Attitudinal and Motivational Factors in the Use of Strategies for Learning Writing Skills by Indonesian University EFL Learners

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Abstract: This study aimed to identify the types and the intensity of use of strategies for learning writing skills, to identify motivational and attitudinal factors that potentially correlate with the use of the strategies, and to measure the interrelationship among the identified strategies and their relationship with students' writing skills. A total of 280 English students from five universities in Indonesia participated in the study. They filled out a questionnaire of strategies for learning writing, an attitude/motivation test battery, and a self-assessment scale of writing skills. An exploratory factor analysis was used to discern the types of strategies. Correlation analyses were to measure the potential correlation between attitudinal/motivational factors and learning strategies used, and between the learning strategies used and the students' perceived writing skills. The findings showed the presence of six strategies for learning writing skills, including self-monitoring, cognitive processing, content-focused processing, metacognitive commencement, form-focused processing, and authentic practicing strategies. The six strategies were used at a moderate level. Furthermore, most attitudinal/motivational factors were significantly correlated with the use of strategies. Finally, the study discovered significant intercorrelations in the use of all types of strategies and a significant correlation between the use of the strategies and writing skills.

Keywords: Attitude, Learning strategies, Motivation, Writing skills, Writing strategies

1. Introduction

Since the 1970s language learning strategies have been extensively studied by researchers around the globe as three major focus areas. The first one is a group of studies that attempted to discover the types of strategies and their patterns of use (Ariffin, et al., 2021; Aydan, 2021; Lunt, 2000; Mistar, 2001; Wharton, 2000). The second group consists of studies dealing with the significance of

learning strategies in predicting learning success as assessed in terms of language proficiency (Park, 1997) or language learning achievement (Halim, et al., 2020; Hidayanti & Umamah, 2018; Setyadi, 2004). The last are studies treating language learning strategies as criterion variables predicted from individual learner characteristics, such as language aptitude, learning motivation, attitude, gender, and personality traits (Gardner et al., 1997; Hidayanti & Umamah, 2019; Lee & Oxford, 2008; Mistar & Umamah, 2014) and situational factors, including learning context of foreign or second language (Green & Oxford, 1995) and course status of either compulsory or elective subject (Oxford & Nyikos, 1989).

Subsequent studies deal with strategies learners employ in learning specific language skills such as reading, listening, speaking, and writing. In the context of strategies for learning writing skills, very few studies have attempted to put together the three major research focuses in a single study. This study is then aimed at revealing the types of strategies for learning writing skills and their intensity of use, the role of motivational and attitudinal factors in the use of the identified strategies, and the predictive power of learning writing strategies on writing skills.

2. Literature Review

Writing skill always challenges students with its complex processes from pre-writing, drafting, and revising (Oshima & Hogue, 2007). Summarized from previous research findings (e.g. Al Seyabi & Tuzlukova, 2014; Farooq et al., 2012; Flores & Lopez, 2019; Karim et al., 2017; Umamah et al., 2019), the complexities of writing are also rooted in both academic problems such as limited linguistic and writing knowledge and non-academic problems such as time constraints (Umamah & Cahyono, 2020). These complexities demand students equip themselves with certain strategies for learning writing skills (Cohen & Macaro, 2007). The use of strategies is of great importance to promote students' knowledge and skills in writing (Zimmerman & Bandura, 1994), and it was found that students' writing strategies affect their writing quality (Oktoma et al., 2020). Research on the use of strategies for learning writing skills has been extensively carried out exploring various issues such as the profile of strategy use, writing strategy-based intervention, the correlation between the writing strategies and writing performance, and the role of individual differences on writing strategy use.

