

The Role of Metacognitive Writing Strategies in ESL Academic Writing: A Case Study of Malaysian Undergraduates

Norhartini Aripin

Akademi Pengajian Bahasa, UiTM Shah Alam, 40450 Shah Alam, Selangor, Malaysia

Email: hartiniaripin494[at]gmail.com

Abstract: Academic writing requires ESL writers to excel in using language and writing mechanics during the writing process. The process is not easy especially for the second language users. To monitor and regulate the writing process, Metacognitive writing strategies have been introduced. Metacognitive writing strategies are one of the writing strategies that consists of three components which are planning, monitoring, and evaluating. These components are believed to influence the writers' writing skill as well as to boost their writing performance. This quantitative study was conducted to explore the perception of the use of metacognitive strategies in academic writing among undergraduates. A purposive sample of 108 participants responded to the survey. The participants were undergraduates from two public universities in Johor and Selangor. A set of survey questionnaire with four sections is the instrument used is a 5 Likert - scale survey to reveal the variables. The data obtained were analyzed by using the software of Statistical Package for the Social Science (SPSS). The significance of this study lies in its potential to improve the teaching of academic writing for ESL learners, by demonstrating the importance of metacognitive strategies in enhancing writing performance and reducing anxiety.

Keywords: Metacognitive strategies, ESL writing, academic writing, planning, monitoring, evaluating., ESL writers

1. Introduction

1.1 Background of the Study

Writing is defined as a systematic skill that allows learners to inculcate their knowledge including vocabulary, grammar, and structure (Azizi *et al.*, 2017). Writing is not an easy task for ESL writers especially to those who struggle at using English language. They are expected to put vocabulary, syntax, coherent and cohesive, grammar and sentence structure accordingly, so that the ideas, opinions, and thoughts can be conveyed successfully. Hence, a practical approach should be applied by the writers in order to compose well. Applying writing strategies during the writing process has been perceived as a good approach. Chien (2012) claimed that writers who use writing strategies in their writing process will excel in their writing performance.

In ESL writing, Mu (2005) introduced five types of writing strategies that could guide ESL writers in learning writing. Metacognitive writing strategies have been used by most ESL writers during their writing process (Raoofi *et al.*, 2014). There are three major phases in metacognitive writing strategies namely planning, monitoring, and evaluating. These three components are believed to guide and control the writers during the writing process. These strategies help learners to reach a higher level of writing content (Pitenoe *et al.*, 2017); reach desirable goals and have better control over the behaviour and their learning, allow the learners to be more confident and efficient in their writing (Rahmat and Ismail, 2014), have a proper guideline to regulate materials that they have learned (Azizi *et al.*, 2017). Hence, the study aims to explore the influence of metacognitive writing strategies on writers' writing performance and to determine how planning, monitoring, and evaluating are used by undergraduates during the writing process of English essays.

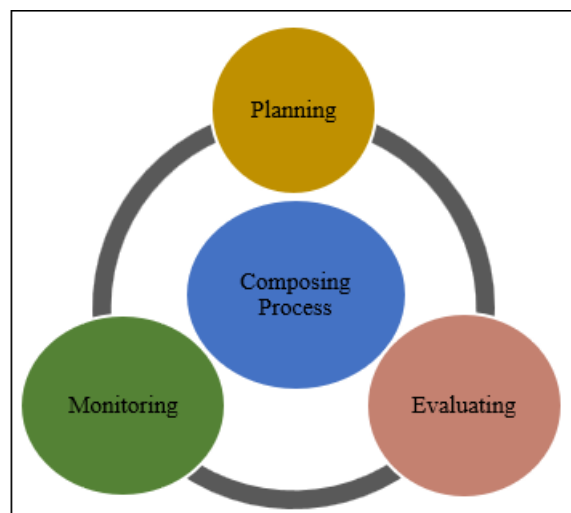


Figure 1: The Influence of Planning, Monitoring, and Evaluating in the Writing Process

1.2 Problem Statement

In the writing process, metacognitive writing strategies are expected to be applied by the writers as a writing regulator that guides them to compose. Planning, monitoring, and evaluating are used as guidelines to help them control their writing as well as their anxiety. By applying this writing strategies, the writers could produce an organised essay with less worry.

