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Exploring Self-Regulated Writing Strategies: A Comparison between Paragraphs and Essays

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Abstract

Writing requires a complex skill, and thus students need to regulate themselves in employing the appropriate strategies to achieve good writing performance. The present research investigated Self-Regulated Writing (SRW) strategies used by EFL (English as a Foreign Language) university students. It contrasted the students' strategies related to the complex structure of the texts (i.e., paragraphs and essays) and students' writing performance. The data information came from two separate sets of self-regulated learning strategy questionnaire, as well as writing outcomes of the students. Descriptive statistics and the Mann-Whitney U test were utilized to evaluate the data. The six dimensions of SRW strategies were extensively utilized in paragraph and essay writings. The six dimensions

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include motive, method, time, performance, physical environment, and social environment. Interestingly, the social environment dimension had the highest mean score, showing that the students needed assistance from their peers and available learning resources. Meanwhile, the motive dimension obtained the lowest mean in both paragraph and essay writings. Furthermore, the analysis showed no significant statistical difference in using SRW strategies in writing paragraphs and essays except in the method dimension. The difference in strategy use based on achievement was also not significant. The results indicate that the students applied similar SRW strategies in paragraph and essay writings regardless of their proficiency levels. Pedagogical implications and recommendations for future research are also further discussed in the article.

Keywords: Essay, paragraph, self-regulated writing strategies, writing.

1. INTRODUCTION

Since writing is categorized as a compound competence in language skills, many students have difficulties mastering this skill (Harris & Graham, 2016). In the EFL context, students often experience difficulties in three aspects of writing, i.e., content (i.e., the topic being discussed), linguistic (i.e., language features), and lexical elements (i.e., vocabularies) (Al Seyabi & Tuzlukova, 2014; Karim et al., 2017; Umamah et al., 2019). The difficulties are limited to long-written texts (e.g., essays) and simpler writing (e.g., paragraphs). In essay writing, students face challenges in content, grammatical, and lexical aspects (Sudirman & Tiasari, 2015). In paragraph writing, Karim et al. (2017) revealed that EFL students face difficulties in all stages of writing (writing, revising, and planning—in sequence) and in using idiomatic expressions and lexical aspects. Al Seyabi and Tuzlukova (2014) unveiled that EFL students generally have problems with lexical and content aspects in paragraph and essay writings. Thus, appropriate, and effective learning strategies are strongly demanded to help them cope with these writing difficulties (Cohen & Macaro, 2007).

Regarding writing problems, a large body of research has convincingly proven that Self-Regulated Learning (SRL) strategies are effective in helping students improve their writing achievement (Cer, 2019; Helsel & Greenberg, 2007; Kartika, 2015; Roderick, 2019; Zimmerman & Bandura, 1994). SRL strategies are effective because they involve self-planning, self-monitoring, and self-regulation, which fit the nature of writing as a process, covering three phases. The preparation phase starts prior to writing (goal setting), the execution phase takes place during writing (self-monitoring), and the reflection phase occurs following writing (self-evaluation) (Hughes et al., 2019). By employing SRL strategies, students can achieve linguistic development, cognitive improvement, and regulation to finally ameliorate their writing quality (Cer, 2019). To specifically address writing skills, this current research uses the term Self-Regulated Writing (SRW) strategies, following other researchers (Brunstein & Glaser, 2011; Reynolds & Perin, 2009).

As stated earlier, EFL students experience difficulties in writing paragraphs and essays; therefore, they need to apply SRW strategies. However, previous studies on the use of SRW strategies mainly put their focus on essay writing (Abadikhah et al.,

2018; Helsel & Greenberg, 2007; Kartika, 2015; Teng & Huang, 2019) or paragraph writing (Bai & Guo, 2019; Geres-Smith et al., 2019; Hughes et al., 2019) separately. Thus, different use of the strategies in both types of writing cannot be identified clearly. Moreover, Al Seyabi and Tuzlukova (2014) uncovered that EFL students generally have similar problems in lexical and content aspects when writing paragraphs and essays. This leads to the question of whether the students also apply similar SRW strategies in writing texts with different complexity. In addition, issues concerning SRW strategy use based on writing achievement have not been sufficiently investigated. A previous study reports a correlation between SRW strategies and writing achievement in general (Geres-Smith et al., 2019) without explicitly addressing proficient and less proficient students. Another study finds that the students' SRW strategy use differs depending on their proficiency levels, indicating that proficient students use more SWR strategies than their less proficient counterparts (Bai & Guo, 2019). Abadikhah et al. (2018) found that fourth-year students apply SRW strategies (i.e., method and social environment) more frequently than third-year students. These findings imply that students with different writing proficiency levels might also have different SRW strategy use, but this conclusion needs further investigation. Therefore, this research is intended to determine the SRW strategy used in students' paragraph and essay writings and to examine whether there is a significant difference in the application of SRW strategies based on different text complexities and writing achievement.