In terms of the profile of strategy use, past research provides evidence that the use of strategies for learning writing skills is at a moderate level (Bai et al., 2014; Mistar et al., 2014; Yulianti, 2018; Zuhairi & Umamah, 2016) meaning that students generally have not made use of writing strategies intensively. Furthermore, students use different types of writing strategies. Chinese students, for example, use rhetorical strategies, metacognitive strategies, cognitive strategies and social/affective strategies in their writing practice (Mu & Carrington, 2007). In the Indonesian context, junior high school students were reported to use cognitive strategies more frequently than other writing strategies (Zuhairi & Umamah, 2016). Meanwhile, Masriani et al. (2018) reported affective and metacognitive as the most used strategies. Korean students use problem-solving strategies followed by planning strategies (Bailey, 2019). More specifically, some studies concern the use of strategies in the writing stages. In the prewriting phase, students use *revising the requirements* as the most used strategy. In the drafting phase, they use *writing the introduction*. In the revising phase, they perform the strategy of *checking mistakes after getting feedback* (Gibriel, 2019). Students also give attention to writing mechanics, relate the writing topic to their experience and knowledge, plan what to write mentally and express it verbally (talk-writing), use freewriting strategy, make an outline, make a list, use online materials, ask for help, take the reader into account, and consider text organisation in each stage of their writing process (Hermilinda & Aziz, 2018). The difference in the types of strategy use might be caused by the use of different writing strategy measurements used by the researchers.

Current body of research is also concerned about the necessity of integrating strategy-based intervention in writing classes. Previous findings proved that intervention of writing strategy can promote students' writing skills (Arju, 2017; Mastan et al., 2017; Pitenoee et al., 2017; Zhang et al., 2019). Through intervention, university students can organize their ideas better, develop their thoughts, and maintain text unity and coherence (Arju, 2017). Similarly, senior high school students' writing aspects such as organization, content, vocabulary, language use, and mechanics improved after they were given writing strategy intervention (Mastan et al., 2017). Students also benefited from content improvement (Pitenoee et al., 2017). In general, writing strategy intervention helps students to improve their writing performance (Zhang et al., 2019). To this end, students need strategy-based writing instruction to promote their performance (Cohen & Macaro, 2007).

Concerning the correlation between strategies and writing performance, some studies also confirmed the positive correlation between the two variables (Gibriel, 2019; Nasihah & Cahyono, 2017; Olivares-Cuhat, 2010; Sadik, 2014); however, they are different in the types of writing strategies. According to Gibriel (2019), checking mistakes after getting feedback from the teacher is the most correlated strategy with writing achievement. Nasihah and Cahyono (2017) reported metacognitive strategies as the most correlated strategies with writing performance, while Sadik (2014) revealed that strategies that have a positive correlation with writing performance are cognitive writing strategies. A significant correlation between three strategy categories such as metacognitive, cognitive, affective and effort regulation, and writing performance is reported by Raoofi and Maroofi (2017). The different findings regarding the types or writing strategies correlating with writing performance might be due to different measures of the writing strategies and the students' proficiency levels.

The last issue is students' individual differences whereby some research has been conducted covering different aspects of students' individual differences. Gender, for example, is reported to significantly affect strategy choice with the female writers using more strategies compared to their male counterparts (Aripin & Rahmat, 2021). Other studies highlighted the role of proficiency levels resulting in a finding that students with good writing performance are reported as better writing strategy users (Arifin, 2017; Mistar et al., 2014). Proficiency level has a linear correlation with strategy use (Alfian, 2018). However, Zuhairi and Umamah (2016) revealed an insignificant difference between high and low-performing students in using strategies. Strategy development is affected by factors such as the level of proficiency, task metacognitive engagement, attitude and strategic use of other languages in their repertoire (Forbes, 2019). Anxiety also affects strategy use (Stewart et al., 2015); however, not all levels of anxiety affect the use of writing strategies. It is reported that moderate levels of anxiety have a positive effect on strategy use (Bailey, 2019). Together with anxiety, self-beliefs around writing also affect the use of strategies (Stewart et al., 2015). Assessing the correlation among writing strategies, individual differences (motivational constructs), and writing performance, Raoofi and Maroofi (2017) unveil that motivational constructs (self-efficacy, intrinsic value, attainment value, and cost) and writing strategy categories (metacognitive, cognitive, affective and effort regulation) significantly correlate to writing performance. Summarizing from previous research, Manchón (2018) reported that students' individual differences which affect strategy use can be classified into three important factors such as learner-related, task-related, and context-related factors. Learner-related factors include levels of proficiency, gender, motivation, and writer's mental model (conceptions and beliefs). Task-related factors involve task complexity and time. Context related factors cover the influence of L1/L2 literacy, educational experience, strategies to transfer prior knowledge of writing genre and to expand genre repertoires across learning contexts, the use of strategy in study-abroad stays.

