

COLLEGE STUDENTS SELF-REGULATED LEARNING STRATEGIES IN ACADEMIC WRITING AND WRITING PERFORMANCE: CORRELATIONAL STUDY

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Abstrak

Penelitian ini bertujuan untuk mengeksplorasi lebih lanjut korelasi strategi belajar mandiri mahasiswa dan kinerja menulis dalam konteks pembelajaran bahasa Inggris sebagai bahasa asing. Selain itu, penelitian ini juga menyelidiki strategi yang paling sering digunakan mahasiswa saat menyelesaikan tugas tertulis mereka. *Writing Strategies for Self-Regulated Learning Questionnaire* (WSSRLQ) diberikan kepada 72 mahasiswa jurusan Pendidikan Bahasa Inggris di salah satu perguruan tinggi negeri di Surabaya. Hasil penelitian melaporkan bahwa peserta didik lebih suka menggunakan strategi perilaku sosial ($M = 3.90$), diikuti oleh strategi motivasi ($M = 3.84$), strategi kognitif ($M = 3.75$), dan strategi metakognitif ($M = 3.74$). Penelitian ini juga mengungkapkan bahwa terdapat korelasi sedang antara strategi belajar mandiri dengan kinerja menulis ($r = 0.481$). Selain itu, penelitian ini juga menunjukkan adanya korelasi antara dimensi strategi belajar mandiri dengan kinerja menulis yaitu metakognitif, kognitif dan strategi perilaku sosial, namun tidak ditemukan korelasi antara strategi motivasi dan kinerja menulis.

Kata kunci: Bahasa Inggris sebagai Bahasa Asing, Strategi belajar mandiri, Pertunjukan Menulis

Abstract

This study aimed at exploring further the correlation between college students' self-regulated learning strategies and writing performance in the EFL context. Additionally, this present study also investigated the most frequently used strategies of college students' while completing their written tasks. *Writing Strategies for Self-Regulated Learning Questionnaire* (WSSRLQ) was administered to 72 junior students majoring in English Education at one of the state universities in Surabaya. The result reported that learners rather used social-behavioral Strategies ($M = 3.90$), followed by motivational strategies ($M = 3.84$), cognitive strategies ($M = 3.75$), and metacognitive strategies ($M = 3.74$). This study also revealed that there was a medium correlation between self-regulated learning strategies and writing performance ($p = .000$, $r = 0.481$). Moreover, the result also showed a correlation between the dimensions of self-regulated learning with writing performances namely metacognitive, cognitive and social-behavioral strategies, yet there is no correlation between motivational strategies and writing performance.

Keywords: EFL, Self-regulated learning strategies, Writing Performances

INTRODUCTION

Writing has been recognized as one of the important skills in the EFL context, since it helps EFL learners to put their ideas into written text (Bai et al., 2020). It is also seen as a challenging skill to be mastered, especially for EFL learners that lack motivation (Lee & Wong, 2014). In writing, EFL learners are required to produce written text that is aligned from one paragraph to another and pay attention to diction, grammar, coherence, and unity of the text.

At college levels, EFL learners will meet several levels of writing, including academic writing. Within academic writing, learners demand to be able to write in the academic realm by considering credible sources such as journals, essays, papers, paper conferences, and thesis

(Oshima & Hogue, 2006). Academic writing also ideally uses a formal and systematic format (Oshima Ann Hogue et al., 2007). In this form, learners necessarily need to elaborate and enrich their ideas into well-organized written text.

For university students, academic writing plays an important role in terms of writing for thesis publication to fulfill graduation requirements. Additionally, to be able to construct well-organized written text, EFL learners face obstacles during the process of writing (Wragg et al., 2020). Moreover, the obstacles happened because they less practice or lack motivation to construct their written text. To address this problem, it could be fixed by providing learners with strategies in learning (Lan, 2005).

Additionally, to keep the progress of their project and complete the goals, learners should consider maintaining their strategies.

According to Guo et al., (2018), self-regulated learning plays an essential role in the teaching-learning process and the use of the strategies predicts positive effects on learners' academic achievement. The use of strategies within the learners' process may be one of many solutions to enhance learners' academic accomplishment. Self-regulated learning is defined as the self-initiated actions of learners that actively and effectively manage their learning process by implementing strategies to reach the goals (Zimmerman & Pons, 1986), which consist of multifaceted structures such as cognitive, meta-cognitive, social-behavioral, and motivational strategies (Zimmerman, 2011). Each of these forms of self-regulated learning strategies is correlated one to another through cyclic feedback in which the individual is self-responsible and self-reacts for feedback regarding the effectiveness of self-regulated learning strategies.