Consequently, this research is conducted to investigate what SRW strategies are applied by EFL university students in composing paragraphs and essays. Furthermore, this research is to examine whether there is a significant difference in the use of SRW strategies based on the text the students produce and their writing achievement. The research questions are formulated in the following:

1. What SRW strategies are applied by EFL university students in writing paragraphs and essays?
2. Is SRW strategy used in writing paragraphs significantly different from writing essays?
3. Do proficient and less proficient students differ in using SRW strategies in writing paragraphs and essays?

2. LITERATURE REVIEW

2.1 Paragraph vs. Essay Writing

Overall, in writing a paragraph and an essay, students need to consider the content (i.e., the topic being discussed), the organization (i.e., coherence and cohesion), and the language use (i.e., grammar) (McDonough et al., 2018). In terms of content, paragraph and essay writings are different. In paragraph writing, the content consists of three structures: topic sentence, supporting sentence, and concluding sentence (Oshima & Hogue, 2006). The topic sentence states the main idea that the writer wants to discuss in the paragraph. Supporting sentences contain the information or proofs which explain the topic sentence. Finally, a concluding sentence is a closing remark in the form of a paraphrase or summary to remind the readers of what is being discussed. Meanwhile, in essay writing, content refers to the ideas presented in three

parts: an introductory paragraph involving a clear thesis statement, body paragraphs with logical and relevant details as well as reasons to support the argument, and a concluding paragraph including accurate restatement of the thesis statement, a summary of the details or reasons, and recommendation.

Regarding organization and language use, both paragraph and essay writings require similar standards (Langan, 2010). The organization deals with the presence, order, and number of the parts of the paragraph or essay, i.e., topic sentence/introductory, supporting sentences/body, and concluding sentence/paragraphs. Meanwhile, language use is related to the correct and appropriate use of grammar and mechanics (e.g., spelling, punctuation, and capitalization).

2.2 Self-Regulated Writing Strategies: The Six Dimensions

The current issue in language learning strategy research is related to the notion of SRL strategies. Self-regulated strategies, according to Zimmerman and Risemberg (1997) and Kinnebrew et al. (2015), can be defined as thoughts, feelings, and actions used to achieve different literary goals, including writing skill improvement and enhancement of written text quality. According to Pintrich and De Groot (1990) and Panadero (2017), self-regulated learning covers three components: metacognitive strategies (for planning, monitoring, and modifying their cognition), management and control of their effort, and actual cognitive strategies.

SRL strategies can be used in learning vocabulary (Khezrlou & Sadeghi, 2011; Sadeghi & Khezrlou, 2012), listening (Yabukoshi, 2018), and reading (Anggraini & Cahyono, 2020; Kavani & Amjadiparvar, 2018; Oruç & Arslan, 2016). In the last few years, these strategies have been widely adopted in writing skills (Cer, 2019; Helsel & Greenberg, 2007; Kartika, 2015; Roderick, 2019; Zimmerman & Risemberg, 1997). Along with the frequent use of these strategies in the writing context, the term SRL strategies has been replaced with SRW strategies (Arianto & Wulyani, 2022; Brunstein & Glaser, 2011; Reynolds & Perin, 2009).

The classification of SRW strategies in this study adopts the theoretical framework of Zimmerman (1998), consisting of six dimensions related to the learning process: time, motive, physical environment, performance, method, and social environment. The motive dimension focuses on reasons (why) for learning. This dimension involves goal-setting, self-talk, and emotion control. The method dimension relates to the ways (how) learners learn. It requires them to make a summary, take notes, ask questions, rehearse, and make a visual representation. The time dimension deals with students' time management (when) during the learning process. The physical environment dimension is related to structuring the surrounding environment (where) to support learning. In addition, the social environment dimension refers to help-seeking (with whom) when they confront learning difficulties, and the performance dimension deals with (what) learning by observing, reflecting, making a judgment, and comparing current performance with the learning goals.

2.3 Self-Regulated Writing Strategies and Writing Achievement

Failure to apply effective strategies is one of the causes of writing difficulties (Graham et al., 2000). SRW strategies help students cope with the complexities of

writing. The significant role of SRW strategies in enhancing the quality of students' writing was proven by previous research conducted at all levels of education.

In preschool, [Kim and Nor \(2019\)](#) revealed that SRW strategies significantly affected young learners' self-efficacy and writing performance. Self-monitoring and controlling strongly predicted self-efficacy, while planning and goal setting predict early writing performance. In addition, the students perceived that using planning and goal-setting, self-monitoring, and self-evaluation strategies enhanced the writing performance.

In elementary schools, [Geres-Smith et al. \(2019\)](#) reported that SRW strategies promoted students' writing quality, duration, and self-efficacy in composing a persuasive text. The research proved a significant change in students' self-efficacy after the teacher performed self-regulated strategies development (SRSD) intervention. Similarly, using self-regulated strategy intervention, [Helsel and Greenberg \(2007\)](#) uncovered that SRW strategies helped struggling writers tackle the difficulties in the writing process.