The previous research has explored various issues of writing strategy including the role of individual differences. However, the aspects of individual differences are mostly limited to gender and proficiency levels. Also, most of them focused on either attitudinal (e.g. attitude toward native speakers of the target language, attitude toward second language learning interest, and language learning anxiety) or motivational factors (interest, integrative motivation, and instrumental motivation) and reported them separately. Therefore, investigating the role of both attitudinal and motivational factors on the use of strategies for learning writing skills will provide more comprehensive findings. Besides, issues regarding the interrelationship among the categories of writing strategies and how they are correlated with writing performance are fruitful information but still neglected. Anchored by the aforementioned background and review of related literature, this study was carried out to answer the following research questions:

1. What strategies do students use in learning writing skills and how do they use them?
2. What attitudinal and motivational factors potentially correlate with the use of the strategies?
3. How is the intercorrelation among the categories of writing strategies and how do they correlate with writing performance?

3. Methodology

3.1 Research Design

This study employed both descriptive and correlational designs. The descriptive design was utilized to discern the types of strategies for learning writing skill as well as their patterns of use. Meanwhile, the correlational design was used to find the correlation between attitudinal/ motivational attributes and the use of learning writing strategies and the predictability of learning strategies on writing skill attainment.

3.2 Sample of the Study

The targeted participants of this study were 300 university students. They were students of the English education department from five universities in East Java, Indonesia. Three universities were under the Ministry of Research, Technology and Higher Education, while the other two were under the Ministry of Religious Affairs. Two of them are public, while the other three are private universities. From each institution, an equal number (n = 20) of sophomores, juniors, and seniors were selected. Out of 300, 20 students were excluded as they did not complete all the required instruments, so the total participants were 280 students, consisting of 186 females and 94 males with the age range between 20 and 23 years old.

3.3 Research Instruments

This study used three questionnaires to obtain data. The questionnaires are the modified version of the Attitude/Motivation Test Battery, a Posteriori Taxonomy of Strategies of Learning English Writing Skill, and a written self-assessment.

Instrument for Attitude/Motivation Attributes

The modified version of the Attitude/Motivation Test Battery (Gardner et al., 1997) was used as the instrument to examine the attributes of attitudes/motivation in foreign language learning. This

was originally developed for Canadian learners of French, so some adjustments were made to make it applicable to Indonesian learners of English (Mistar, 2001). This instrument contains nine attitudinal and motivational attributes, covering attitude towards native speakers of English (8 items), attitudes toward learning English (10 items), desire to learn English (10 items), English class anxiety (10 items), English use anxiety (10 items), interest in foreign languages (10 items), instrumental orientation (4 items), integrative orientation (4 items), and motivational intensity (10 items), totaling 76 items. All of the items of instrumental orientation and integrative orientation were positively keyed, half of the items of the other seven attributes were positively keyed, and the other half, negatively. The overall reliability coefficient of the instrument was .938. The reliability index of each of the nine attributes is .621, .845, .712, .585, .830, .737, .498, .776, and .702 respectively.