However, the problem occurs when ESL writers do not realise the significance of using strategies and how these strategies could influence them in controlling their anxiety while writing due to limited knowledge and exposure about using these strategies in their writing Saedpanah and Mahmoodi (2020). Aluemalai and Maniam (2020) also claimed that although metacognitive writing strategies was conducted in

the writing process, the writers were still anxious to write due to limited exposure on how to use these writing strategies. This has caused them to have disorganised text which affected their final writing outcomes as well as their writing performance.

Hence, this quantitative study is done to explore perception of learners on their perception of metacognitive strategies. Specifically, this study is done to answer the following questions;

- How do learners perceive the use of planning stage in academic writing?
- How do learners perceive the use of monitoring stage in academic writing?
- How do learners perceive the use of evaluating stage in academic writing?
- Is there a relationship between planning, monitoring and evaluating stage?

2. Literature Review

2.1 Academic Writing

Writing is a crucial skill as it measures writers' writing and cognitive achievement. Rahmat *et. al* (2018) defined writing as a social - cognitive process as the writers should ensure that the written ideas are conveyed and successfully understood by the readers. Writing is an important skill to be mastered as writers' language attainment is measured by their proficiency in writing (Nnamani and Akabogu, 2020). Guneyli (2016) described writing as a process where the ideas are transferred by involving writers' emotions, opinions, thoughts, and past experiences based on language rules and letters. In other words, writing can be perceived as a process of connecting the writers to the readers, besides transferring ideas, information, and thoughts that the writers plan in their mind. Instead of transferring ideas into a written text, writers are also capable to share feelings and convince readers through their writing (Aluemalai and Maniam, 2020).

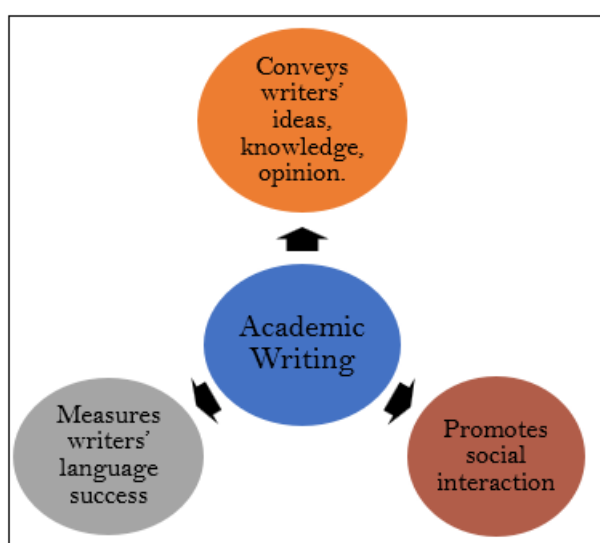


Figure 2: Definition of Writing in the Study

2.2 Metacognitive Writing Strategies

The strategies that are used by writers to control and regulate their writing process. There are three micro strategies that help writers to use metacognitive strategies. They are planning, monitoring, and evaluating. Planning strategies are conducted before writing either the writers write a draft on paper or they just draw the ideas in their mind. Planning strategies are essential as they function as a guideline that will drive the writers in the writing process. Metacognitive writing strategies help learners to reach a higher level of writing content (Pitenoe *et al.*, 2017) ; reach desirable goals and have better control over the behaviour and their learning, allow the learners to be more confident and efficient in their writing (Rahmat and Ismail, 2014) have a proper guideline to regulate materials that they have learned (Azizi *et al.*, 2017) .

2.2.1 Planning

Planning is an essential part of the writing process and the major writing time is spent at this stage. According to Silin and Chan (2015), 70% of writing time should be spent at the planning stage. During the planning stage, writers are required to plan and recall their prior knowledge to construct the draft or outline. According to Bai *et al.* (2014) , planning is the most prominent strategy chosen by primary learners in Singapore than other strategies. At this initial stage, writers will talk about arrangement and preparation before they start writing.

2.2.2 Monitoring

Monitoring is known as a controller that regulates the transferring process. During the monitoring stage, writers will check and identify problems during while - writing process. This while - writing process allows writers to convert their thoughts and ideas into language. At this stage, the writers will also verify other aspects such as content, organization, grammar, and mechanics.

2.2.3. Evaluating

This final stage of metacognitive writing strategies guides writers to carefully proofread and revise their product or text. This stage usually takes place after the writing process is complete. Likewise, ESL writers will repeatedly proofread the text to recognize grammatical mistakes and inappropriate use of phrases or words. After scrutinizing the text several times, writers will reconsider to see if there are any changes or amendments needed.