At the secondary level, [Rosário et al. \(2019\)](#) found that writing performance of students improved after implementing SRSD and SRSD with story-tool interventions. [Teng and Huang \(2019\)](#) also confirmed the essential roles of SRW strategies (goal-oriented monitoring and evaluating) in improving students' writing outcomes. Meanwhile, [Bai et al. \(2020\)](#) uncovered that the use of the SRL writing strategies was significantly different among students with different writing proficiency and grade levels. Long before SRW strategies received much concern from ELT researchers, [Zimmerman and Bandura \(1994\)](#) unveiled that self-regulatory efficacy for writing beliefs was directly related to the students' perceived efficacy of writing course attainment and indirectly correlated with their achievement.

At the university level, [Kartika \(2015\)](#) reported a significant increase in students' writing scores after using self-regulated writing strategies. In terms of frequency of use, [Abadikhah et al. \(2018\)](#) disclosed that EFL university students use the strategies of SRW at an intermediate to somewhat advanced level. Strategies in the method dimension were reported to be the most frequently used. Besides, fourth-year students used SRW strategies more intensively than third-year students. It implies that level of proficiency might have influenced the strategy use. Investigation of graduate students' self-regulation and rhetorical problem-solving revealed that more proficient students made a narrative of progress and used writing problems to find possible solutions and set goals ([Roderick, 2019](#)).

Experimental research conducted by [Teng and Zhang \(2019\)](#) uncovered that students engaged in the self-regulated strategy intervention performed better and applied the strategies more actively than those who did not receive any intervention. A recent study reported that the overall of SRW strategy use (i.e., time, motive, physical environment, performance, method, and social environment) is at a high level, with the social environment dimension as the highest mean and the motive dimension as the lowest ([Umamah & Cahyono, 2020](#)). The findings further uncovered that the proficient students dominantly applied method, performance, and social environment dimensions of SRW strategies. However, the research did not investigate the use of SRW strategies by less proficient students.

3. METHODS

3.1 Research Design

The current research used a quantitative design to address the three research questions. The first question was answered through descriptive statistical analysis to investigate the most frequently used SRW strategies. In addition, the Mann-Whitney U test was carried out to answer the second and the third research questions to find out the significant difference in the use of SRW strategies based on the two types of writing the students produced and the significant difference in their achievement in writing paragraphs and essays.

3.2 Participants

A total of 94 English department students from one of Indonesia's private institutions took part in the research and responded to the questionnaire. Out of 94, 49 were first-year students (33 females and 16 males), and 45 were third-year students (37 females and 8 males). The first-year students had taken a paragraph writing course, and the third-year students had passed an essay writing course. Both are compulsory courses that the students should complete. The students were recruited based on a convenience sampling technique. Convenience sampling entails selecting participants who can be reached, are interested in giving more information or are readily accessible to get in touch or interact on a feasible level (Stratton, 2021).

3.3 Instruments

This study included detailed data from two separated self-regulated learning strategy questionnaires developed by Abadikhah et al. (2018). Each set has 60 items with a 5-point Likert scale. This first set of questionnaires was explicitly addressed to elicit data regarding self-regulated learning in writing a paragraph, and the other one was for essay writing. The questionnaires were developed to collect detailed information and provide thoughts about the strategies employed across six dimensions (i.e., time, motive, physical environment, performance, method, and social environment) in writing two different texts. Some adjustments were made in the motive dimension (Items 9, 10, 13, 15) in the questionnaire for the paragraph writing. The adjustment was made by changing the context from an essay into a paragraph. Detailed information about the questionnaire is presented in Table 1.

Table 1. SRL Strategy Questionnaire Distribution

Dimensions	Descriptions	Number of items
Motive	Setting learning goals and self-efficacy	14
Method	Applying strategies for task accomplishment	10
Time	Managing the time to learn and how long	8
Physical environment	Setting surrounding environment	5
Social environment	Finding assistance	6
Performance	Making self-evaluation, self-consequence	17
Total		60

The first part of the questionnaire was about the purpose of distributing the questionnaire, a brief explanation of SRW strategies, the content of the questionnaire, and an agreement to be participants, i.e., the consent form for joining the research activities. The next part was the participants' demographic information, such as full name, gender, and interest in writing. The main part was the sixty-item questionnaire with a 5-Likert scale (strongly disagree '1' to strongly agree '5'). The survey was complete and had a high reliability (0.95). However, it was translated into the participants' mother tongue (i.e., Indonesian) to confirm the respondents fully understood each item and avoided bias. One writing teacher and one student from the English department of the same institution where the research was conducted were given instruction to review the translation results to ensure every item in the questionnaire was comprehensible.

In addition, to measure the students' writing achievement and group them into proficient and less proficient students, those from the paragraph writing group (first-year students) were assigned to make a descriptive paragraph describing their bedroom. In contrast, the students from the essay writing group (third-year students) were asked to compose an argumentative essay. The compositions were rated only by the writing teacher of each group. The students were grouped based on the criterion that those who obtained ≥ 80 are grouped into proficient students, while those whose score is < 80 are categorized as less proficient. The categorization was based on the score evaluation standard provided at the university.

