ASIAN PEOPLE JOURNAL 2025, VOL 8(2), 164-178
e-ISSN: 2600-8971
http://dx.doi.org/10.37231/apj.2025.8.2.822
https://journal.unisza.edu.my/apj

PENERBIT
Universiti Sultan Zainal Abidin

ASIAN PEOPLE JOURNAL
Multidiciplinary Social Science Journal
APJ

# INTEGRATING SOCIAL COGNITIVE THEORY INTO ESL WRITING PEDAGOGY: A STUDY OF LEARNERS' STRATEGIES AND PERCEPTIONS

Zulaikha Khairuddin[1], Khairunnisa Mohd Daud[1*], Nurul Atiqah Amran[2], Salina Sabri [1], Noor Hanim Rahmat[1]

[1]Akademi Pengajian Bahasa, Universiti Teknologi MARA, 40450 Shah Alam, Malaysia
[2] Faculty of Modern Languages and Communication, Universiti Putra Malaysia, 43400 Serdang, Malaysia

*Corresponding Author Email: khair208@uitm.edu.my*

Received: 18 August 2025 • Accepted: 17 October 2025 • Published: 31 October 2025

***Abstract***

*Writing skill, a vital aspect of literacy, often pose challenges for ESL students. The complexity of the structure of an essay, as well as ESL students' level of proficiency, are some of the problems faced by these learners which can hinder their writing performance. As such, this study investigates ESL students' perceptions on the writing strategies used when writing academic essays, with a focus on how cognitive, behavioural, and environmental factors interact to shape writing performance. Drawing on Bandura's triadic reciprocal determinism, this quantitative study aims to explore the relationship between the personal, behaviour and environment components. To gain a better understanding of their perceptions, a survey was conducted to 142 students in a local higher learning institution in Malaysia. The survey used a 5 likert-scale survey and analysis was conducted using SPSS. Findings showed that these students employed all five (5) writing strategies, i.e., metacognitive, effort regulation, cognitive, social, and affective strategies. Findings of this study also suggested that by integrating SCT principles into writing pedagogy not only enhances strategy awareness but also promotes learner autonomy and resilience. Correlation analysis further revealed a highly significant association between personal components and behaviour (r = .718**, p = .000), indicating a strong positive relationship between these variables. It was also found that there are significant correlations among the three constructs personal, behaviour and environment) discussed. This suggested that educators should consider the three constructs in assisting students to write better. The study concludes with pedagogical recommendations and directions for future research into SCT-informed writing interventions.*

***Keywords***: *Affective Strategies; Cognitive Strategies; Effort Regulation Strategies; Metacognitive Strategies; Social Cognitive Theory; Social Strategies*

**Cite as:** Khairuddin, Z., Mohd Daud, K., Amran, N.A., Sabri, S., & Rahmat, N.H. (2025). Exploring Social Cognitive Theory in Writing Strategies. *Asian People Journal, 8*(2), 164-178.

## INTRODUCTION

Writing skill is one of the skills that can be considered as challenging among learners, especially ESL learners. This is attributed to the complexity of the essay structure where learners have to express their ideas cognitively, visually and conceptually (Baharudin et al., 2023). Other than that, writing skill is also challenging due to their low level of proficiency. This situation leads to students having poor grammar skills, lack of coherence knowledge, having limited vocabulary and having difficulties following writing rules (Hasan, 2025; Zakaria & Sulaiman, 2024). This shows that writing skill can be quite demanding for students to acquire which they could ease the challenges by using suitable writing strategies.

Writing is one of the important skills that needs to be learnt by students. Learning writing skills is not easy as it involves complex skills where students have to use their cognitive skills to produce an essay or a composition (Sagredo-Ortiz & Kloss, 2025; Suvin, 2020). This can be seen especially at the tertiary level as the assignments and assessments may involve producing written products. For example, students have to produce academic writing as part of their assignments (Azmar & Razali, 2024; Sagredo-Ortiz & Kloss, 2025). This indicates that producing an essay requires students to equip themselves with suitable and appropriate writing skill.

Considering writing skill is challenging and complex, there may be challenges and difficulties faced by them. According to Prasadini et al. (2023) and Hasan (2025), students faced difficulties in terms of language conventions in delivering their ideas such as generating and organising ideas, applying academic language and vocabulary and writing the paragraphs coherently. These difficulties may happen due to the students' low level of proficiency as they may lack grammatical knowledge. Other than that, in producing academic essays, students also faced challenges in terms of the structure of the paper, language barriers and choosing suitable and appropriate language expressions (Zhang et al., 2025). This shows that students need to familiarise themselves with academic writing by using appropriate writing strategies. Therefore, determining students' writing strategies would assist them in producing better written products.

There are many writing strategies that are helpful for learners to employ while writing their essays or compositions. Writing strategies such as cognitive and meta-cognitive strategies were used by students with high level of proficiency while students with low proficiency level would spend more time to search for suitable vocabulary to be written in their essays (Nhung, 2023). In other words, students employ different writing strategies depending on their level of proficiency. Hapsari et al. (2024) mentioned that students utilised a few writing strategies in their essays such as metacognitive, memory, cognitive, compensation, affective, and social writing strategies and the choices of writing strategies employed would depend on students' preference. This shows that students utilise certain writing strategies depending on the suitability of essays' content.