2.3 Past Studies on Composing Process

There have been many past studies on the composing process of ESL writers. The study by Aluemalai and Maniam (2020) to investigate how undergraduates used strategies in the three main stages of writing process namely pre - writing, while - writing, and revising. the study involved undergraduate ESL students from Universiti Pendidikan Sultan Idris (UPSI). A set of survey questionnaire was adapted to measure the applied strategies in during the three stages of the composing process. The data obtained were analyzed by using the software of Statistical Package for the Social Science (SPSS). The findings of this study indicated ESL students have

preferred planning strategies then while writing strategies and revising strategies.

Another study by Abas and Abd Aziz (2018) is done to identify the writing process of Indonesian EFL proficient student writers; and to explore the writing strategies used by Indonesian EFL proficient student writers. The researchers used Williams' writing process model as the basis for identifying the writing process, while Leki, Sasaki and Mu's writing categories were used to identify the writing strategies. This qualitative case study research design integrating four data collection methods, that was, observation, interview, think - aloud protocol, and video - stimulated recall interview. The results show that the student writers undertake a five - step writing process: prewriting, planning, drafting, pausing and reading and revising and editing in each stage of the writing process. The study significantly contributes to the body of knowledge on writing, helps L2 writing teachers and L2 learners at all levels of writing using the model of the writing process and the proposed writing strategies.

2.4 Past Studies on Metacognitive Writing Strategies

Many studies have been done to investigate the influence of metacognitive writing strategies in the learning process of ESL writers. In Goctu's (2017) study on metacognitive strategies in Academic writing, more than half of participants did not have metacognitive awareness although they used them in a writing process. The results revealed that most of the students used metacognitive strategies, but their strategies were largely incomplete due to lack of awareness. In addition, the researcher also found that metacognitive strategies had a positive cognitive, social, and emotional impact on learners academic writing.

In another study on metacognitive awareness by Azizi *et. al* (2017), they found the relationship between learners' writing performance, self - awareness, and metacognitive strategies. The results also revealed that Iranian EFL students were lacked metacognitive strategies awareness when approaching writing and successful students used metacognitive strategies more than the other writing strategies. In addition, the researchers also claimed that there was a positive relationship between metacognitive writing strategies use and the learners' writing performance. This proves that students who have self - awareness in the using of metacognitive writing strategies will successfully perform in their writing.

2.5 Conceptual Framework

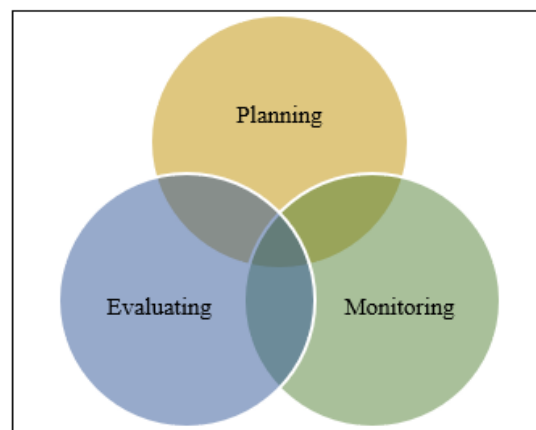


Figure 3: Conceptual Framework of the Study - The Influence of Planning, Monitoring and Evaluating in Writing

Figure 1 shows the conceptual framework of the study. This study is adapted from the categories by O'Malley & Chamot (1990). Metacognitive strategies involve tactics that enable students to have the control of their own learning. These strategies are known as learners' learning regulator, which consist of planning (e. g., advance organizers, direct attention, functional planning, selective attention, and self - management), monitoring (e. g., self - monitoring), and evaluation (e. g., self - evaluation). In these strategies, people are resources with their own attitudes and beliefs towards L2 learning.

3. Methodology

3.1 Research Design

This quantitative study is done to explore the perception of the use of metacognitive strategies in academic writing among undergraduates. A purposive sample of 108 participants responded to the survey. The selected sample for this study is undergraduates from two public universities in Johor and Selangor and have attended an English course called (Integrated Writing Skill). Meanwhile, the instrument used for this study is a set of survey questionnaire with four sections. Section A has items on demographic profile. Section B has 6 items on Planning, Section C has 5 items on Monitoring and section D has 4 items on evaluating. The instrument used is a 5 Likert - scale survey rooted from O'Malley & Chamot (1990) to reveal the variables. The data obtained were analyzed by using the software of Statistical Package for the Social Science (SPSS). The following tables presents the distribution of items in the survey (Table 1) and reliability scores of the survey (Table 2).