To improve the quality of their outcomes as well as their writing skills, EFL learners may employ self-regulated learning. Self-regulated learning will help learners to manage and organize their writing process to yield better-written outcomes (Zimmerman, B., & Risemberg, 1997). In terms of self-regulated learning in the writing context, learners may use several strategies to nurture their writing process. Learners may maximize their cognitive, metacognitive, social-behavioral, and motivational strategies in self-regulated learning to enhance their writing skills as well as the quality of their written outcomes.

Cognitive strategies are related to the ability that students have to process knowledge or information in completing a task (Oxford, 2013). Cognitive strategies facilitate learners to comprehend the information while doing the writing. According to Oxford (2017), in writing, cognitive strategies deal with conceptualizing and analyzing detailed information of the structure of the text. Moreover, Teng & Zhang (2016) stated cognitive strategies influenced learners' writing performance.

Besides, metacognitive strategies are believed as strategies that are closely connected to the learner's ability in managing and controlling their cognition resources to fulfill the learning processes demand (Oxford, 2017). Meta-cognitive strategies have three-phase of regulatory processes such as planning, monitoring, and evaluating (Mohammadi et al., 2020). In the planning phase, metacognitive strategies deal with the selection of credible resources before constructing a written task (Teng, 2020). Further, in the monitoring

phase, metacognitive strategies play roles in setting goals, following the plan, and checking the progress while constructing the written text. Besides, in the evaluating phase, metacognitive deals with editing and revising the written text (Teng, 2020).

Meanwhile, social-behavioral strategies reflect individuals' effort to managing and directing their learning behavior under the influence of environmental aspects (Sun & Wang, 2020). Based on Teng & Zhang (2020), social-behavioral consist of peer learning and feedback handling. EFL learners can use strategies such as seeking feedback from teachers or peers and having a discussion about the written task given. Teng & Zhang (2018) also stated that self-regulated learning strategies lie upon social-behavioral strategies. By having reciprocal feedback such as from the teacher, it can improve learners' engagement and effort towards their writing task.

In turn, motivational strategies can be defined as the way individuals purposely enhancing their thoughts or feeling to engage in constructing tasks (Zimmerman, 2008). In writing, motivational strategies deal with controlling the emotion during constructing the written task (Teng, 2020). Self-regulation in terms of motivation is reflected in learners' feelings, emotions, thoughts, and active control in which learners fully aware to influence their motivation to reach the goals. Moreover, Teng & Zhang (2016) stated that motivational strategies promoted self-encouragement in learners' tendency towards writing tasks and emotional control when completing writing tasks.

Several previous studies yielded positive results associated with self-regulated learning and writing performance. Sun & Wang (2020) conducted a study focusing the correlation of writing self-efficacy and writing self-regulated learning strategies in the EFL context. The result showed that learners who frequently employ self-regulated learning strategies such as reviewing and revising are more as intended to get higher scores of writing performance. Moreover, refers to Feng & Huang (2019), their research is focused on the effects of self-regulated learning strategies on EFL secondary school students' writing performance. The finding showed that self-regulated learning strategies significantly affect EFL secondary school students' writing outcomes. Additionally, Teng & Zhang (2020) conducted research that explored the effects of SLR strategies on L2 writing performance and academic self-efficacy. The result revealed learners who employed self-regulation strategies are more aware of controlling their learning process which leads them to achieve better writing outcomes.

However, previous studies did not explore motivational strategies in self-regulated learning (Sun & Wang, 2020; Teng & Zhang, 2020). Therefore, Feng and Huang (2019) already explored the more complete aspects (cognitive, metacognitive, social-behavioral and motivational strategies) yet at the secondary school level. To fill the gap, the researcher assumed this study is important to be conducted. This study is about to explore further learners' self-regulated learning in terms of cognitive, metacognitive, social-behavioral, and motivational strategies in their written text on academic writing class on the college level and the correlation of those strategies and their writing performance. The result of this study is expected to give a meaningful

METHOD

Regarding the aim of this study, the researcher used a correlational study as the research design to guide the researcher in this study. This study involved 72 participants who fulfilled the online questionnaire. They were taken from junior students majoring in English Education at one of the state universities in Surabaya. Purposive random sampling was used because this research proposed only junior students to be selected as a participant.

To investigate and explore further college students' self-regulated learning (cognitive, meta-cognitive, social-behavior, and motivational strategies) in their written text on academic writing class and the correlation of those strategies and their writing performance, the researcher used an online questionnaire as the instrument in this study. The researcher used Writing Strategies for Self-Regulated Learning Questionnaires (WSSRLQ) which was adopted from Teng & Zhang (2016). It is used to measure college students' self-regulated learning in writing. The questionnaire had 40 items in total that conceptually refers to four main paradigms of self-regulated learning, which are; cognitive, metacognitive, social-behavioral, and motivational regulation. All items in the questionnaire used the Likert Scale ranged from 1 (Never) to 5 (Always). The questionnaire was distributed online through WhatsApp by using an online google form.

