data also revealed students' test anxiety, indicated by their unsecured and uneasy feelings about facing tests. It is a kind of apprehension experienced regarding test failure [37].

Table 2. Descriptive statistics of the tenth graders' academic self-efficacy

Indicators	Factor	N	Mean	SD	Category
I can follow the lessons at this school.	1	483	5.547	1.178	High
I can complete the assignment or homework assigned by my teacher on schedule.	1	483	5.696	1.267	High
I can understand the materials in the books.	1	483	5.491	1.151	High
I can compete to be the best student if I try.	3	483	5.998	1.216	High
I can achieve high scores in English and other subjects.	2	483	5.277	1.361	High
I can use the internet to look for more information about my lessons.	3	483	6.097	1.147	High
If the teacher asks me to do a task in front of the class, I can do it.	2	483	4.965	1.544	Moderate
I can achieve the best at this school.	3	483	5.710	1.222	High
During group work, I can participate and contribute.	3	483	6.002	1.133	High
During the discussion, I can express my opinions.	3	483	5.828	1.162	High
If my teacher speaks in English, I can understand.	2	483	4.714	1.603	Moderate
I can use the library to search for information and knowledge.	1	483	4.994	1.448	Moderate
I can memorize the important things explained by my teachers.	1	483	5.470	1.178	High
I can study together with cleverer students.	3	483	5.779	1.168	High
I can complete the group projects assigned.	3	483	5.747	1.191	High
I can manage my study time for exams.	1	483	5.507	1.263	High
I can ask questions to my teacher if I don't understand what he/she has explained.	1	483	5.267	1.451	High
I can answer my teacher's questions.	1	483	4.899	1.316	Moderate
I am not nervous when preparing for my exams.	1	483	4.751	1.478	Moderate
I can explain the lessons to my classmates.		483	4.845	1.406	Moderate
Valid N (listwise)		483			

The moderate mean score of understanding their teachers' speaking English confirms the low English proficiency of Indonesian students. Even among Asian countries, Indonesian was ranked low [38]. English proficiency index (EPI) in 2017 ranked Indonesia 10th of the 20 countries in Asia [39]. While vocabulary is essential in understanding English, Indonesian students have low vocabulary mastery [40]. Although English has long become a compulsory subject at schools, high school students in Indonesia still face many problems in English, such as a lack of grammar and vocabulary mastery, poor pronunciation, and low speaking performance [41]. The indicator with the highest mean score, "I can use the internet to look for more information about my lessons," is aligned with the finding of previous studies. Prasetiyo *et al.* [42] in their research of Indonesian student digital citizenship, for example, found that Indonesian students used the internet on average 3.03 hours a day. Thirty-four-point four percent of the students used the internet for more than 9 hours a day, 36.8% used the internet for 7-9 hours a day, 25.8% spent 4-6 hours a day on the internet, and the remaining 2.9% spent only 1-3 hours a day.

Although there were some indicators belonging to moderate level, in general, as they started their first year at senior high school, the Indonesian tenth graders had a high level of academic self-efficacy. This finding aligns with Bakti *et al.* study [43]. This was, of course, relieving since academic self-efficacy plays a vital role in academic achievement and performance [25], [26], [44]. Students with high academic self-efficacy will have a big opportunity to succeed academically as they have high learning motivation, strong learning efforts, and quickly recover from academic setbacks [27]–[29]. However, it is worth remembering that self-efficacy is malleable [13]; it may change along the process of study; therefore, maintaining and even enhancing it will be very necessary.

3.2. The academic self-efficacy of tenth graders admitted through zoning and achievement schemes

The second research question for this study was how the academic self-efficacy of the tenth graders admitted through the zoning scheme differed from that of those admitted through the achievement scheme. The academic self-efficacy of the tenth graders admitted through other schemes: affirmation and the transfer of parents' job schemes, were excluded for further analysis as their numbers were too small (Table 1). Table 3 presents the mean scores, the SD, and the standard error mean.