In conclusion, students would use different writing strategies when composing their essays or compositions. The variations are explained due to their level of proficiency, preference and the suitability of writing strategies to be used to elaborate certain contents. As previously mentioned, writing can be demanding for students to produce a written product and suitable writing strategies can be employed to help students to ease the challenges faced by them. Thus, identifying students' writing strategies would assist the educators in helping students to write better.

The purpose of this was to explore students' perceptions on the writing strategies employed in essay writing. In particular, the following questions were addressed by this study:

- What are students' perceptions towards their personal components in writing strategy?
- What are students' perceptions towards their behavioural components in writing strategy?
- What are students' perceptions towards their environmental components in writing strategy?
- Is there a relationship between all components in writing strategy?

## LITERATURE REVIEW

### Bandura Social Cognitive Theory (SCT) (1986)

Writing is a cognitive and motivational process that involves not only linguistic knowledge but also motivation, confidence and social contexts. Bandura (1986) developed the Social Cognitive Theory (SCT), which explains that human behaviour is the result of a dynamic, reciprocal interaction between personal characteristics, behaviour and environment. This suggests that while a person's actions can affect their surroundings and personal beliefs, the same environmental elements and personal beliefs can also impact and change a person's behaviour.

In the context of writing, SCT emphasises writers' views about their capacity to efficiently prepare, draft, and revise their work. According to Bandura (1997), the four main sources of self-efficacy that influence writers' beliefs are mastery experiences, vicarious learning, social persuasion, and the interpretation of emotional and physiological states. Supporting this view, Sehlström, et al. (2023), discovered that, regardless of whether they struggled with reading, upper secondary students with higher writing self-efficacy created texts of higher quality. Their research supports SCT's claim that, even in the presence of learning difficulties, high self-efficacy beliefs among students can promote improved performance.

Cheung et al. (2021) examined the effects of a socio-cognitive approach to teaching writing on fourth graders' narrative writing performance. The study combined social interaction, cognitive strategies, and explicit instruction, enabling students to collaboratively plan, draft, and revise their work. Findings revealed a significant improvement in students' writing quality, particularly in content, organisation and language use. These findings demonstrate that interactive writing instruction can improve writing quality and self-confidence. Thus, educators should utilise suitable and acceptable teaching methods to encourage students to write better composition.

### Writing Strategies

By focusing on distinct yet complimentary components of the writing process, numerous researchers have offered techniques to improve writing proficiency. Paudel (2022) emphasises that effective writing development requires a combination of planning, drafting, revising, and metacognitive strategies to enhance clarity, coherence, and overall writing quality. When combined, these techniques provide a thoughtful, multifaceted method for increasing writing proficiency. Similarly, Nguyen (2023) found that high-proficiency students used more pre- and post-writing strategies, such as planning, discussing ideas, and revising systematically. In contrast, low-proficiency students relied more on during-writing strategies like translating from their native language, frequent dictionary use, and referring to grammar books. This shows that students with different levels of proficiency would employ different types of writing strategies that suited them.

Building on cognitive and motivational perspectives, Vygotsky's sociocultural theory (1978) illustrates that learning happens best through social interaction. Effective writing strategies, such as peer collaboration, teacher feedback, and scaffolding within the Zone of Proximal Development (ZPD), help students develop their writing skill (Nurfaidah, 2018). Supporting this view, Nggawu et al. (2022) emphasise that collaborative writing, grounded in Vygotskian principles, fosters cognitive development through peer interaction and guided support. These findings, which align with SCT's environmental component, imply that incorporating a variety of strategies throughout the writing process can lead to increased skill.

**Past Studies**

Past studies on writing strategies have highlighted its importance in improving writing performance, particularly among second language (L2) and academic writers. One of the most prominent studies is by Flower and Hayes (1981) where a cognitive process model that conceptualised writing as a recursive activity involving planning, translating, and revising was introduced. In other words, the writing process should not be treated as a linear process. Rakrak (2025) analysed early-stage models to more recent cognitive models. It was found that by enhancing the strengths of these two models, it could be of great advantage in producing more effective writers as stage models helped educators scaffold writing instruction through clear steps, and depicted the rich, recursive, and contextually sensitive mental work behind composing. Building on this, the role of metacognitive strategies were emphasised (Victori & Lockhart, 1997; Zimmerman & Risemberg, 1997) as writing is thinking (Rahmat, 2020). Empirical evidence from these studies have highlighted the importance of writers' self-regulatory beliefs and processes, e.g., self-monitoring, goal setting, and evaluation, which could enhance writing effectiveness. Therefore, understanding this knowledge could assist students to prepare themselves with more authentic writing experiences.