To collect the score of students writing performance, the researcher used their writing scores from argumentative and expository writing classes. A writing rubric adopted from Brown (2004) is used to asses' students' argumentative essay which comprises five categories including organization, logical development of ideas, grammar, punctuation/spelling/mechanics, and (2007), the data distribution is normal if p value is more than 0.05. Thus, the data distribution within this study is normal because the p value >0.05 . In line with the

contribution to college students in understanding and employing self-regulated learning strategies in writing to achieve better writing outcomes.

Based on the background of the study, the researcher formulated the research questions as follows: (1) What are the self-regulated learning strategies used by college students' in academic writing? (2) Is there any correlation between college students self-regulated learning strategies and their writing performance?

This study proposed two hypotheses: a). There is no correlation between self-regulated learning strategies and writing performance (H_0), b). There is a correlation between self-regulated learning strategies and writing performance (H_1)

quality of expression. The result of students' writing performance was measured using a formula below.

$$\text{Writing score} = \frac{\text{Students' score}}{\text{Maximum score}} \times 100$$

Then, the result of writing performance classified into not college level (ranged from 1-20), unacceptable (21-40), adequate to fair (ranged from 41-60), good to adequate (ranged from 61-80), and excellent to good (ranged from 81-100) based on Brown (2004). It aimed to know the quality of students' writing.

Furthermore, to measure the consistency of the questionnaire, the researcher conducted a reliability test using Cronbach's alpha formula. The reliability test used the collected data from Writing Strategies for Self-Regulated Learning Questionnaires (WSSRLQ).

Reliability Statistics

Cronbach's Alpha	N of Items
.830	40

Table 1. Reliability Statistics

The reliability of Writing Strategies for Self-Regulated Learning Questionnaires (WSSRLQ) was measured using IBM SPSS 21, and the Cronbach alpha level was 0.830. In line with Cohen (2007), a questionnaire is reliable if the level of Cronbach's alpha is 0.70 or above. Thus, this questionnaire is reliable.

Before calculating the correlation between self-regulated learning strategies and writing performance, the researcher measured the normality of test distribution. One-Sample Kolmogorov-Smirnov Test was used in order to know the data distribution is normal or not. The result indicated that the data were normal with p value = 0.305. According to Cohen

normality test result, the researcher used Product Moment to find out the correlation between College students' self-

regulated learning strategies and their writing performance.

RESULTS AND DISCUSSION

Results

College students' self-regulated learning strategies in academic writing

Self-regulated learning strategies used by college students in their academic writing consisted of four aspects; cognitive strategies, metacognitive strategies, social-behavioral strategies, and motivational strategies. Here is the result.

Descriptive Statistics of SRL Strategies

No.	Strategy	Total Mean	SD
1.	Cognitive Strategies	3.75	.448
2.	Metacognitive Strategies	3.73	.173
3.	Social-Behavioral Strategies	3.90	.309
4.	Motivational Strategies	3.84	.271

Table 2. Descriptive Statistics of SRL Strategies

Based on the result collected from Writing Strategies for Self-Regulated Learning Questionnaires, learners were rather used social-behavioral Strategies ($M = 3.90$, $SD = .309$), followed by motivational strategies ($M = 3.84$, $SD = .271$), cognitive strategies ($M = 3.75$, $SD = .448$), and metacognitive strategies ($M = 3.74$, $SD = .173$). Here is the result of each self-regulated learning dimensions.

a. Cognitive Strategies

Table 3. College Students' Cognitive Strategies

Item	Statement	Mean
3	When writing, I check spelling and punctuation.	4.40
4	When writing, I check the structure for logical coherence.	4.29
5	When writing, I check the cohesiveness or connection among sentences.	3.99
6	When writing, I check whether the topic and the content have been clearly expressed.	3.92
7	Write useful words and expressions taught in writing courses to help me remember them.	3.90
2	When writing, I check grammar mistakes.	3.51
1	When writing, I use some literary devices to make the composition	3.50
10	Before writing, I read related articles	3.57

	more interesting.	
8	I speak out useful words and expressions taught in writing courses to help me remember them.	3.26
9	I read my class notes and the course material over and over again to help me remember them.	2.96
TOTAL MEAN		3.75