3.4 Procedures

To explore strategies of SRW applied in paragraph and essay writings, the students who consented to participate in the study were required to respond to the self-regulated learning strategy questionnaire distributed online via Google Forms. The form was sent to the writing teachers. The teachers then sent the link to the class leader to share with all class members. The respondents were first asked to read the first section of the questionnaire containing the purpose of distributing the questionnaire, a brief explanation of SRW strategies, and the content of the questionnaire to ensure that their response was valid. Before answering the main questionnaire, they were instructed to state their agreement by clicking the Agree button. Then they responded to the demographic information questions and the SRW questionnaire. After the questionnaire distribution, the first-year students were assigned to produce a short descriptive paragraph, while the third-year students composed a five-paragraph argumentative essay. Based on the test results, the students were grouped into proficient and less proficient students.

3.5 Data Analysis

Descriptive statistics were used to assess the quantitative data from the questionnaire. The mean score for every dimension (a total of six dimensions) was calculated. If the mean score is between 3.45 and 5.00, the frequency of usage of the SRW strategies is termed high level, moderate level if it is between 2.45 and 3.44, and low level if it is between 1.00 and 2.44 (Oxford, 1990). Meanwhile, the Mann-Whitney U test was used to see the difference in the preference of SRW strategies based on the text produced by the students and writing achievement. The researchers employed the

statistical analysis of the Mann-Whitney U test as the data of the present study was in ordinal measurement.

4. RESULTS

4.1 The Use of Self-Regulated Writing Strategies in Writing Paragraphs and Essays

Analysis of descriptive statistics (Table 2) unveils that, in writing a paragraph, EFL university students' use of SRW strategies is at a high level (3.62), with strategies in the social environment dimension as the most frequently used strategies (4.10). Meanwhile, the least used strategies are in the motive dimension (3.04).

Table 2. The SRW strategies used in paragraph writings.

Strategy dimensions	N	Mean	Std. deviation	Rank
Social environment	49	4.10	.63	High
Performance	49	3.87	.55	High
Physical environment	49	3.75	.72	High
Method	49	3.65	.58	High
Time	49	3.32	.52	Moderate
Motive	49	3.04	.53	Moderate
Overall	49	3.62	.59	High

The overall use of SRW strategies in essay writing, which is presented in Table 2 is also at a high frequency (3.72). The most dominant strategies are those in the social environment dimension (4.22), while the least used strategies are those in the motive dimension (3.08).

Table 3. The SRW strategies used in essay writings.

Strategy dimensions	N	Mean	Std. deviation	Rank
Social environment	45	4.22	.53	High
Physical environment	45	3.92	.87	High
Performance	45	3.89	.63	High
Methods	45	3.89	.60	High
Time	45	3.32	.55	Moderate
Motive	45	3.08	.64	Moderate
Social environment	45	4.22	.53	High
Overall	45	3.72	.64	High

Based on the findings in Table 2 and Table 3, EFL university students applied SRW strategies at a high-frequency level in writing paragraphs and essays. In both paragraph and essay writings, the social environment dimension received the highest mean score, while motive gained the lowest mean score in both types of writing.

4.2 Comparison of Self-Regulated Writing (SRW) Strategy Use in Writing Paragraphs and Essay

The result from the Mann-Whitney U test (Table 5) shows that, with the exception of the method dimension (.051), there was no significant difference in SRW

strategy utilized in writing paragraphs and essays. As shown in Table 4, the mean score of the method dimension in essay writing (3.89) is higher than in paragraph writing (3.65).

Table 4. The descriptive statistics of SRW strategy used in paragraph and essay writings

Strategy dimensions	Text type	Mean	Std. deviation
Time	Essay	3.32	.55
	Paragraph	3.32	.52
Motive	Essay	3.08	.64
	Paragraph	3.04	.53
Method	Essay	3.89	.60
	Paragraph	3.65	.58
Performance	Essay	3.89	.63
	Paragraph	3.87	.55
Social Environment	Essay	4.22	.53
	Paragraph	4.10	.63
Physical Environment	Essay	3.92	.87
	Paragraph	3.75	.72

Table 5. The Mann-Whitney U test results on the SRW strategy used in paragraph and essay writings

Strategy dimensions	Asymptotic sig. (2- sided)
Time	.829
Motive	.671
Method	.036
Performance	.491
Social environment	.463
Physical environment	.223

The findings indicate that when writing an essay, EFL university students used the strategies in the method dimension more frequently than that in writing a paragraph. It indicates different ways of accomplishing writing tasks with different levels of complexity. Furthermore, based on the result of the Mann-Whitney U test in Table 5, it was disclosed that there was a significant difference in the use of method strategy dimension across writing types (Asymptotic sig.=.036). Meanwhile, other strategy dimensions did not show any meaningful outcome between writing paragraphs and essays.

4.3 Comparison in the Use of SRW Strategies Based on Writing Achievement

Based on the analysis using a Mann-Whitney U test, it is found that the difference in the use of SRW strategies based on the students' writing achievement in paragraph writing is not significant. As presented in Table 7, the p-value for all dimensions is higher than 0.05.

Table 6. The comparison of strategies used based on achievement (paragraphs).

Categories	High		Low	
	M	SD	M	SD
Time	3.40	.453	3.36	.696
Motive	3.10	.458	3.14	.690

Table 6 continued...