Table 1: Distribution of Items in the Survey

Section	Metacognitive Strategy	No Of Items
B	Planning	6
C	Monitoring	5
D	Evaluating	4
		15

Table 1 shows the distribution of items in the survey. Section A has items on demographic profile such as gender and level of education, Section B presents items for planning, Section C has items for monitoring and Section D has the items for evaluating.

Table 2: Reliability of Survey
Reliability Statistics

Cronbach's Alpha	N of Items
.837	15

Table 2 shows the reliability of the survey. The analysis shows a Cronbach alpha of .837, thus, revealing a good reliability of the instrument chosen/used. Further analysis using SPSS is done to present findings to answer the research questions for this study.

4. Findings

4.1 Findings for Demographic Profile

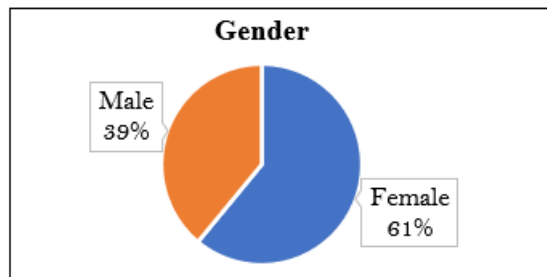


Figure 1: Percentage for Gender

Figure 1 illustrates percentage for gender of respondents in the study. based on the data, 39% of the respondents involved in the study was male, while 61% were female students.

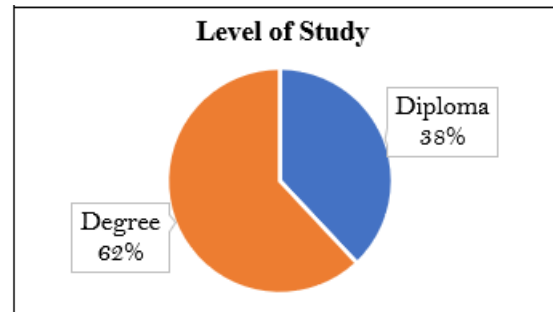


Figure 2: Percentage of Level of Study

Figure 2 shows the level of study of the respondents. Based on the analysis, there was two types of Study level of the respondent which were diploma and degree. From 108 participants in the study, 62% of them were degree students, while 38% of them were diploma students.

4.2 Findings for Planning

This section presents data to answer research question;

How do learners perceive the use of planning stage in academic writing?

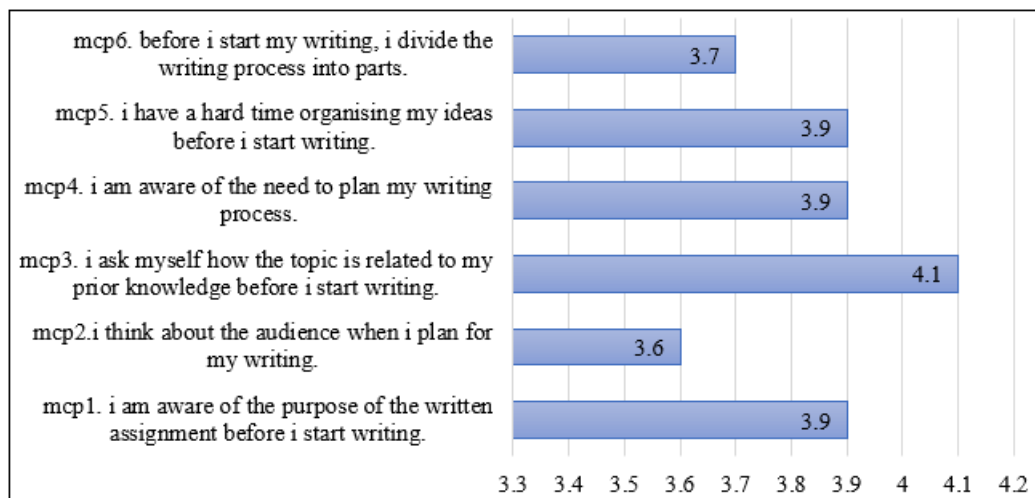


Figure 4.2: Mean for Planning Stage

Based on figure 4.2, the most influential action during planning stage, was most respondents questioned themselves whether the topic assigned was related to their prior knowledge (4.1). Besides that, the respondents also perceived the purpose of the task assigned (3.9), and the need to plan for their writing process (3.9) as important strategies at the planning stage. Most respondents also agreed that they had a hard time organising their ideas before they started writing (3.9). However, it was found that, thinking about the audience

when planning for the writing was the least concern of the respondents (3.6).