Cognitive strategies had 9 items in total which stated several strategies focusing on the cognition aspect used by learners while constructing written task. The highest mean in cognitive strategy was item number 3 (4.40), which about spelling and punctuation checking while writing. It indicated that most learners tend to check the punctuation and word spelling while composing their writing task. Meanwhile, item number 4 also had a high mean (4.29), it became the second strategy mostly used by learners. It revealed learners rather check the text structure for logical coherence within their writing. In other words, item number 9 with a mean (2.96) became the lowest strategy that was chosen by learners. It showed that learners rarely read their class notes to help them remember the ideas. In sum, cognitive strategies which are frequently used by learners are; checking word spelling, grammar, and structure for composing logical coherence within their written task.

b. Metacognitive Strategies

Table 4. College Students' Metacognitive Strategies

Item	Statement	Mean
17	When writing, I tell myself to follow my plan.	4.03
12	Before writing, I think about the core elements of a good composition I have learned to help me plan.	3.96
16	I monitor my learning process in writing courses.	3.83
18	When learning to write, I set up a learning goal to improve my writing	3.82
14	When learning to write, I check my progress to make sure I achieve my goal.	3.68
11	Before writing, I use the internet to search for related information to help me plan.	3.58
15	I evaluate my mastery of the knowledge and skills learned in writing courses.	3.58

	to help me plan.	
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13	When learning to write, I set up goals for myself in order to direct my learning activities.	3.54
TOTAL MEAN		3.73

Metacognitive strategies had 9 items in total and the result showed that item number 17 had the highest mean among others (4.03). It stated learners tend to follow their plans while constructing written text. Refers to the finding, it means learners proposed writing plans and keep on it during composed written text. Yet, the other strategy that is mostly used by learners was thinking about the main elements of good composition to help them plan the framework before constructing the written task. It was represented in item number 12 with a mean (3.96). Yet, item number 13 which showed setting up goals to direct learning activities became the lowest strategy chosen by learners (3.54). In short, learners tended to follow their plan during constructed written text and concerning the core elements before constructing a written task.

c. Social-Behavioral Strategies

Table 5. College Students' Social-Behavioral Strategies

Item	Statement	Mean
23	I am open to teacher feedback on my writing.	4.32
25	I try to improve my English writing based on teacher feedback.	4.25
24	I try to improve my English writing based on peer feedback.	4.11
22	I am open to peer feedback on my writing.	3.82
20	I discuss with my peers to have more ideas to write with..	3.74
19	I brainstorm with my peers to help me write.	3.57
21	I work with my peers to complete a writing task.	3.47
TOTAL MEAN		3.90

Social-behavioral strategies had 7 items in total. The result showed item number 23 had the highest mean which was (4.32). It stated learners tend to open feedback from the teacher on their writing. Refers to the finding, it means learners more willing to get feedback on their written text based on the teacher's advice. Moreover, item number 25 also had a high mean score (4.25) which represented a statement about improving written tasks based on the teacher feedback. The finding revealed learners preferred to get feedback from the teacher on their writing in order to produce a better final draft.

Meanwhile, the lowest mean presented in item number 21 (3.47), and it indicated learners rarely work with their peers to complete their written task. Therefore, feedback handling from teacher became the most frequent strategies that chosen by learners in social-behavioral strategies.

d. Motivational Strategies

Table 6. College Students' Motivational Strategies

Item	Statement	Mean
37	I tell myself that I should keep on learning in writing courses to become good at writing.	4.33
35	I persuade myself to work hard in writing courses to improve my writing skills and knowledge.	4.28
38	I tell myself not to worry when taking a writing test or answering questions in writing courses.	4.18
36	I persuade myself to keep on learning in writing courses to find out how much I can learn.	4.03
40	I find ways to regulate my mood when I want to give up writing	3.97
34	I tell myself that I need to keep studying to improve my writing competence.	3.88
30	I remind myself about how important it is to get good grades in writing courses.	3.83
39	I tell myself to keep on writing when I want to give it up.	3.83
29	I try to connect the writing task with my personal interest.	3.81
33	I tell myself to practice writing to get good grades.	3.78
27	I choose interesting topics to practice writing.	3.65
31	I tell myself that it is important to practice writing to outperform my peers	3.61
28	I connect the writing task with my real life to intrigue me.	3.57
26	I look for ways to bring more fun to the learning of writing.	3.54
32	I compete with other students and challenge myself to do better than them in writing courses.	3.35
TOTAL MEAN		3.84

From the result of motivational strategies, the highest mean was item number 37 (4.33) which stated

learners should keep on learning in writing courses to become good at writing. It means that learners motivated themselves to keep on track while writing to become good writers. Additionally, item number 35 also had high means (4.28) which about learners persuade themselves to work harder in writing course. It indicated that learners are convinced to work hard in writing courses to enhance their writing skills and knowledge. Meanwhile, item number 32 became the lowest strategy chosen by learners in motivational strategies with a mean (3.35). The finding revealed learners were barely competing with other students and challenge themselves to perform better in writing tasks. In sum, learners tended to motivate themselves to more engage and stay on track while composing their written text to produce better written outcomes.