Instrument for Assessing Writing Strategies

To collect the data on the learners' strategies in learning writing skills, a Posteriori Taxonomy of Strategies of Learning English Writing Skill was employed. Originally, the questionnaire consisted of seventy (n=70) items prepared in the Indonesian language. Before its use for the present research purpose, it was tried out on forty (n=40) students from the English Education Department, Universitas Islam Malang. The results of the construct validity analysis yielded that 50 items contributed very significantly to the assessment of the intended construct. Thus, the final version of the questionnaire consisted of 50 items. The reliability index of the data from the questionnaire as measured by using Cronbach's Alpha method (Pallant, 2011) was .954, indicating very high reliability.

Instrument for Assessing Writing Proficiency

To measure the students' writing proficiency, a-10 item of self-assessment was administered, asking the students to self-assess their writing performance. To each item, they had to respond by circling 1, 2, 3, 4, or 5 indicating how well they were able to perform a writing act with 1 being "not at all", 2 "with much difficulty", 3 "with some difficulty", 4 "with very little difficulty", and 5 "easily". Self-assessment data are reliable as they correlate significantly with language proficiency (Bachman & Palmer, 1989; Mistar, 2011). Goldburg (2013) also reported the significant relationship between the actual L2 writing ability and the self-assessed writing proficiency measures.

3.4   Data Analysis

The first statistical analysis was performed using Principal Component Analysis (PCA) to classify the categories of writing strategies. Prior to the factor analysis, the factorability of the data was evaluated based on two criteria: (1) Bartlett's test of sphericity should be significant and (2) the Kaiser-Meyer-Oklin (KMO) value should be at least .6 (Pallant, 2011). The result of the factor analysis was then used to classify writing strategy categories. To examine the contribution of individual differences in the use of writing strategies, correlation analysis was performed. This correlation analysis was also run to measure the intercorrelation among the writing strategy categories and their correlation with writing performance.

4.   Findings

The findings of the present study are presented in the order of the research questions: 1) What strategies do the students use in learning writing skills and how do they use them?, 2) What attitudinal and motivational factors potentially correlate with the use of the strategies?, and 3) How is the

intercorrelation among the categories of writing strategies and how do they correlate with writing performance?

RQ1. What Strategies Do the Students Use in Learning Writing Skills and How Do They Use Them?

KMO and Barlett's test was performed to ensure that the obtained data could be analyzed using factor analysis. The test result presented in Table 1 shows that the data were factor analysable. This is because the Kaiser-Meyer-Oklin measure of sampling adequacy is .917, which is higher than .6 and Bartlett's test of sphericity is significant ($p < .000$) (Pallant, 2011).

Table 1. KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adeq		
Bartlett's Test of Sph Approx. Chi-Square		4
df		
Sig.		

A factor analysis on the 50 items of writing strategies unveiled six factors (see Appendix), explaining 47.24% variances of writing strategies. Factor 1 with the highest percentage (10.28%) is named Metacognitive Processing Strategies. This factor consists of 11 strategy items such as *trying ways to practice English, noticing own mistakes and using that information to do better, trying to find out how to be a better writer of English, thinking of the progress in learning English writing, trying to relax when feeling afraid of using English in writing, jotting down a few words and working up notes into an essay, reading the text several times, paying attention to the correct use of punctuations, paying attention to the use of transition signal within the paragraph to show the unity of ideas, trying to remember the meaning of words or the patterns by writing them,* and *trying to find patterns in English.*

Factor 2 Cognitive Processing Strategies (13 items) accounts for 8.65% of the items. The strategies in this factor are *reading the writing and correct mistakes, writing sentences to apply certain rules, asking friends or teacher to correct the writing, deleting or changing a word, a phrase, or a sentence when the meaning is not clear, using a word or phrase that means the same thing if getting stuck of an English word, trying to use a lot of vocabularies, trying to connect shorter sentences into longer sentences to have the meaning clear, keeping editing until the whole passage is finished, writing more than one draft before handing in the final product of the essay, stopping after each sentence or paragraph to relate ideas together and get more new ideas, asking for examples of how to use a word or expression in English, interrupting own self when noticing having made a mistake in writing,* and *thinking about the differences between English and Indonesian to avoid making mistakes.*