4.3 Findings for Monitoring

This section presents data to answer research question;

How do learners perceive the use of monitoring stage in academic writing?

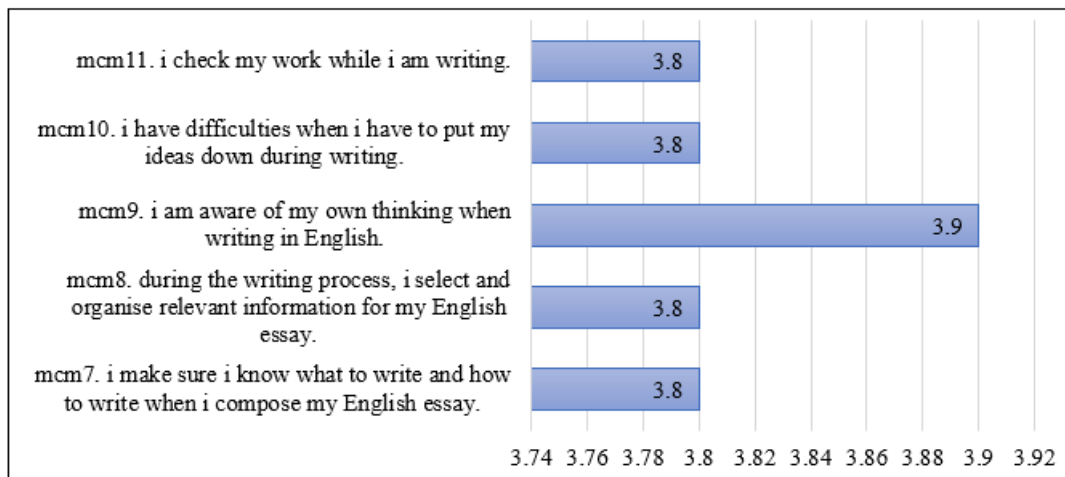


Figure 4.3: Mean for Monitoring Stage

During monitoring stage in figure 4.3, the most influential act was that the respondents were aware of their own thinking when writing in English with the highest score of 3.9. Meanwhile, making sure about how and what to write, selecting and organising relevant information for the writing, checking their work while writing was also respondents' concern when monitoring their writing process with 3.8 score respectively. However, during monitoring stage, the

respondents also found that, it was difficult to put the ideas down during writing (3.8).

4.4 Findings for Evaluating

This section presents data to answer research question; *How do learners perceive the use of evaluating stage in academic writing?*

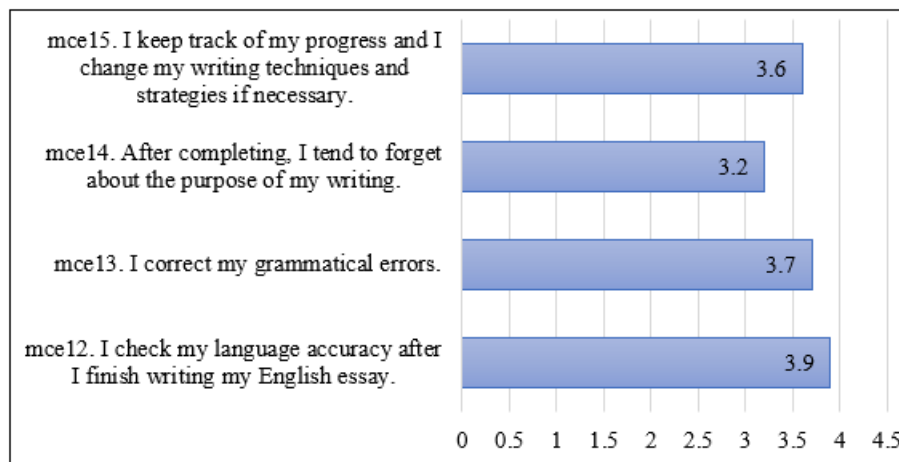


Figure 4.4: Evaluation Stage

Based on figure 4.4, it was reported that, the most perceived strategy during the evaluating stage which scored the highest point (3.9) was checking language accuracy of the essay. Besides that, the respondents agreed that correcting grammatical errors (3.7) and keeping track writing progress and changing writing techniques and strategies (3.6) were also perceived as important act when evaluating the essay. Nevertheless, forgetting the purpose of the writing after completing was the least perceived by the respondents during the evaluating stage (3.2).