The correlation between college students' self-regulated learning strategies and writing performance

To know the correlation between the variables, the researcher used the Pearson Product Moment Correlation technique. The researcher correlated college students' self-regulated learning strategies with writing performance. The writing performances were taken from learners' scores in argumentative and expository writing classes. Here is the chart of learners' writing scores.

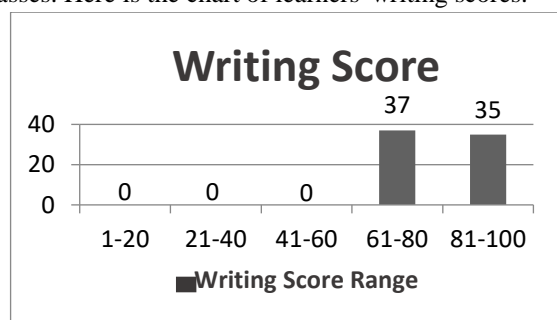


Chart 1. Writing Score

Based on the chart, 0 learner got a score between 1-20 (categorized as not college level), 0 learner got a score between 21-40 (categorized as unacceptable), 0 learner had a score between 41-60 (categorized as adequate to fair), 37 learners got a score between 61-80 (classified as good to adequate), and 35 learners got a score between 81-100 (classified as excellent to good).

After the data from Writing Strategies for Self-Regulated Learning Questionnaires (WSSRLQ) and learners' writing scores are collected, the researcher analyzed the result using the Pearson Product Moment Correlation technique.

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						SRL
W R I T I N G	Pearson correlatio n	.438	.545	.361	.026	.481
	Sig (2 tailed)	.000	.000	.002	.830	.000
	N	72	72	72	72	72

Table 7. Pearson Product Moment Correlation

Based on the correlation table above, self-regulated learning strategies and writing performance showed a positive correlation. It is proven by the level of significance/sig ($p = .000$, $p\text{-value} = < 0.01$) based on Cohen (2007). Thus, this study rejected the null hypothesis (H_0) and accepted alternate hypothesis (H_1), which means there is a correlation between self-regulated learning strategies and writing performance. While the effect size was classified as medium effect with coefficient correlation ($r = 0.481$).

For each dimension in self-regulated learning, only motivational strategies that did not correlate with writing performance ($p = .830$). Besides, there was a positive correlation between three dimensions of self-regulated learning with writing performance; cognitive strategies ($p = .000$), metacognitive strategies ($p = .000$), and social-behavioral ($p = .002$). Regarding the result, there is a correlation because the level of significance/Sig is less than 0.01 (Cohen, 2007). Meanwhile, the strength of correlation or effect size in metacognitive strategies belonged to large ($r = .545$), while cognitive and social-behavioral strategies belonged to medium ($r = .438$, $r = .361$).

DISCUSSION

College students' self-regulated learning strategies in academic writing

This study yielded several findings regarding the dimension of self-regulated learning strategies in academic writing and writing performance. The result showed social-behavioral strategies had higher total mean among other strategies ($M = 3.90$), followed by motivational strategies ($M = 3.84$), cognitive strategies ($M = 3.75$), and metacognitive strategies ($M = 3.75$).

a. Cognitive Strategies

Based on the result of cognitive strategies, learners frequently used strategies that focus on the use of grammar and logical coherence in written text. Learners tended to check word spelling, grammar, and structure for composing logical coherence within their written task.

The finding of this study showed learners were paying attention to the details of their written text in terms of grammar, word spelling, and text structure. This finding was echoed Teng & Zhang's (2016) statement. They revealed cognitive strategies affected learners' writing scores because the act of learners in generating their writing background knowledge and linguistic mastery. This action makes learners nurturing active engagement and improving learners' writing performance.

Furthermore, it also in tune with (Oxford, 2017) theory which stated that cognitive strategies help learners actively engage in conceptualizing and analyzing detailed information of the structure of the text. Moreover, learners who keep paying attention to the text details and self-assured in grammar will tend to get higher scores in writing performances and better comprehending of their text structure (Sun & Wang, 2020).

b. Metacognitive Strategies

The result yielded in metacognitive strategies showed learners tended to follow their plan during constructed written tasks and concerning the core elements before constructing written tasks. According to Mohammadi et al (2020), meta-cognitive strategies have three-phase of regulatory processes such as planning, monitoring, and evaluating. Meanwhile, the result of this study was only planning and monitoring strategies that were mostly used by learners in metacognitive strategies.