Method	3.71	.515	3.78	.661
Performance	3.91	.595	3.96	.617
Social environment	4.15	.578	4.28	.690
Physical environment	3.89	.778	3.65	.704

Table 7. The Mann-Whitney U test result on the use of SRW strategies based on achievement (paragraphs).

Categories	Asymptotic sig. (2- sided)
Time	.719
Motive	.943
Method	.792
Performance	.905
Social environment	.456
Physical environment	.34

In essay writing, the results also revealed no significant difference in the SRW strategy use based on the students' writing achievement, as shown by the p-value of higher than 0.05 for all dimensions (Table 9).

Table 8. The comparison of strategies used based on achievement (essays).

Categories	High		Low	
	M	SD	M	SD
Time	3.36	.373	3.18	.645
Motive	3.11	.541	2.96	.705
Method	4.02	.579	3.80	.691
Performance	4.11	.518	3.74	.625
Social environment	4.35	.505	4.29	.401
Physical environment	4.20	.665	3.77	.974

Table 9. The t-test result on the use of SRW strategies based on achievement (essays).

Strategy Dimensions	Asymptotic Sig. (2-sided)
Time	.381
Motive	.669
Method	.491
Performance	.086
Social Environment	.642
Physical Environment	.270

Based on the findings, it is evident that there was no significant difference in the use of SRW strategies by proficient and less proficient students in both paragraph and essay writings. In other words, students who were proficient and less proficient applied the same SRW strategies in their process of writing. They were all aware of using the six dimensions in strategies of SRW.

5. DISCUSSION

The finding of the descriptive statistics shows that EFL university students employed SRW strategies at a high-frequency level in writing a paragraph and an essay. This finding is in line with the report of previous studies (Bai & Guo, 2019;

Umamah & Cahyono, 2020). This indicates that both groups of students are highly aware of the importance of SRW strategies. Confirming the finding of Umamah and Cahyono (2020), the present study reports that the social environment dimension obtained the highest mean score in both paragraph and essay writings. It means that in an EFL context, the students generally needed social support to accomplish their writing tasks (Yot-Domínguez & Marcelo, 2017) by seeking help. The help can be obtained from their peers through peer feedback (Kusumaningrum et al., 2019) and from available resources (e.g., the Internet) (Hughes et al., 2019). However, it is interesting that current research findings in the online learning context unveiled that students use fewer social behavior strategies (Xu, 2021). This leads to further investigation of the use of SRW strategies in the online learning setting.

Meanwhile, the least used strategy was in the motive dimension, suggesting that the students could not set learning goals and control their affective factors such as self-efficacy and anxiety. Setting goals is necessary to direct how students learn. When they have meaningful reasons for learning a language, they are likely to have more motivation to learn, which can lead to a more successful acquisition (Andrade & Bunker, 2009; Kurniasih, Mukminatien, et al., 2022). Meanwhile, affective factors influence students' writing performance (Erkan & Saban, 2011; Pajares & Valiante, 1997); thus, the failure to control emotion might negatively affect students' performance. Consequently, the negative emotion can cause anxiety in the students, for instance, when their scores are so low that they can fail the course (Kurniasih, Cahyono, et al., 2022). Therefore, students need to be encouraged to make specific learning goals and manage their affective factors.

The result from the Mann-Whitney U test indicates that overall, except for the method dimension, there was no significant statistical difference in employing SRW strategies in writing paragraphs and essays. This finding proves that regardless of the complexity of the text, EFL students have used all six dimensions in SRW strategies to help them cope with writing challenges. It is reasonable since EFL students generally deal with similar problems both in paragraph and essay writings (Al Seyabi & Tuzlukova, 2014). However, some of them might use the strategies less effectively (Graham et al., 2000); thus, they have lower achievements. It might become a limitation of the current study that can be taken a closer look at in future research.

Besides that, the evidence showing a significant difference in method dimension supports the finding of Abadikhah et al. (2018), who proved that fourth-year students applied SRW strategies more intensively than their third-year counterparts. In this present research, paragraph writing was given in the first year, while essay writing was given in the second year. This might be the reason why the students in the essay writing group outperformed those in the paragraph writing group in the use of the method dimension. The former has had more learning experiences which can affect the strategy use (Teng & Huang, 2019). Besides, paragraph writing does not give the same organizational challenges as more extended types of writing, such as essays (McDonough et al., 2018). Thus, the students writing an essay needed more effort, such as writing a summary, taking notes, asking questions, rehearsing, and making a visual representation which are essential skills in writing a long, written text. In other words, more complex text requires more effective SRW strategies to help students organize their ideas cohesively in an iterative manner (Hughes et al., 2019). This research finding implies the need to emphasize the understanding that writing is a long-

lasting process requiring self-monitoring and evaluation to improve its quality since the students are in the early stage of developing their writing skills.