Table 3. Tenth graders' academic self-efficacy admitted through zoning and achievement schemes

Variable	Admission	N	Mean	SD	S. Error mean
Academic self-efficacy	Zoning scheme	359	106.176	18.020	0.951
	Achievement scheme	85	119.600	14.035	1.522
	Total	444			

The mean score of academic self-efficacy of the tenth graders admitted through the zoning scheme (n=359) was 106.176, while the one of the achievement scheme (n=85) was 119.600. The academic self-efficacy of the tenth graders admitted through the achievement scheme was higher than that of those admitted through the zoning scheme. The Mann-Whitney U test for mean difference resulted in 8493.500, the Wilcoxon W was 73113.500, and Asymp. Sig. (2-tailed) was 0.000. This suggests that the difference was significant. In other words, there was a significant difference in the academic self-efficacy between the tenth graders admitted through the zoning scheme and those admitted through the achievement scheme.

Some points can be proposed to explain the finding. First, as Bandura suggests, the development of self-efficacy is influenced by four sources: mastery experience, vicarious experience, social persuasion, and physiological and affective states [13], [45]. Of the four sources, mastery experience is the most dominant and informative [13], [46]. It is an experience of doing tasks in question, in this case, academic tasks. The more frequently a student does an academic task successfully, the more confident he will be. A high efficacy expectation for a particular task is enhanced as a person successfully completes the task at hand [47]. Students admitted through the zoning scheme had lower academic self-efficacy as they might not struggle to get seats in their prospective schools. The zoning admission scheme guarantees they will have the seats, regardless of their academic performance. This policy has caused some students to develop low learning motivation because they believe grades will not matter [48]. Feeling secured about being admitted to the surrounding school has resulted in low learning effort, low practice, and, consequently, low mastery experience. Conversely, students whose house-to-school proximal distance does not secure the zoning admission scheme had to work harder. They would spend much effort in learning as grade was vital for admission. This would make them more experienced and confident in academic tasks, leading them to higher efficacy.

Secondly, the development of academic self-efficacy is also influenced by family, peers, schooling, and transitional influence [30]. Indonesian parents were involved in their students learning and motivation [49], [50]. Parents motivate, monitor, control, and help their children learn. Knowing that their children can secure seats in prospective public schools diminishes the intensity of the involvement. In contrast, parents who cannot take advantage of the zoning scheme will behave otherwise. They will give more motivation, monitor, and help their children to achieve good grades. This leads to their children studying harder. Parents are important figures whose persuasion impacts their children's self-efficacy. In addition to family, schools affect academic self-efficacy development. The researcher met some students admitted through a zoning scheme in a used-to-be highly favorite school- saying that the school's reputation had made them anxious about their academic ability. They were afraid of not being able to fulfill the school's expectations.

3.3. The achievement of the tenth graders admitted through zoning and achievement schemes

The third research question of this study was how the achievement of the tenth graders admitted through the zoning scheme differed from the one admitted through the achievement scheme. The achievement was measured by an English achievement test as the students completed some topics during the first few months of their study. This achievement test was different from school to school as the schools were implementing the Merdeka Curriculum, which gave schools and classroom teachers ample freedom to select and modify learning materials. However, they employed the same grading scale of 0–100. It is believed that this classroom achievement test could better reflect students' achievement than a single uniform test prepared by the researchers. Table 4 presents the results.

Table 4. Test scores of the tenth graders admitted through zoning and achievement schemes

Variable	Admission scheme	N	Mean	SD	S. Error mean	
Test score	Zoning scheme	359	60.381	24.218	1.278	
	Achievement scheme	85	73.435	23.983	2.601	
	Total	444				

The test mean score of the zoning scheme was 60.381 with SD=24.218, while the one of the achievement scheme was 73.435 with SD=23.983. The findings show that the mean score of the English achievement test of the tenth graders admitted through the zoning scheme and the one through the achievement scheme was significantly different. The tenth graders of the achievement group, who in the previous analysis were found to have higher academic self-efficacy, had a higher test mean score. Mann-Whitney U test was run to see whether the difference in the mean score was significant. It resulted in Mann-Whitney U=9971.000, Wilcoxon W=74591.000, Z=-4.979, and Asymp. Sig. (2-tailed)=0.000. So, it was concluded that there was a significant difference in the English test mean score between the tenth graders admitted through the zoning scheme and the those of the achievement scheme.