4.5 Findings for Relationship planning with monitoring and evaluating stage

This section presents data to answer research question 4; *Is there a relationship between planning, monitoring and evaluating stage?*

To determine if there is a significant association in the mean scores between planning, monitoring, and evaluating

strategies data is analysed using SPSS for correlations. Results are presented separately in table 3, and 4 below.

Table 3: Correlation between Planning and Monitoring

		Planning	Monitoring
Planning	Pearson Correlation	1	.724**
	Sig. (2- tailed)		<.001
	N	108	108
Monitoring	Pearson Correlation	.724**	1
	Sig. (2- tailed)	<.001	
	N	108	108

**Correlation is significant at the 0.01 level (2-tailed)

Table 3 shows there is an association between planning and monitoring. Correlation analysis shows that there is a high significant association between planning and monitoring ($r=.724^{**}$) and ($p=.000$). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate

positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between planning and monitoring.

Table 4: Correlation between Planning and Evaluating

		Planning	Evaluating
Planning	Pearson Correlation	1	.516**
	Sig. (2- tailed)		<.001
	N	108	108
Evaluating	Pearson Correlation	.516**	1
	Sig. (2- tailed)	<.001	
	N	108	108

**Correlation is significant at the 0.01 level (2-tailed)

Table 4 shows there is an association between planning and evaluating. Correlation analysis shows that there is a high significant association between planning and evaluating ($r=.516^{**}$) and ($p=.000$). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between planning and evaluating.

5. Conclusion

5.1 Summary of Findings and Discussion

Based on the findings, it can be summarized that ESL writers perceive planning, monitoring, and evaluating useful strategies during the writing process. However, the use of these three strategies in metacognitive writing strategies throughout the process is different according to every writer. From the study, it can be summarised that when planning, writers usually access the information from their prior memory (Flower and Hayes, 1981). Being aware of the purpose of writing and the need to plan for writing were also important process when planning as claimed by Arifin (2017), as soon as the writers received the topic, they conducted a mental activity to formulate their thoughts about writing and to analyse the requirements of the topic. This shows that, planning helps writers to set their purpose and goal before they start writing. Using the planning strategy in the writing process helps students to think about what they want to achieve and how they want to achieve it (Hartina et al., 2018). Moreover, at monitoring stage, the respondents were aware of their own thinking when writing in English, making sure about how and what to write, selecting and organising relevant information for the writing. besides that, checking their work while writing was also crucial when monitoring their writing process. This can be corroborated by Aliyu and Fung (2020) who agreed that during the monitoring phase, participants kept track of their performance and detected errors. Finally, when evaluating the essay, the respondents agreed that checking, tracking, and changing were the needed processes by the writers, as suggested by Moqbali et al. (2020) and Al - Zankawi (2018) who found that respondents indicated that their main writing concern was editing local errors such as grammar, vocabulary, and spelling.

In conclusion, this study demonstrates the critical role of metacognitive strategies planning, monitoring, and evaluating in the academic writing of ESL undergraduates. The significant relationships found between these strategies suggest that their application can greatly improve writing performance. Educators should consider integrating these strategies into their curriculum to enhance ESL learners writing outcomes.

5.2 Implications and Suggestions for Future Research

Future research should explore a more thorough investigation of the implications of using these strategies and the factors that influence ESL writers to use strategies in the writing process. In fact, writing strategies can also be studied by comparing metacognitive writing strategies with other strategies in ESL writing. Besides that, the use of other instruments to collect the data such as observation, and semi - structured interview would help researchers to probe deeper on writers' use of writing strategies in the writing process.

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Author Profile

Norhartini Aripin (Corresponding author)

ORCID: <https://orcid.org/0000-0002-8373-0337>

Email: [hartiniaripin494\[at\]gmail.com](mailto:hartiniaripin494[at]gmail.com)

Phone Number: (+60) 0126599016