Based on the writing achievement, the difference in the use of SRW strategies in both paragraph and essay writing was not significant. In other words, regardless of their level of proficiency, all the students, both proficient and less proficient, were not different in applying SRW strategies. This result contrasts with previous research (e.g., Bai & Guo, 2019; Bai et al., 2020; Teng & Huang, 2019) reporting that proficient students utilized SRW strategies more often than less proficient students. As Butler and Winne (1995), Sutarni et al. (2021), and Anggraini, Cahyono, et al. (2022) alleged, proficient students use the strategies more effectively since they know their capability, beliefs, motivation, and cognition. Meanwhile, the less proficient students still experience writing difficulties, probably due to the inappropriate implementation of strategies (Graham et al., 2000; Umamah et al., 2019). As a result, it is not unanticipated that students with high self-regulation outperform those with weak self-regulation in terms of academic achievement. (Umamah & Cahyono, 2020; Zimmerman & Bandura, 1994). The current unexpected findings might be explained by the fact that the different education levels in the current study involved university students, while the previous studies investigated secondary school students. As a result, university students have more experience using SRW strategies than secondary school students. Anggraini, Anugerahwati, et al. (2022) have proved that students' education levels affected their learning preferences. Moreover, regarding the SRW strategies, the scores obtained by proficient and less proficient students in this study were slightly different. The finding of this study reflects that teachers need to pay more attention to less proficient students to use their SRW strategies more appropriately and effectively based on the writing tasks.

6. CONCLUSION

Self-regulated writing strategies help EFL students overcome the problems of writing task complexities by regulating their learning process. In general, all students (proficient and less proficient) applied SRW strategies in paragraph and essay writings. What makes their achievement different lies in how effectively they use the strategies.

This research only invited limited participants to participate in the present study, future research should employ more participants to understand the pattern of SRW strategies. The total number of participants will contribute to the more detailed findings. Students with moderate writing scores were also missed in the present study; future researchers can facilitate this limitation for their research. Moreover, although this study focuses on the use of the strategies, the findings may well have a bearing on students' gender differences. Therefore, further studies need to consider such moderator variables.

Despite its limitations, this current study has provided some pedagogical implications. First, to assist less proficient students in using the strategies more effectively, writing teachers can train them using SRW strategy intervention. Additionally, further investigation on how to use the SRW strategies effectively is also crucial. Thus, the findings can be applied by teachers. Second, the findings of this study provide insights for teachers to explain in detail how each strategy applies in

certain types of writing since the findings partially explain the difference in the SRW strategies used in writing paragraphs and essays.

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REFERENCES

- Abadikhah, S., Aliyan, Z., & Talebi, S. H. (2018). EFL students' attitudes towards self-regulated learning strategies in academic writing. *Issues in Educational Research*, 28(1), 1–17.
- Al Seyabi, F., & Tuzlukova, V. (2014). Writing problems and strategies: An investigative study in the Omani school and university context. *Asian Journal of Social Sciences & Humanities*, 3(4), 37–48.
- Andrade, M. S., & Bunker, E. L. (2009). A model for self-regulated distance language learning. *Distance Education*, 30(1), 47–61. <https://doi.org/10.1080/01587910902845956>
- Anggraini, M. P., Anugerahwati, M., Sari, R. N., Miranty, D., Kurniasih, K., & Iswahyuni, I. (2022). The ICT use of informal digital learning in enhancing EFL university students' English performance. *CALL EJ*, 23(3), 94–114.
- Anggraini, M. P., & Cahyono, B. Y. (2020). Scrutinizing EFL learners' online reading strategy use across proficiency levels. *XLinguae*, 13(4), 190–200. <https://doi.org/10.18355/XL.2020.13.04.14>
- Anggraini, M. P., Cahyono, B. Y., Anugerahwati, M., & Ivone, F. M. (2022). The interaction effects of reading proficiency and personality types on EFL university students' online reading strategy use. *Education and Information Technologies*, 27(6), 8821–8839. <https://doi.org/10.1007/s10639-022-10979-9>
- Arianto, M. A., & Wulyani, A. N. (2022). Self-Regulated Writing (SRW) strategies during the completion of dissertation: A case study. *Cakrawala Pendidikan*, 41(1), 154–169. <https://doi.org/10.21831/cp.v41i1.40687>
- Bai, B., & Guo, W. (2019). Motivation and self-regulated strategy use: Relationships to primary school students' English writing in Hong Kong. *Language Teaching Research*, 25(3), 378–399. <https://doi.org/10.1177/1362168819859921>
- Bai, B., Shen, B., & Mei, H. (2020). Hong Kong primary students' self-regulated writing strategy use: Influences of gender, writing proficiency, and grade level. *Studies in Educational Evaluation*, 65, Article 100839. <https://doi.org/10.1016/j.stueduc.2020.100839>
- Brunstein, J. C., & Glaser, C. (2011). Testing a path-analytic mediation model of how self-regulated writing strategies improve fourth graders' composition skills: A randomized controlled trial. *Journal of Educational Psychology*, 103(4), 922–938. <https://doi.org/10.1037/a0024622>