In the planning section, learners preferred concerning the core elements before constructing written tasks. This finding is in tune with Teng & Zhang's (2020) statement. They revealed that in the planning phase learners tend to think several elements for good composition writing such as credible sources and general information regarding the chosen topics. Furthermore, Panahandeh & Esfandiari (2014) also implied that the planning phase engaged learners to selectively pay attention to what they want to do and only choose the information or stimulus which relevant to their task.

The other finding showed learners follow the plans while composing their written text. This strategy is placed in the monitoring phase of metacognitive strategies. The result of this study was echoed Teng & Zhang's (2020) finding about learners prefer to follow their plan and checking the progress while constructing written text. They also added that learners make their plans and goals as guidance to produce a better final writing draft. Oxford (2017) also supported this finding, that within the monitoring phase, learners are in a situation in which they should aware of what they are doing and fully involved in the task given.

c. Social-Behavioral Strategies

Regarding the result of social-behavioral strategies, most college students tended to use these strategies while writing. According to Teng & Zhang (2020), social-behavioral strategies consist of feedback handling and peer learning. Within feedback handling, it may come from peers or teachers. The finding in this study revealed feedback handling from teachers has become the most used strategy for learners. Feedback handling from the teacher is stated in two statements; learners open to feedback from the teacher on their writing and learners improve their written text based on the teacher's feedback.

In social-behavioral strategies, learners preferred to open feedback for their writing based on teacher feedback. Based on the result, it is in line with Teng & Zhang's (2020) finding. They stated feedback handling from teachers is promoted attitude towards teacher or peers. Furthermore, the act of willing to receive feedback from teacher is reflected in how learners control their learning behavior under the influence of social and environment (Ramdass & Zimmerman, 2011)

Another finding revealed learners try to improve their written text based on the teacher feedback. This finding is consistent with Teng & Zhang's (2018) statement, which about having reciprocal feedback such as from the teacher, it can improve learners' engagement and effort towards their writing task. They also stated that interactive support from teacher through feedback is beneficial for learners to enhance writing outcomes. Moreover, (Sun & Wang, 2020) supported this finding, which cyclic feedbacks have great impacts on giving valuable information and adjustment that help learners improving their written task based on the critics of their work.

d. Motivational Strategies

Based on the result of motivational strategies, learners tended to motivate themselves to engage and stay on track while completing written text. The findings revealed learners purposely generate their willingness, personal time, and effort to keep on learning in writing courses to become good at writing. This finding is in tune with Chen, Wang, & Kim's (2019) theory, that motivational strategies accommodate learners in achieving writing goals and fostering learners for getting mentally ready to focus on their writing task. Mohammadi et al (2020) also stated, that learners more focus on objective orientation by generating their personal effort so that learners may adapt to meet task demands.

Another finding showed learners preferred to convinced themselves to work hard in writing courses to enhance their writing skills and knowledge. This finding was echoed Teng & Zhang's (2016) statement. They stated motivational strategies promoted self-encouragement towards the task given. By having motivational self-talk, learners are motivated and confident to complete their writing text.

The correlation between college students' self-regulated learning strategies and writing performance

Based on the result of this study, there was a medium correlation between self-regulated learning strategies and writing performance ($r = .481, p < .001$). Furthermore, there was found a positive correlation between the dimensions of self-regulated learning with writing performance. Metacognitive strategies resulted large correlation ($r = .545, p < .001$), cognitive and social-behavioral strategies yielded medium correlation ($r = .438, p < .001$), ($r = .361, p < .001$), yet there is no correlation in motivational strategies ($p = .830$).

This present study revealed a positive correlation between self-regulated learning strategies and writing performance. Self-regulated learning in a writing context helps learners to organize the process of their writing. In the writing aspect, it would be better if students are aware of their ability to handle the task, and it can be realized by implementing self-regulated learning. Self-regulated learning is also believed as an encouragement for writers to handle their projects and develop their understandings of the task given so that they could yield better writing performances (Abadikhah, Aliyan, & Talebi, 2018). So that, by implementing self-regulated learning, learners may well-organized writing process to achieve the goals.

Within this study, the result noted metacognitive strategies and writing performance was correlated. As stated by Harris et al (2011), metacognitive strategies play role in managing cognitive resources, which in turn positively affect learners' writing outcomes. Metacognitive strategies provided three phases of the regulatory process namely planning, monitoring, and evaluating. Through those phases, learners are allowed to use the most suitable strategies that help them propose task plans, monitor task progress, and evaluate the task given.

Cognitive strategies and writing performance also showed a positive correlation. Cognitive strategies may affect learners' writing score since cognitive strategies could help learners in generating their writing background knowledge and linguistic mastery, which make them nurture active engagement and improving their writing performances (Teng & Zhang, 2016).