Factor 3 (8.37%) is Content-Focused Planning/Revising Strategies consisting of 9 items. This factor covers the following strategies: *discussing the topic with others (teachers, classmates, etc.) before writing, doing mind-mapping to generate and cluster ideas before writing, starting writing when both ideas and structures are clear in mind, and trying to have an argument clear before starting writing, rearranging sentences and paragraphs to make ideas clear when revising, focusing on the layout of the content when revising, revising to develop the content of the writing, focusing on the clarity of ideas and grammar when revising,* and *revising to improve the style of writing.*

Factor 4 (8.13%) representing Metacognitive Commencement Strategies consists of 8 items. The strategies in this factor are *always making a writing plan before starting to write, planning a schedule to have enough time to write in English, having clear goals for improving English writing*

skills, memorizing proverbs or beautiful expressions to enhance and improve writing, checking if each written sentence is accurate and perfect before writing another sentence, thinking of the rhetorical steps of the text when starting to write in English, thinking of the linguistic features of the text when starting to write in English, and *thinking of the communicative purposes of the text when writing in English.*

Table 2. The Intensity of Use of Writing Strategies

No.	Types of Writing Strategies	Mean (SD)	Intensity of Use
1.	Metacognitive Processing Strategies	3.21 (.72)	Moderate
2.	Cognitive Processing Strategies	3.05 (.64)	Moderate
3.	Content-Focused Planning/Revising Str	3.00 (.71)	Moderate
4.	Metacognitive Commencement Strategi	2.75 (.63)	Moderate
5.	Vocabulary-Focused Processing Strateg	2.86 (.72)	Moderate
6.	Authentic-Practicing Strategies	3.14 (.77)	Moderate
	Overall Writing Strategies	3.01 (.59)	Moderate

Factor 5 (6.52%) is Vocabulary-Focused Processing Strategies covering 5 items. This factor involves strategies such as *using new English words in sentences to remember them, remembering a new English word by making a mental picture of a situation in which the word might be used, using the English words in different ways, making up new words if having no idea the right one in English,* and *rewriting the composition by correcting the mistakes in word use.*

Factor 6 (5.28%) named Authentic Practicing Strategies has 4 items such as *writing various kinds of texts in English (a descriptive, narrative, news item, etc.), writing notes, letters, or reports in English, writing new materials over and over,* and *writing what comes to mind.*

Based on the factor analysis, only one factor (Metacognitive Processing Strategies) explained writing strategies more than 10%, while the other five factors (Cognitive Processing Strategies, Content-Focused Planning/Revising Strategies, Metacognitive Commencement Strategies, Vocabulary-Focused Processing Strategies, and Authentic Practicing Strategies) explained less than 10%.

Following the classification of learning strategy use by (Oxford, 1990), the intensity of use of overall writing strategies by Indonesian EFL students is at a moderate level (M=3.01, SD=.59) as depicted in Table 2. As the table shows, metacognitive processing strategies were used most frequently (M=3.21, SD=.72) and metacognitive commencement strategies were used least frequently (M=2.75, SD=.63).

RQ2. What Attitudinal and Motivational Factors Potentially Correlate with the Use of Strategies?

Using bivariate correlation analysis, the correlation between individual differences (motivational and attitudinal factors) and the use of writing strategies is presented in Table 3. As seen in the table, out of nine attitudinal and motivational variables, eight variables (e.g. attitude toward native speakers of English, attitude towards learning English, desire to learn English, English use anxiety, interest in foreign languages, instrumental orientation, integrative orientation, and motivational intensity) have a significant contribution to the use of all six strategy categories. Only English class anxiety did not correlate with the use of overall writing strategies.