- Butler, D. L., & Winne, P. H. (1995). Feedback and self-regulated learning: A theoretical synthesis. *Review of Educational Research*, 65(3), 245–281. <https://doi.org/10.3102/00346543065003245>
- Cer, E. (2019). The instruction of writing strategies: The effect of the metacognitive strategy on the writing skills of pupils in secondary education. *SAGE Open*, 9(2), 1–17. <https://doi.org/10.1177/2158244019842681>
- Cohen, A. D., & Macaro, E. (2007). *Language learner strategies*. Oxford University Press.
- Erkan, D. Y., & Saban, A. I. (2011). Writing performance relative to writing apprehension, self-efficacy in writing, and attitudes towards writing: A correlation study in Turkish tertiary-level EFL. *Asian EFL Journal*, 13(1), 164–192.
- Geres-Smith, R., Mercer, S. H., Archambault, C., & Bartfai, J. M. (2019). A preliminary component analysis of self-regulated strategy development for persuasive writing in grades 5 to 7 in British Columbia. *Canadian Journal of School Psychology*, 34(1), 38–55. <https://doi.org/10.1177/0829573517739085>
- Graham, S., Harris, K. R., & Troia, G. A. (2000). Self-regulated strategy development revisited: Teaching writing strategies to struggling writers. *Topics in Language Disorders*, 20(4), 1–14. <https://doi.org/10.1097/00011363-200020040-00003>
- Harris, K. R., & Graham, S. (2016). Self-regulated strategy development in writing: Policy implications of an evidence-based practice. *Policy Insights from the Behavioral and Brain Sciences*, 3(1), 77–84. <https://doi.org/10.1177/2372732215624216>
- Helsel, L., & Greenberg, D. (2007). Helping struggling writers succeed: A self-regulated strategy instruction program. *The Reading Teacher*, 60(8), 752–760. <https://doi.org/10.1598/RT.60.8.5>
- Hughes, M. D., Regan, K. S., & Evmenova, A. (2019). A computer-based graphic organizer with embedded self-regulated learning strategies to support student writing. *Intervention in School and Clinic*, 55(1), 13–22. <https://doi.org/10.1177/1053451219833026>
- Karim, S. M. S., Maasum, T. N. R. T. M., & Latif, H. (2017). Writing challenges of Bangladeshi tertiary level EFL learners. *E-Bangi: Journal of Social Sciences and Humanities*, 14(2), 296–306.
- Kartika, H. D. (2015). A learner's self-regulated learning in writing. *IJEE (Indonesian Journal of English Education)*, 2(2), 120–131. <https://doi.org/10.15408/ijee.v2i2.3085>
- Kavani, R., & Amjadiparvar, A. (2018). The effect of strategy-based instruction on motivation, self-regulated learning, and reading comprehension ability of Iranian EFL learning. *Cogent Education*, 5(1), Article 1556196. <https://doi.org/10.1080/2331186X.2018.1556196>
- Khezrlou, S., & Sadeghi, K. (2011). Self-regulated vocabulary strategy use: Implications for CALL and individual variables. *MEXTESOL Journal*, 36(1), 1–17.
- Kim, S. S., & Nor, M. Md. (2019). The effects of self-regulated learning strategies on preschool children's self-efficacy and performance in early writing. *International Journal of Education*, 11(2), 99–108. <https://doi.org/10.17509/ije.v11i2.14504>

- Kinnebrew, J. S., Gauch, B. C., Segedy, J. R., & Biswas, G. (2015). Studying student use of self-regulated learning tools in an open-ended learning environment. In C. Conati, N. Heffernan, A. Mitrovic, & M. Verdejo (Eds.), *Proceedings of the 17th International Conference of Artificial Intelligence in Education* (pp. 185-194). SpringerLink. https://doi.org/10.1007/978-3-319-19773-9_19
- Kurniasih, Cahyono, B. Y., Astuti, U. P., & Suryati, N. (2022). EFL students' writing anxiety in online learning environment during the Covid-19 pandemic. In M. Zaim, H. Ardi, & M. A. Arianto (Eds.), *Proceedings of the 67th TEFLIN International Virtual Conference & the 9th ICOELT 2021* (pp. 149–153). Atlantis Press. <https://doi.org/10.2991/assehr.k.220201.027>
- Kurniasih, Mukminatien, N., Arianto, M. A., Sari, R. N., Anggraini, M. P., & Umamah, A. (2022). Affective factors in online writing performance: Do they matter? *MEXTESOL Journal*, 46(2), 1-9.
- Kusumaningrum, S. R., Cahyono, B. Y., & Prayogo, J. A. (2019). The effect of different types of peer feedback provision on EFL students' writing performance. *International Journal of Instruction*, 12(1), 213–224. <https://doi.org/10.29333/iji.2019.12114a>
- Langan, J. (2010). *Exploring writing: Paragraphs and essays* (2nd ed). McGraw-Hill.
- McDonough, K., De Vleeschauwer, J., & Crawford, W. (2018). Comparing the quality of collaborative writing, collaborative prewriting, and individual texts in a Thai EFL context. *System*, 74, 109–120. <https://doi.org/10.1016/j.system.2018.02.010>
- Oruç, A., & Arslan, A. (2016). The impact of self-regulated learning on reading comprehension and attitude towards Turkish course and metacognitive thinking. *Educational Research and Reviews*, 11, 523–529. <https://doi.org/10.5897/ERR2016.2692>
- Oshima, A., & Hogue, A. (2006). *Writing academic English* (4th ed.). Pearson
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Heinle & Heinle Publishers.
- Oxford, R. L. (2002). Language learning strategies in a nutshell: Update and ESL suggestions. In J. C. Richards & W. A. Renandya (eds.), *Methodology in language teaching: An anthology of current practice* (pp. 124-132). Cambridge University Press. <https://doi.org/10.1017/CBO9780511667190.018>
- Pajares, F., & Valiante, G. (1997). Influence of self-efficacy on elementary students' writing. *The Journal of Educational Research*, 90(6), 353–360. <https://doi.org/10.1080/00220671.1997.10544593>
- Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for feseach. *Frontier of Psychology*, 8, Article 422. <https://doi.org/10.3389/fpsyg.2017.00422>
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33–40. <https://doi.org/10.1037/0022-0663.82.1.33>
- Reynolds, G. A., & Perin, D. (2009). A comparison of text structure and self-regulated writing strategies for composing from sources by middle school students. *Reading Psychology*, 30(3), 265–300. <https://doi.org/10.1080/02702710802411547>