Sasaki (2004) conducted a longitudinal study to demonstrate the use of explicit instruction and sustained strategy in improving writing fluency and quality, as well as confidence in English writing, among Japanese ESL and EFL learners. This indicates that students would appreciate it if they were given clearer instructions on how they should compose their essays. Mu and Carrington (2007) conducted a similar study on second language (L2) writers; Chinese post-graduate students in an Australian higher education institution. The results from this particular study showed that the writing strategies employed when writing in their first language (L1) were different from the ones they would employ in their L2 writing. This shows that different languages would require students to employ different writing strategies. In recent years, the rapid development of Artificial Intelligence (AI) has shown an influential role in second language learning. Despite being of great assistance for L2 writers, the role of teachers and educators in providing feedback is still a much essential part of improving the quality of writing (Alharbi, 2023; Feng Teng, 2024). Collectively, the findings from these studies suggest that writing in L2 seemed to be one of the most challenging tasks, especially in the academic contexts. L2 writers must employ a range of writing strategies, e.g., cognitive, metacognitive, to manage the writing process effectively and convey the intended messages.

Within the Malaysian context, however, research exploring the interaction between cognitive, behavioural, and environmental factors in shaping ESL students' writing strategies remains limited. Although many studies have examined writing strategies among ESL learners, few have done so from the perspective of Social Cognitive Theory (SCT). This study seeks to bridge that gap by examining how Malaysian tertiary ESL students view and use different writing strategies, as well as how personal, behavioural, and environmental components interact to influence their writing ability. The study offers a distinctive viewpoint as it integrates psychological, contextual, and pedagogical dimensions of writing in a Malaysian higher education setting.

**Conceptual Framework**

Figure 1 below illustrates the study's conceptual framework. This study is anchored from Bandura's (2012) Social Cognitive theory and replicated from writing strategies by Raoofi, et.al (2017). Bandura (2012) states that in learning, there is a dynamic interaction between personal factors, behaviour and the environment. Personal factors in learning include the person's thinking abilities, knowledge, values and goals. In terms of writing, personal factors reflect on the writer's use of metacognitive strategies. Writing is often seen as a form of thinking, where metacognitive strategies help writers to organise their ideas (Rahmat, 2020). Next, Bandura (2012) adds that behavioural components involve the learner learning new behaviour for specific situations. In the context of writing, Raoofi, et.al (2017) categorises this as Effort Regulation and Cognitive Strategies in Writing. Lastly, Bandura (2012) posits that the environment plays a crucial role in learning. Learners learn by observing and modelling the society around them. This observation helps them build their own values. In writing, Raoofi, et.al (2017) labelled this component as Social and Affective writing strategies. In addition to that, as stated by Bandura (2012) that the components in the social cognitive theory bear dynamic interaction, the purpose of this study is to investigate the connections among the three components; personal, behaviour and environment.

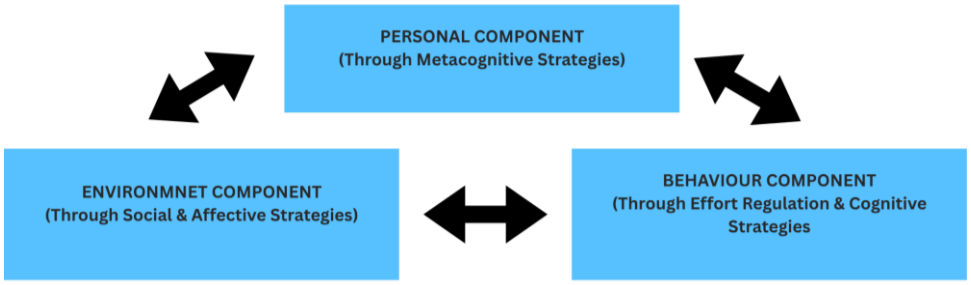


Figure 1: Conceptual Framework of the Study
Mapping Writing Strategies with Social Cognitive Theory

## METHODOLOGY

The purpose of this quantitative study is to investigate writing strategies using social cognitive theory. A simple random sampling technique was employed and there were 142 participants who responded to the survey. The instrument comprises a survey with a 5-point Likert scale. The categories used for the Likert scale; 1 represents "Never", 2 "Rarely", 3 "Sometimes", 4 "Often" and 5 "Always".

Table 1 illustrates the distribution of items in the survey. This study is anchored from the Social Cognitive Theory by Bandura (2012) and replicated from Raoofi et. al (2017) to reveal the variables in the table below. There were 10 items on Behaviour. (Section B) while Section C has 10 items on Personal and there were 7 items on Environment (Section D).

Table 1: Distribution of items in the survey

| Section | Social Cognitive Theory (Bandura, 2012) | Writing Strategy | No of Items | | Cronbach Alpha |
|---|---|---|---|---|---|
| B | Personal | Metacognitive | 10 | 10 | .899 |
| C | Behaviour | Effort regulation | 4 | 10 | .880 |
| | | Cognitive | 6 | | |
| D | Environment | Social | 4 | 7 | .807 |
| | | Affective | 3 | | |
| | | Total items | | 27 | .936 |

Table 1 also displays the reliability values for the questionnaire for each construct. The analysis shows a Cronbach alpha of .899 for Behaviour, .880 Personal and .807 for Environment. The overall Cronbach alpha value for all 27 items is .936, indicating that the selected instrument is very reliable (Jackson, 2015). To address the research questions of this study, SPSS was utilised to present the findings.