Furthermore, writing is associated with the cognitive process related to information processing towards written tasks, so cognitive strategies is relevant to be implemented (Ramdass & Zimmerman, 2011).

Moreover, this present study also noted that social-behavioral strategies and writing performance were positively correlated. The possible reason is social-behavioral strategies could accommodate interactive support from external factors such as teacher and peers to enhance learners' engagement in written task goals. In turn, social-behavioral strategies within self-regulated learning are concerned with feedback loops which learners able to edit and revise their work to produce better outcomes (Zimmerman, 2013). The action of giving feedback may evolve the capacity of learners' self-regulated learning and strengthen their self-controlled (Schunk & Zimmerman, 2007). As a result, learners may optimize their writing skills and well-controlled the progress.

However, the finding of this present study revealed that motivational strategies and writing performance has no correlation. It can be inferred that motivational self-talk that learners are already given to themselves did not generate significant effects on their writing performances. This can be influenced by the environmental the situation in which didn't support and lack of writing practices. Furthermore, according to Mohammadi et al., (2020), motivational aspects may couldn't affect writing performance since this might be due to EFL's environment and situation which learners have no time to generate interest enhancement towards their writing tasks.

Taken together, the findings of this present study reported beneficial effects on learners' writing performance, and it was consistent with previous studies (Sun & Wang, 2020; Teng & Huang, 2019; Teng & Zhang, 2020). The findings revealed the self-regulation of cognitive, social-behavioral, and metacognitive strategies have a reciprocal sense of each other and come as an interacting determinant on learners' writing performances.

CONCLUSION

This current study aimed to explore further college students' self-regulated learning in academic writing and the correlation between those strategies with writing performance. As explained in the discussion section, learners rather used social behavioral strategies ($M = 3.90$), which are open feedback from the teacher and improving written tasks based on the teacher's feedback. Followed by motivational strategies ($M = 3.84$), with motivate themselves to engage and stay on track while

completing written text. Cognitive strategies ($M = 3.75$), with checking word spelling, grammar, and structure for composing logical coherence within their written task. Metacognitive strategies ($M = 3.74$), with following plans and concerning the core elements before constructing a written task.

Based on the result, there was a positive correlation between the dimensions of self-regulated learning with writing performance. Metacognitive strategies yielded large correlation ($r = .545$), cognitive and social-behavioral strategies yielded medium correlation ($r = .438$, $r = .361$), yet there is no correlation in motivational strategies ($p\text{-value} = .830$). Moreover, self-regulated learning strategies and writing performance showed medium positive correlation ($r = .481$, $p < .001$). In sum, self-regulated learning strategies and writing performance is positively correlated. It can be inferred that learners got beneficial effects from self-regulated learning strategies while constructing their written task. Self-regulated learning strategies also help learners perform better in their written outcomes.

Suggestion

The researcher would like to give several suggestions regarding the result of this study. Since self-regulated learning is proved to have positive effects on learners writing performance, teachers may promote self-regulated learning within the writing course in the classroom context. Even though writing comes as individual learning, the teacher may provide classroom activities that involved self-regulated learning strategies aspects such as feedback handling from teachers and peers, encourage learners to always keep on track while writing, paying attention to idea planning, and so on.

Because this current study is also limited on several aspects, future researchers are suggested to conduct research with different focus of skill. Moreover, this study is limited only to junior students at the university level, the future research may select larger participants in university or another.