- Roderick, R. (2019). Self-regulation and rhetorical problem solving: How graduate students adapt to an unfamiliar writing project. *Written Communication*, 36(3), 410–436. <https://doi.org/10.1177/0741088319843511>
- Rosário, P., Högemann, J., Núñez, J. C., Vallejo, G., Cunha, J., Rodríguez, C., & Fuentes, S. (2019). The impact of three types of writing intervention on students' writing quality. *Plos One*, 14(7), Article e0218099. <https://doi.org/10.1371/journal.pone.0218099>
- Sadeghi, K., & Khezrlou, S. (2012). Glossing mode in self-regulated vocabulary learning, and its relationship with gender, age, and field of study. *The Journal of Asia TEFL*, 9(3), 51–74.
- Stratton, S. J. (2021). Population research: Convenience sampling strategies. *Prehospital and Disaster Medicine*, 36(4), 373–374. <https://doi.org/10.1017/S1049023X21000649>
- Sudirman, A., & Tiasari, L. (2015). Developing logical divisions of ideas in university students' expository essays. *International Journal of Science and Research*, 4(11), 191–199.
- Sutarni, N., Ramdhany, M. A., Hufad, A. & Kurniawan, E. (2021). Self-regulated learning and digital learning environment: Its effect on academic achievement during the pandemic. *Cakrawala Pendidikan*, 40(2), 374–388. <https://doi.org/10.21831/cp.v40i2.40718>
- Teng, F., & Huang, J. (2019). Predictive effects of writing strategies for self-regulated learning on secondary school learners' EFL writing proficiency. *TESOL Quarterly*, 53(1), 232–247. <https://doi.org/10.1002/tesq.462>
- Teng, L. S., & Zhang, L. J. (2019). Empowering learners in the second/foreign language classroom: Can self-regulated learning strategies-based writing instruction make a difference? *Journal of Second Language Writing*, 48, Article 100701. <https://doi.org/10.1016/j.jslw.2019.100701>
- Umamah, A., & Cahyono, B. Y. (2020). Indonesian university students' self-regulated writing (SRW) strategies in writing expository essays. *Indonesian Journal of Applied Linguistics*, 10(1), 25–35. <https://doi.org/10.17509/ijal.v10i1.24958>
- Umamah, A., Hidayanti, I., & Kurniasih, K. (2019). Kesulitan mahasiswa dalam menulis teks eksposisi: Analisis berbasis gender [Students' difficulties in writing expository texts: Gender-based analysis]. *Jurnal Pendidikan dan Kebudayaan*, 4(1), 33–50. <https://doi.org/10.24832/jpnk.v4i1.1004>
- Xu, J. (2021). Chinese university students' L2 writing feedback orientation and self-regulated learning writing strategies in online teaching during COVID-19. *The Asia-Pacific Education Researcher*, 30, 563–574. <https://doi.org/10.1007/s40299-021-00586-6>
- Yabukoshi, T. (2018). Self-regulation and self-efficacy for the improvement of listening proficiency outside the classroom. *The Language Learning Journal*, 49(1), 27–40. <https://doi.org/10.1080/09571736.2018.1472626>
- Yot-Domínguez, C., & Marcelo, C. (2017). University students' self-regulated learning using digital technologies. *International Journal of Educational Technology in Higher Education*, 14, Article 38. <https://doi.org/10.1186/s41239-017-0076-8>
- Zimmerman, B. J. (1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D. H. Schunk & B. J.

Zimmerman (Eds.), *Self-regulated learning: From teaching to self-reflective practice* (pp. 1–19). Guilford Press.

Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, 31(4), 845–862. <https://doi.org/10.3102/00028312031004845>

Zimmerman, B. J., & Risemberg, R. (1997). Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, 22(1), 73–101. <https://doi.org/10.1006/ceps.1997.0919>