## RESULT AND DISCUSSION

### Demographic Analysis

Based on the provided demographic data in Table 2 above, the participants' profile reveals distinct distributions across four key categories; gender, course of study, level of writing proficiency and university affiliation. Gender representation is predominantly female (76%), with males comprising 24% of the sample. Looking at the aspect of their course of study, over half of the participants (54%) belong to Social Sciences & Humanities, followed by Business & Administration (27%) and Science & Technology (19%). This suggests that the findings in the sampling may be more reflective of students from this academic background, potentially affecting the generalisability of the results across disciplines.

Table 2: Percentage for Demographic Profile

| Question | Demographic Profile | Categories | Percentage (%) |
|---|---|---|---|
| 1 | Gender | Male | 24% |
| | | Female | 76% |
| 2 | Course of Study | Science & Technology | 19% |
| | | Social Sciences & Humanities | 54% |
| | | Business & Administration | 27% |
| 3 | Level of Writing Proficiency | Low | 6% |
| | | Intermediate | 78% |
| | | High | 16% |
| 4 | University | UniSZA | 9% |
| | | UPM | 23% |
| | | UiTM | 67% |

The data demonstrates that a significant majority of participants (78%) possess intermediate writing proficiency which provides a valuable insight into the typical level of academic writing among the sampled group.

Meanwhile, a small portion (16%) of the sample demonstrate high-level proficiency, and only a minority (6%) fall into the low proficiency category hence limiting the depth of comparative analysis across three proficiency levels. UiTM dominates the institutional breakdown with 67% of participants. This is followed by respondents from UPM (23%) and a small faction from UniSZA (9%). These results suggest that demographic concentration in gender, discipline, writing proficiency level, and university affiliation signals limitations in representativeness.

**Findings for Personal Components**

This section presents data to answer research question 1- What are students' perceptions towards their personal components in writing strategy? In the context of this study, personal components are measured by metacognitive strategy.

Table 3: Metacognitive Strategies

| Items | Mean | SD |
|---|---|---|
| MWSQ1 I organise my ideas prior to writing. | 3.8 | 0.9 |
| MWSQ2 I revise my writing to make sure that it includes everything I want to discuss in my writing. | 4.2 | 0.7 |
| MWSQ3 I check my spelling. | 4.3 | 0.8 |
| MWSQ4 I check my writing to make sure it is grammatically correct. | 4.2 | 0.8 |
| MWSQ5 I evaluate and re-evaluate the ideas in my essay. | 3.9 | 0.9 |
| MWSQ6 I monitor and evaluate my progress in writing. | 3.9 | 0.9 |
| MWSQ7 I revise and edit an essay two or more times before I hand it in to my teacher. | 3.9 | 0.9 |
| MWSQ8 I go through the planning stages in my writing. | 3.9 | 0.9 |
| MWSQ9 I go through the drafting stages in my writing. | 3.9 | 1.0 |
| MWSQ10 I go through the revising and editing stages in my writing. | 4.1 | 0.8 |

The data presented in Table 3 provides descriptive statistics on the personal components of the participants in writing strategy, specifically focusing on metacognitive strategies. These strategies consist of planning, monitoring, evaluating, and revising during the writing process. Each item on the table is rated on Likert scale, with associated mean scores (Mean) and standard deviations (SD). The key findings from the data collected above can be divided into three categories; highest rated strategies, moderate used strategies, and writing process stages. The highest rated strategy at 4.3 mean scores with a standard deviation of 0.8 is checking spelling (MWSQ3), which indicates learners' attention to surface-level accuracy. This was followed by MWSQ2 and MWSQ4, both at 4.2 with a standard deviation at 0.7 and 0.8 each, reflecting strong tendencies among the learners to ensure completeness of ideas and grammatical correctness. Items 5 to 7, which include evaluating ideas, monitoring progress, and revising essays multiple times, each recorded a mean score of 3.9 with a standard deviation of 0.9, indicating a moderate level of engagement with reflective metacognitive processes that extend beyond basic corrections.

Meanwhile, MWSQ1, which pertains to organising ideas before writing, recorded at the lowest mean score of 3.8 with a standard deviation of 0.9, suggesting that learners relatively make less emphasis on pre-writing planning compared to their focus on revision and error-checking strategies during and post-writing exercises. The final category, which is on the writing process stages planning (MWSQ8), drafting (MWSQ9), and revising (MWSQ10) shows that learners exhibit fairly consistent engagement across these areas, with mean scores ranging

from 3.9 to 4.1 and standard deviations of 0.9, 1.0, and 0.8 each. Among these, revising and editing (MWSQ10) is slightly more emphasised (Mean = 4.1, SD = 0.8), aligning with earlier findings in MWSQ2, MWSQ3, and MWSQ4. The results demonstrate students' stronger focus on revision-related strategies such as checking for content completeness, spelling accuracy, and grammatical correctness. The results above are consistent with the framework of Malaysia's education system that relied heavily on summative evaluation and rubric-based grading systems that foreground linguistics accuracy.