Though not surprising, this finding gave empirical evidence of the different academic abilities of the students admitted through zoning and achievement schemes. As the zone-based admission scheme does not use academic achievement as a criterion for admission, it is not surprising that the test mean score of students admitted through the zoning scheme was lower than that of the achievement scheme. However, it does not mean that all students admitted through the zoning system had a low academic performance. Some of them did have high scores on the test. A wide score gap between the high-performing and low-performing students has made the test mean score of students admitted through the zoning scheme significantly lower than that of the achievement scheme. While students of the zoning scheme were academically heterogeneous, students of the achievement scheme were more homogenous.

The finding that the tenth graders with lower academic self-efficacy, in this case, the tenth graders admitted through the zoning scheme, had lower test scores supports previous studies, which mostly found that self-efficacy positively affects achievement and performance [51]. The study of Mills *et al.* [52] on the influence of self-efficacy on achievement involving 303 students studying foreign languages also found that self-efficacy for self-regulation predicted language achievement. A similar research finding was offered by Pajares [53], which concluded that self-efficacy beliefs and performance were related. Students with high self-efficacy choose to engage in activities, exercise greater efforts, and can persist longer in times of difficulty [54]. Students with higher self-efficacy strived to complete academic tasks harder, persist better in times of trouble and see tasks as challenges to do rather than a treat, exert better commitment to the tasks, and quickly recover from setbacks [29], [47]. This leads them to develop a better sense of efficacy.

4. CONCLUSION

In general, the Indonesian tenth graders had a high level of academic self-efficacy. They had high confidence that they could accomplish academic tasks successfully. However, there was a significant difference in academic self-efficacy between the tenth graders admitted through the zoning scheme and those admitted through the achievement scheme, in which the self-efficacy of the tenth graders admitted through the achievement scheme was higher than the those admitted through the zoning scheme. This difference was also evident in the academic achievement. Students admitted through the achievement scheme performed higher academically than those admitted through the zoning system. The findings of the study bring some implications. As the classrooms are academically heterogeneous, teachers must, therefore, be able to select and implement teaching strategies that can close the gap between the high-performing and the lowperforming students. Attention should be given to those performing low so that they can speed up the learning process. At the same time, however, teachers must also provide challenges to those performing high so that this group of learners can be kept motivated. This study may also have policy implications. Schools are actually allowed to have up to 30% of new students through the achievement scheme. The data, however, show that the number of students admitted through the achievement scheme was less than 20%. Schools should do something to attract more high-achieving prospective students so that a better academic environment can be created and developed.

The study had some limitations. Among others are the unequal numbers of respondents in the zoning and achievement groups as this current study took the whole class members as respondents. Randomly picking students of equal number and compare their academic self-efficacy and academic performance can be an option. The second limitation was the English achievement test which covered only a few learning objectives; therefore, it might not be comprehensive. Future research is expected to take a more equal number of respondents and use mid-term or final exam scores as data for achievement.

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AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

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C: Conceptualization I : Investigation Vi: Visualization M: Methodology R : ResourcesSu: Supervision So: Software D : Data Curation P: Project administration Va: Validation O: Writing - Original Draft Fu: Funding acquisition

Fo: Formal analysis E : Writing - Review & Editing

CONFLICT OF INTEREST STATEMENT

There is no conflict of interest in this paper.

INFORMED CONSENT

This article is one of the outputs of the research entitled "Academic self-efficacy and self-regulation of low achieving students in heterogeneous classes impacted by zoning PPDB: influencing factors and leveraging strategies (in Indonesian) (A case study of Semarang City public high school students)." It explores the academic self-efficacy of low-achieving students in heterogeneous classrooms and other relevant issues. For data collection, the authors got a letter of consent (permit) from the Education and Culture Office of Central Java Province No. 071/1070 (16 July 2023). In collecting the data, the authors also got permission from the schools. Data were collected by questionnaire and interview, and prior to the collection, respondents had been given sufficient information about the objective and procedure of the research. Respondents' names are kept anonymous.

ETHICAL APPROVAL

The research followed rules and ethics; no item of the questionnaire and interviews can be considered as offensive to races, religions, or personal values.

DATA AVAILABILITY

The data that support the findings of this study are available from the corresponding author [H], upon reasonable request.

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