Table 3. The Correlation between Motivational and Attitudinal Factors with Writing Strategies

	MPS	CPS	C-FP/I	MCS	V-FI	APS	OW
AtNSE	.295*	.263*	.188*	.169*	.175*	.303*	.279*
AtLE	.345*	.291*	.251*	.287*	.248*	.310*	.345*
DtLE	.406*	.295*	.293*	.292*	.221*	.360*	.374*
ECA	-.01	-.01	.072	.170*	.109	.057	.061
EUA	.207*	.209*	.260*	.225*	.222*	.199*	.259*
IiFL	.505*	.394*	.371*	.286*	.292*	.386*	.455*
InstO	.122	.120	.211*	.200*	.133*	.191*	.184*
IntO	.300*	.281*	.292*	.284*	.222*	.276*	.330*
MI	.354*	.337*	.317*	.347*	.236*	.357*	.389*

Notes: AtNSE: Attitude towards Native Speakers of English, AtLE: Attitude towards Learning English, DtLE: Desire to LE, ECA: English Class Anxiety, EUA: English Use Anxiety, IiFL: Interest in Foreign Languages, InstO: Instrumental Orientation, IntO: Integrative Orientation, MI: Motivational Intensity, MPS: Metacognitive Processing Strategies, CPS: Cognitive Processing Strategies, C-FP/RS: Content-Focused Planning/Revising Strategies, MCS: Metacognitive Commencement Strategies, V-FPS: Vocabulary-Focused Processing Strategies, APS: Authentic-Practicing Strategies, OWS: Overall Writing Strategies

Further analysis examined the contribution of attitudinal and motivational factors to each strategy category. Attitude towards native speakers of English, attitudes toward learning English, desire to learn English, English use anxiety, interest in foreign languages, instrumental orientation, integrative orientation, and motivational intensity have a significant contribution to all six strategy categories. English class anxiety contributed only to two strategy categories (metacognitive commencement strategies and vocabulary-focused processing strategies). This type of anxiety has a negative correlation with metacognitive processing strategies and cognitive processing strategies, and has no significant correlation with content-focused planning/revising strategies and authentic processing strategies. On the whole, it can be noted that attitudinal and motivational factors have a strong influence on the use of strategies to learn writing skills.

RQ3. How is the Intercorrelation among the Categories of Writing Strategies and How do they Correlate with Writing Performance?

Analysis of the intercorrelation among the strategy categories results found that six categories correlated with each other. The significant coefficient correlation is at .01 level as indicated in Table 4. The strongest correlation is between cognitive processing strategies and metacognitive processing strategies (*r*= .768), while the correlation between authentic-practicing strategies and cognitive processing strategies is the lowest (*r*= .532).

Table 4. The Intercorrelation among Strategies of Learning Writing

	MPS	CPS	C-FP/F	MCS	V-FPS	APS
MPS	1					
CPS	.768*	1				
C-FP/RS	.725*	.749*	1			
MCS	.670*	.640*	.689*	1		
V-FPS	.621*	.589*	.584*	.592*	1	
APS	.600*	.532*	.578*	.589*	.534*	1

MPS: Metacognitive Processing Strategies, CPS: Cognitive Processing Strategies, C-FP/RS: Content-Focused Planning/Revising Strategies, MCS: Metacognitive Commencement Strategies, V-FPS: Vocabulary-Focused Processing Strategies, APS: Authentic-Practicing Strategies

Furthermore, when the use of the six strategy categories correlated with the students' perceived writing skills, the overall correlation is significant (*r*= .381). It can be seen in Table 5 that all of the categories are significant at the .01 level. Authentic practicing strategies have the strongest correlation (*r*= .388), while cognitive processing strategies have the lowest correlation (*r*= .303).