Mohamad Marzaini et al. (2024) and Zulkifli et al. (2024) studies, for example, demonstrate that there is a discrepancy between expected assessment practices and what teachers actually do at school. In practice, teachers preferred rubrics and often neglected informal assessments that allow students to experiment with their own voices. Hence, when composing essays, students channel their cognitive effort toward error avoidance rather than idea exploration.

**Findings for Behavioural Components**

This section presents data to answer research question 2- What are students' perceptions towards their behavioural components in writing strategy? In the context of this study, this is measured by effort regulation and cognitive strategies.

Table 4: Effort Regulation Strategies

| Items | Mean | SD |
|---|---|---|
| ERSQ 1I write a lot to develop my writing skill. | 3.3 | 0.9 |
| ERSQ 2I often work hard to do well in my writing even if I don't like English writing tasks. | 3.8 | 0.9 |
| ERSQ 3Even if the writing activities are difficult, I don't give up but try to engage in them. | 4.1 | 0.8 |
| ERSQ 4I concentrate as hard as I can when doing a writing task. | 4.1 | 0.8 |

To address research question 2, this section examines learners' perceived behavioural components in writing strategy that is measured by effort regulation and cognitive strategies. The findings as shown in Table 4 indicate that learners generally demonstrate strong persistence and focus when faced with writing tasks. The highest-rated items, ERSQ3 and ERSQ4 (Mean= 4.1 and SD= 0.8), indicate that students are persistent in engaging with difficult writing tasks and can deeply concentrate during writing. ERSQ2 recorded a relatively high mean score (3.8) with a standard deviation of 0.9, suggesting a negative emotional and attitudinal response toward writing in English. The attitudes could stem from low confidence in their language proficiency or limited interest in the subject matter.

The findings also show their willingness to persist and perform well reveals their strong sense of responsibility and resilience. In contrast, ERSQ1, which involves writing extensively to improve skills, scored the lowest (Mean=3.3 and SD= 0.9), indicating a lower tendency among students to engage in regular writing practice for skill development. Overall, the data suggests that despite exhibiting strong levels of determination and focus to complete writing tasks, learners show comparatively less commitment to writing regularly as a strategy to develop their skills.

Table 5: Cognitive Strategies

| Items | Mean | SD |
|---|---|---|
| CWSQ1 I use memorized grammatical elements such as singular and plural forms, verb tenses, prefixes and suffixes, etc, in my writing | 3.9 | 0.8 |
| CWSQ2 I put newly memorized vocabulary in my sentences. | 3.9 | 0.9 |
| CWSQ3 In order to generate ideas for my writing, I usually engage myself in brainstorming. | 4.1 | 0.8 |
| CWSQ4 I use different words that have the same meaning. | 4 | 0.8 |
| CWSQ5 I use my experiences and knowledge in my writing. | 4.3 | 0.7 |
| CWSQ6 I try to use effective linking words to ensure clear and logical relationship between sentences or paragraphs | 4.1 | 0.8 |

Table 5 presents learners' responses on cognitive strategies in writing. In general, it shows a positive engagement across six components with the highest mean scores rated at 4.3 and the lowest is at 3.9. CWSQ5 is the highest-rated item (Mean = 4.3 and SD = 0.7), indicating that learners often draw upon personal experiences and knowledge in their writing. Strategies in writing skill such as brainstorming to generate ideas (CWSQ3) and the use of linking words for clarity and coherence (CWSQ6) both scored 4.1 with standard deviations at 0.8. This shows that learners actively engage in idea development and strive for logical flow in their writing. CWSQ4 scores 4.0 (SD=0.8), pointing to their general preference in using lexical variety as cognitive strategies to improve their writing. However, memorisation-based strategies such as applying basic grammatical structures (CWSQ1) and inserting newly memorised vocabulary (CWSQ2), both received slightly lower mean scores of 3.9 with standard deviations of 0.8 and 0.9 each, suggesting a lesser reliance on rot technique in their writing tasks. Overall, the data demonstrates diverse strategies in writing as the learners tend to favour more meaning-driven and integrative strategies over mechanical memorisation in their cognitive approach.

**Findings for Environmental Components**

This section presents data to answer research question 3- What are students' perceptions towards their environmental components in writing strategy? In the context of this study, this is measured by social and affective strategies.