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.
- 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(August 2019). <https://doi.org/10.1016/j.stueduc.2020.100839>
- Brown, H. D. (2004). *Language Testing Book: Principles and Classroom Practice*. Book, 314.
- Chen, X., Wang, C., & Kim, D. H. (2019). Self-Regulated Learning Strategy Profiles Among English as a Foreign Language Learners. *TESOL Quarterly*, 54(1). <https://doi.org/10.1002/tesq.540>
- Cohen, L., Manion, L., Lecturer, P., Morrison, K., & Lecturer, S. (2007). *Research Methods in Education* (Sixth Edit). New York: Routledge.
- Guo, Y., Xu, J., & Liu, X. (2018). English language learners' use of self-regulatory strategies for foreign language anxiety in China. *System*, 76, 49–61. <https://doi.org/10.1016/j.system.2018.05.001>
- Harris, K. R., Graham, S., MacArthur, C., Reid, R., & Mason, L. H. (2011). Self-regulated learning processes and children's writing. In B. J. Zimmerman & D.H.Schunk(Eds.), *Handbook of self-regulation of learning and performance* (pp. 187–202). New York: Routledge/Taylor & Francis.
- Lan, R. L. (2005). Language learning strategies profiles of EFL elementary school students in Taiwan. *ProQuest Dissertations and Theses*, 41(c), 290-290 p.
- Lee, I., & Wong, K. (2014). Bringing Innovation to EFL Writing: The Case of a Primary School in Hong Kong. *Asia-Pacific Education Researcher*, 23(1), 159–163. <https://doi.org/10.1007/s40299-013-0149-y>
- Mohammadi, R. R., Saeidi, M., & Ahangari, S. (2020). Self-regulated learning instruction and the relationships among self-regulation, reading comprehension and reading problem solving: PLS-SEM approach. *Cogent Education*, 7(1). <https://doi.org/10.1080/2331186X.2020.1746105>
- Oshima, A., & Hogue, A. (2006). *Longman Academic Writing Series 4: Paragraphs to Essays*. New York: Pearson Education.
- Oshima Ann Hogue, A., Carlson, E., DiLillo, G., Edmonds, C., Le Drean Linda Moser, L., & Pullman, E. (2007). *Introduction to Academic Writing THIRD EDITION*. Pearson Education Limited.
- Oxford, R. L. (2013). *Teaching and researching language learning strategies*. Harlow: Pearson
- Oxford, R. L. (2017). *Teaching and Researching Language Learning Strategies Self-Regulation in Context* (Second Edi). New York: Routledge.
- Panahandeh, E., & Esfandiari, S. (2014). The Effect of Planning and Monitoring as Metacognitive Strategies on Iranian EFL Learners' Argumentative Writing Accuracy. *Procedia - Social and Behavioral Sciences*, 98, 1409–1416. <https://doi.org/10.1016/j.sbspro.2014.03.559>
- Ramdass, D., & Zimmerman, B. J. (2011). Developing Self-Regulation Skills: The Important Role of Homework. *Journal of Advanced Academics*, 22(2),

- 194–218.
<https://doi.org/10.1177/1932202X1102200202>
- Schunk, D. H., & Zimmerman, B. J. (2007). Influencing children's self-efficacy and self-regulation of reading and writing through modeling. *Reading and Writing Quarterly*, 23(1), 7–25.
<https://doi.org/10.1080/10573560600837578>
- Sun, T., & Wang, C. (2020). College students' writing self-efficacy and writing self-regulated learning strategies in learning English as a foreign language. *System*, 90, 102221.
<https://doi.org/10.1016/j.system.2020.102221>
- Teng, (Mark) Feng, & 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, F. (2020). Tertiary-Level Students' English Writing Performance and Metacognitive Awareness: A Group Metacognitive Support Perspective. *Scandinavian Journal of Educational Research*, 64(4), 551–568.
<https://doi.org/10.1080/00313831.2019.1595712>
- Teng, L. S., & Zhang, L. J. (2016). A Questionnaire-Based Validation of Multidimensional Models of Self-Regulated Learning Strategies. *Modern Language Journal*, 100(3), 674–701.
<https://doi.org/10.1111/modl.12339>
- Teng, L. S., & Zhang, L. J. (2018). Effects of motivational regulation strategies on writing performance: a mediation model of self-regulated learning of writing in English as a second/foreign language. *Metacognition and Learning*, 13(2), 213–240. <https://doi.org/10.1007/s11409-017-9171-4>
- Teng, L. S., & Zhang, L. J. (2020). 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(February), 100701.
<https://doi.org/10.1016/j.jslw.2019.100701>
- Tremblay-Wragg, É., Mathieu Chartier, S., Labonté-Lemoyne, É., Déri, C., & Gadbois, M. E. (2020). Writing more, better, together: how writing retreats support graduate students through their journey. *Journal of Further and Higher Education*, 00(00), 1–12. <https://doi.org/10.1080/0309877X.2020.1736272>
- Zimmerman, B., & Risemberg, R. (1997). RESEARCH FOR THE FUTURE Becoming a Self-Regulated Writer: A Social Cognitive Perspective. *Contemporary Educational Psychology*, 101, 73–101.
- Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45(1), 166–183. <https://doi.org/10.3102/0002831207312909>
- Zimmerman, B. J. (2013). From cognitive modeling to self-regulation: A social cognitive career path. *Educational Psychologists*, 48, 135–147.
- Zimmerman, B. J. (2011). Motivational sources and outcomes of self-regulated learning and performance. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self regulation of learning and performance* (pp. 49– 64). Mahwah: Erlbaum.
- Zimmerman, B. J., & Pons, M. M. (1986). Development of a Structured Interview for Assessing Student Use of Self-Regulated Learning Strategies. *American Educational Research Journal*, 23(4), 614–628. <https://doi.org/10.3102/00028312023004614>