Table 5. The Correlation between the Use of Writing Strategies and Perceived Writing Skill

	Perceived Writing Skill
Metacognitive Processing Strategies	.341**
Cognitive Processing Strategies	.303**
Content-Focused Planning/Revising Strategies	.339**
Metacognitive Commencement Strategies	.313**
Vocabulary-Focused Processing Strategies	.334**
Authentic Practicing Strategies	.388**
Overall Writing Strategies	.381**

5.   Discussion

The strategies to learn writing skills are classified into six categories: metacognitive processing strategies, cognitive processing strategies, content-focused planning/revising strategies, metacognitive commencement strategies, vocabulary-focused processing strategies, and authentic-practicing strategies. Regarding the intensity of use, the strategies are used at a moderate level with metacognitive processing strategies as the highest score and metacognitive commencement strategies as the lowest score. The findings of this study that the use of strategies of learning writing skills is at a moderate level is comparable to previous findings (Bai et al., 2014; Mistar et al., 2014; Yulianti, 2018; Zuhairi & Umamah, 2016). This means that students, in general, have not made use of strategies of learning writing skills intensively since they use the strategies sometimes. These findings imply the need to integrate strategy-based intervention to encourage students to use strategies more frequently. Moreover, it is reported that strategy intervention helps students improve their strategy use (Bai, 2015; Bielak, 2018) leading to improvements in writing performance (Bai, 2015; Mastan et al., 2017; Zhang et al., 2019).

Concerning the role of individual differences, it is revealed that attitudinal and motivational factors significantly influence the use of strategies to learn writing skills. This finding corroborates the previous findings that attitudinal factors are influential to strategy development (Forbes, 2019). A more positive attitude towards writing might result in more purposeful learning so that students are willing to use various strategies intensively to achieve their learning goals leading to an improvement in writing performance. Attitude, in turn, is reported to influence writing performance (Bulut, 2017). Anxiety is another factor that influences strategy use (Bailey, 2019; Stewart et al., 2015) either positively or negatively depending on anxiety levels. It is further reported that moderate levels of anxiety have a positive effect on strategy use (Bailey, 2019). If the anxiety level is either high or low, this might negatively affect the use of learning strategies since students might not have sufficient effort to use different types of learning strategies. This might be the reason why anxiety and writing performance are negatively correlated (Gibriel, 2019; Sabti, Md Rahid, Nimehchisalem, & Darmi, 2019) meaning that the higher the anxiety level, the lower the students' writing performance. Furthermore, Raoofi and Maroofi (2017) unveiled that motivational constructs are influential to learning strategy use. Students with high motivation and interest are more likely to use more strategies

to achieve success in learning. Therefore, they might try to seek multimodal strategies to attain success in learning writing skills. Moreover, it is proven that motivational factors can predict writing performance (Graham et al., 2017; Nasihah & Cahyono, 2017; Sabti et al., 2019).

All the six strategy categories are correlated with each other meaning that the use of one of the strategy categories will affect the use of the other categories. This finding confirms previous research findings of the intercorrelation among writing strategy categories (Pitenoee et al., 2017; Zuhairi & Umamah, 2016). If students use all types of strategies to learn writing skills effectively, the effect on their learning of writing will be strongly significant leading to an enhancement in writing performance. Moreover, one of the factors that influences the writing process is the use of multimodal strategies (Kessler, 2020).

Finally, it is not surprising that this study revealed that the use of learning strategies and writing performance have a significantly positive correlation. This finding is in conjunction with the results of a large body of previous studies (Gibriel, 2019; Nasihah & Cahyono, 2017; Oktoma et al., 2020; Olivares-Cuhat, 2010; Raoofi & Maroofi, 2017; Sadik, 2014). Students with good performance generally find appropriate and effective strategies to cope with difficulties in learning writing. Thus, it is not surprising that students with good writing performance are better writing strategy users (Arifin, 2017; Mistar et al., 2014). This study, further, unveils that authentic practicing strategies have the strongest correlation, while cognitive processing strategies have the lowest correlation. It is different from the majority of previous research findings reporting that the most correlated strategies involve either metacognitive (Masriani et al., 2018; Nasihah & Cahyono, 2017; Raoofi & Maroofi, 2017) or cognitive strategies (Sadik, 2014; Zuhairi & Umamah, 2016). This implies that learning by doing is effective to internalize the writing theories, but at the same time, students apply the theories into actual practice. This finding encourages writing teachers to focus on practice rather than on isolated writing theories.