Table 6: Social Strategies

| Items | Mean | SD |
|---|---|---|
| SWSQ1 In order to generate ideas for my writing, I usually discuss the writing topic with a friend or classmate. | 3.6 | 1.0 |
| SWSQ2 After revising and editing my essay thoroughly, I ask a friend or my classmate to read and comment on it. | 3.5 | 1.0 |
| SWSQ3 I try to identify friends or classmates whom I can ask for help in my writing. | 3.7 | 1.0 |
| SWSQ4 When I have trouble writing my essay, I try to do it with my classmates or friends. | 3.7 | 1.0 |

Table 6 presents four items measuring social writing strategies and each item has a mean score ranging from 3.5 to 3.7 with identical standard deviations of 1.0. In general, the highest-rated items as presented in SWSQ3 and SWSQ4, indicate that learners prefer a peer-assisting approach when they face difficulties in their writing. This

shows their higher reliability on collaborative intervention and discussion as social strategies to overcome their difficulties in writing tasks. Discussing topics to generate ideas (SWSQ1) scores 3.6 (SD=1.0) is also frequently used in this situation. Meanwhile, seeking peer comments after thorough self-revision (SWSQ2) is slightly less common with only a 3.5 mean score and a standard deviation of 1.0.

Table7: Affective Strategies

| Items | Mean | SD |
|---|---|---|
| AWSQ1 I try to write an essay in class with confidence and ease. | 3.8 | 0.9 |
| AWSQ2 I try to relax whenever I feel afraid of writing. | 4 | 0.8 |
| AWSQ3 I encourage myself to write even when I am afraid of making mistakes. | 4.1 | 0.8 |

Table 7 shows the mean for affective strategies. The highest mean is 4.1 for Item 3 (SD=0.8) which states that the learners encouraged themselves to write even when they were afraid of making mistakes. Next, is item 4 (SD=0.8) where the learners reported that they tried to relax whenever they felt afraid of writing, finally is item 1 (mean-3.8, SD=0.9) which states that the learners tried to write an essay in class with confidence and ease.

**Findings for Relationship between components in writing strategy**

This section discusses information to address research question 4- Is there a relationship between all components in writing strategy? Data is analysed using SPSS for correlations in order to find out whether there is a significant correlation in the mean scores between components in writing strategy. Results are presented separately in table 8, 9, and 10 below.

Table 8: Correlation between Personal Components and Behaviour

| | | Personal | Behaviour |
|---|---|---|---|
| Personal | Pearson (Correlation | 1 | .718** |
| | Sig (2-Tailed) | | .000 |
| | N | 142 | 142 |
| Behaviour | Pearson (Correlation | .718** | 1 |
| | Sig (2-Tailed) | .000 | |
| | N | 142 | 142 |

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

Table 8 shows there is a high significant relationship between personal components and behaviour, (r=.718**) and (p=.000). Jackson (2015) states that positive correlation is measured on a scale of 0.1 to 1.0 and that the coefficient is significant at the.05 level.This indicates that there is also a strong positive relationship between personal components and behaviour.

Table 9: Correlation between Behaviour and Environmental Components

| | | Behaviour | Environment |
|---|---|---|---|
| Behaviour | Pearson (Correlation | 1 | .642** |
| | Sig (2-Tailed) | | .000 |
| | N | 142 | 142 |
| Environment | Pearson (Correlation | .642** | 1 |
| | Sig (2-Tailed) | .000 | |
| | N | 142 | 142 |

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

Table 9 shows there is a high significant association between behaviour and environment, (r=.642**) and (p=.000). Positive correlation is measured on a scale of 0.1 to 1.0 and that the coefficient is significant at the .05 level (Jackson, 2015). This shows that there is also a strong positive relationship between behaviour and environment.

Table 10: Correlation between Environmental and Personal Components

| | | Environment | Personal |
|---|---|---|---|
| Environment | Pearson (Correlation | 1 | .570** |
| | Sig (2-Tailed) | | .000 |
| | N | 142 | 142 |
| Personal | Pearson (Correlation | .570** | 1 |
| | Sig (2-Tailed) | .000 | |
| | N | 142 | 142 |

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

Table 10 shows there is a high significant correlation between environment and personal, (r=.570**) and (p=.000). According to Jackson (2015), positive correlation is measured on a scale of 0.1 to 1.0 and that the coefficient is significant at the .05 level. This indicates that there is also a strong positive relationship between environment and personal.

## CONCLUSION

Based on the results, it can be seen that students employed all the writing strategies which are metacognitive strategies, effort regulation strategies, cognitive strategies, social strategies and affective strategies. These writing strategies were categorised according to different constructs which were personal, behavioural and environmental components. Metacognitive writing strategies fall under personal components while effort regulation and cognitive writing strategies fall under behavioural components. Lastly, social and affective writing strategies are classified as environmental components.

Firstly, for metacognitive strategies, the majority of students checked their spelling and grammar, revised and edited their essays. They also planned and drafted their essays and evaluated their ideas. This result is in line with a research done by Handayani et al. (2023), where students planned, monitored and evaluated their essays. This is indicative of students following the structure of the composing process which are planning, translating and

reviewing by Flower and Hayes (1981). Followed by the effort regulation strategies where the majority of students did not give up when they faced difficulties and maintained focus while writing the essay. This appears to stem from students' personal goal to achieve when composing their essays. Teng et al. (2022) similarly discovered that students who used self-regulatory writing strategies would be influenced by factors such as planning, goal-oriented monitoring, goal-oriented evaluation, emotional control, memorization, and metacognitive judgment. Next is cognitive strategies where students brainstormed their ideas, used suitable vocabulary and grammar knowledge when writing and included their prior knowledge as the ideas. This is in accordance with research done by Sethuraman and Radhakrishnan (2020) where students who utilised cognitive strategies would pay attention to using their background knowledge, generating new ideas and making sure the ideas were coherent when composing their essays.

The fourth writing strategy is social strategies. The majority of students sometimes asked for help from their friends or classmates in generating ideas, reading and commenting on the essays and when they faced problems while they were writing. This result is similar to a study where students collaborated with their peers and at the same time they also asked for help from their lecturer (Hapsari et al., 2024). Lastly are the affective strategies where students would write their essays with confidence and try to relax when they felt nervous while writing. The students also encouraged themselves to write despite the fear of making mistakes. Pang et al. (2024) mentioned that these strategies were important as it would affect students' learning motivation, interest and determination when writing their composition.

Other than that, it can be seen that there was a positive significant relationship between personal and behaviour components, behaviour and environment components and environment and personal components. This means that when the personal components increase, the behaviour components have the tendency to increase. This same goes with behaviour and environment components and environment and personal components. These results are in agreement with Song et al. (2022) where they found that all three components were correlated to one another. It can be summarised that students employed all five (5) writing strategies and the sub-writing strategies. However, each sub-strategies utilised would differ in terms of how frequently the students used them. Last but not least, each component was correlated to each other accordingly.

The findings of this study reinforce Bandura's (2012) Social Cognitive Theory (SCT), which suggests that learning outcomes are shaped by dynamic interaction between personal, behaviour and environment. In the context of writing, the high mean scores for metacognitive and cognitive strategies indicate students' capacity for self-management as predicted by SCT. The strong positive correlations between the personal, behavioural and environmental components further validate Bandura's claim these factors mutually influence one another. Furthermore, the results support earlier studies (Cheung et al., 2021; Sehlström et al., 2023) showing that social interaction and individual cognition are essential to the writing process. These findings are also consistent with the framework developed by Raoofi et al. (2017), which integrates SCT with metacognitive, effort regulation, cognitive, social and affective components. The students applied all five strategy types in ways that corresponded to the model's three components: personal, behavioural, and environmental.

The findings suggest that writing instruction should integrate all three components of Bandura's Social Cognitive Theory by balancing metacognitive, cognitive, effort regulation, social, and affective strategies. Since students demonstrated strong abilities in revising, checking grammar, using prior knowledge, regular writing practice and group projects should be given more attention in the classroom in order to build persistence and social

learning. Additionally, students who receive emotional support during the writing process benefit from the use of affective strategies. Therefore, instruction should foster a supportive and comfortable atmosphere where students can take chances without fear of making mistakes. This could be achieved through constructive feedback, goal setting activities and progress tracking.

As this current study focuses and is limited to a specific group of students, future research should include a more balanced mix of participants in terms of gender, academic fields, and institutions to make the findings more broadly applicable. It is also suggested that future research be designed to monitor students over time in order to examine how their writing strategies develop and whether particular teaching styles lead to long-lasting improvements. In addition, comparing students from different cultural or educational backgrounds could provide insights into how context influences their choice and use of writing strategies.

## REFERENCES

Alharbi, W. (2023). AI in the foreign language classroom: A pedagogical overview of automated writing assistance tools. *Education Research International, 2023*(1), 4253331.

Azmar, K., & Razali, A. B. (2024). Teaching and learning English academic writing in Malaysian tertiary context. *Universal Journal of Educational Research, 12*(3), 49–56.

Baharudin, F., Ramli, N. L., Habali, A. M., Azmi, A. A., & Rahmat, N. H. (2023). Process of writing: The challenges in writing skill among ESL learners. *International Journal of Academic Research in Business and Social Sciences, 13*(10), 33–52.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.

Bandura, A. (2012). Social cognitive theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 349–373). Sage Publications Ltd.

Cheung, Y. L., Chu, S. K. W., & Jang, H. (2021). Impact of a socio-cognitive approach to teaching English language writing on primary school students' compositions. *Iranian Journal of Language Teaching Research, 9*(1), 1–22.

Feng Teng, M. (2024). A systematic review of ChatGPT for English as a foreign language writing: Opportunities, challenges, and recommendations. *International Journal of TESOL Studies, 6*(3).

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication, 32*(4), 365–387.

Hapsari, M. D. H., Fatimah, N., & Nguyen, T. T. H. (2024). Students' strategies in learning writing online: A case at English Education Department. *Teaching English as a Foreign Language Journal, 3*(2), 111–122.

Hasan, N. R. H. (2025). Learners' challenges and problems in English writing skill: A study on students at King Faisal University. *International Journal for Scientific Research, 4*(2), 123–140.

Jackson, S. L. (2015). *Research methods and statistics: A critical thinking approach* (5th ed.). Cengage Learning.