6. Conclusion

This study confirms the prominent role of strategies to learn writing skills. The use of learning strategies is proven to be significantly correlated with student writing performance. However, the learning strategies have not been used intensively. This calls for language practitioners to equip their students with explicit learning strategy intervention so that they could recognize the necessity of using learning strategies to enhance their writing skills. In providing interventions, individual differences among the students must be considered, especially concerning the attitudinal and motivational factors reported to have a strong contribution to the use of strategies. They should visualize something good and interesting about learning English writing so that writing anxiety could be alleviated, and students could be motivated to learn this productive skill.

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9.   References

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APPENDIX

Posteriori Taxonomy of Strategies of Learning English Writing Skill

Factor 1: Metacognitive Processing Strategies
1. I try to find as many ways as I can to use my English.
2. I notice my English mistakes and use that information to help me do better.
3. I try to find out how to be a better writer of English.
4. I think of my progress in learning English writing.
5. I try to relax whenever I feel afraid of using English in writing.
6. When I am going to write a text, I jot down a few words and then I work up my notes into an essay.
7. I read my text several times when writing to check whether I am satisfied with it.
8. I pay attention to the correct use of punctuations when writing.
9. I pay attention to the use of transition signals within paragraph to show unity of ideas.
10. I try to remember the meaning of words or the patterns by writing them.
11. I try to find patterns in English.

Factor 2: Cognitive Processing Strategies
1. I read my writing and correct mistakes.
2. I write sentences to apply certain rules.
3. I ask my friends or my teacher to correct my writing.
4. I delete or change a word, a phrase, or a sentence when the meaning is not clear.
5. If I cannot think of an English word, I use a word or phrase that means the same thing.
6. I try to use a lot of vocabularies.
7. I try to connect shorter sentences into longer sentences to have the meaning clear.
8. I keep editing until I finish writing the whole passage.

9.   I write more than one draft before handing in the final product of the essay.
10.   I stop after each sentence or paragraph to relate ideas together and get more new ideas.
11.   I ask for examples of how to use a word or expression in English.
12.   I interrupt myself when I notice that I have made a mistake in writing.
13.   I think about the differences between English and Indonesian to avoid making mistakes.

Factor 3: Content-Focused Planning/Revising Strategies
1.   Before writing, I discuss the topic with others (my teachers, my classmates, etc.).
2.   Before writing, I do mind-mapping to generate and cluster my ideas.
3.   I like to start writing when both ideas and structures are clear in my mind.
4.   I try to have my argument clear before starting writing.
5.   When I revise, I rearrange sentences and paragraphs to make ideas clear.
6.   When I revise, I focus on the layout of the content.
7.   I revise to develop the content of my writing.
8.   When revising, I focus on the clarity of ideas and grammar.
9.   I revise to improve the style of my writing.

Factor 4: Metacognitive Commencement Strategies
1.   I always make a writing plan before I start to write.
2.   I plan my schedule so that I have enough time to write in English.
3.   I have clear goals for improving my English writing skill.
4.   I memorize proverb or beautiful expression to enhance and improve my writing.
5.   I check if each sentence I write is accurate and perfect before I write another sentence.
6.   I think of rhetorical steps of the text when starting to write in English.
7.   I think of the linguistic features of the text when starting to write in English.
8.   I think of communicative purposes of the text when starting writing in English.

Factor 5: Vocabulary-Focused Processing Strategies
1.   I use new English words in sentences so that I can remember them.
2.   I remember a new English word by making a mental picture of a situation in which the word might be used.
3.   I use the English words I know in different ways.
4.   I make up new words if I do not know the right one in English.
5.   I rewrite my composition by correcting the mistakes in word use that I notice.

Factor 6: Authentic Practicing Strategies
1.   I write various kinds of texts in English (descriptive, narrative, news item, etc.).
2.   I write notes, letters, or reports in English.
3.   I write new materials over and over.
4.   I write what I am thinking about.