Maarof, N., & Murat, M. (2013). Writing strategies used by ESL upper secondary school students. *International Education Studies, 6*(4), 47–55. http://files.eric.ed.gov/fulltext/EJ1067593.pdf

Mohamad Marzaini, A. F., Shahazwan, M. Y., Noorhayati, Z., Mohamad, H. B., Wan Nurul Elia, H. S., & Supramaniam, K. (2024). A discovery on Malaysian ESL teachers' adherence to policy mandates in classroom-based assessment practices. *Malaysian Journal of Learning and Instruction, 21*(1), 249–284.

Mu, C., & Carrington, S. (2007). An investigation of three Chinese students' English writing strategies. *TESL-EJ: The Electronic Journal for English as a Second Language, 11*(1), 1–23.

Nhung, N. (2023). A study on writing strategies used by students of different levels of proficiency at a university in Vietnam. *International Journal of Social Science and Human Research, 6*(5), 2722–2729.

Nggawu, L., Husain, D. L., Agustina, S., & Yasin, Y. (2022). The effectiveness of collaborative writing strategy in improving essay writing skills of university students in the EFL context. *Al-Ishlah: Jurnal Pendidikan, 14*(4), 5731–5743.

Nguyen, T. N. (2023). A study on writing strategies used by students of different levels of proficiency at a university in Vietnam. *International Journal of Social Science and Human Research, 6*(5), 2722–2729.

Nurfaidah, S. (2018). Vygotsky's legacy on teaching and learning writing as a social process. *Langkawi: Journal of the Association for Arabic and English, 4*(2), 149–156.

Pang, Y., Hashim, H., & Said, N. E. M. (2024). Exploration on the use of learning strategies in writing for English major students. *Nurture, 18*(4), 816–830.

Paudel, J. (2022). Demystifying writing: Strategies for developing better writing. *Journal of NELTA, 27*(1–2), 181–200.

Prasadini, N. N., Brilianti, A. E., Ramadhanti, S. F., & Efridiani, R. (2023). Unveiling the challenges of academic writing: Perspectives from students and lecturers. In *Proceedings of the 5th International Conference on Linguistics and Language Teaching* (pp. 67–74).

Rahmat, N. H. (2020). Thinking about thinking in writing. *European Journal of Literature, Language and Linguistics Studies, 3*(4), 20–37.

Rakrak, M. (2025). Evolving perspectives on the process approach to writing: From stage models to cognitive models. *International Journal of Advanced Academic Studies, 7*(2), 8–13.

Raoofi, S., Miri, A., Gharibi, J., & Malaki, B. (2017). Assessing and validating a writing strategy scale for undergraduate students. *Journal of Language Teaching and Research, 8*(3), 624–633.

Sagredo-Ortiz, S., & Kloss, S. (2025, May). Academic writing strategies in university students from three disciplinary areas: Design and validation of an instrument. *Frontiers in Education, 10*, 1600497.

Sasaki, M. (2004). A multiple-data analysis of the 3.5-year development of EFL student writers. *Language Learning, 54*(3), 525–582.

Sehlström, P., Waldmann, C., & Levlin, M. (2023). Self-efficacy for writing and written text quality of upper secondary students with and without reading difficulties. *Frontiers in Psychology, 14*, 1231817.

Sethuraman, M., & Radhakrishnan, G. (2020). Promoting cognitive strategies in second language writing. *Eurasian Journal of Educational Research, 20*(88), 105–120.

Song, Y., Bao, H., & Shen, S. (2022). Understanding the influence of initial values of college students in shaping pro-environmental behavioral intention. *International Journal of Environmental Research and Public Health, 19*(15), 9730.

Suvin, S. (2020). Complexities of writing skill at the secondary level in Bangladesh education system: A quantitative case study analysis. *English Language Teaching, 13*(12), 65–75.

Teng, M. F., Wang, C., & Zhang, L. J. (2022). Assessing self-regulatory writing strategies and their predictive effects on young EFL learners' writing performance. *Assessing Writing, 51*, 100573.

Victori, M., & Lockhart, W. (1995). Enhancing metacognition in self-directed language learning. *System, 23*(2), 223–234.

Zakaria, N., & Sulaiman, N. A. (2024). The needs analysis of ESL learners' expository writing challenges: Perspectives of ESL teachers. *International Journal of Academic Research in Business and Social Sciences, 14*(5), 322–335.

Zakaria, Z., Amirul Izzat, S. A. R., & Mohamed, A. M. D. (2024). Assessment in action: Investigating the practices of Malaysian physical and health education teachers. *International Journal of Academic Research in Progressive Education and Development, 13*(1), 2187–2204.

Zhang, H., Xu, X., Lei, V. N. L., Hong, W. C. H., & Jie, W. (2025). Academic writing challenges and supports for early-stage Chinese postgraduates: A mixed-methods study on teaching-research integration, supervisor engagement, and self-efficacy. *PLOS ONE, 20*(2), e0317470.

Zimmerman, B. J., & Risemberg, R. (1997). Self-regulatory dimensions of academic learning and motivation. In *Handbook of academic learning* (pp. 105–125). Academic Press.