

The Influence of Writing Strategies on Different Types of Writing Anxiety

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ABSTRACT

Writing anxiety has become a common challenge among learners in higher education, particularly in academic writing tasks that require critical thinking, language accuracy, and effective communication. The use of appropriate writing strategies is believed to help learners manage writing difficulties and reduce anxiety during the writing process. Therefore, this study investigates the influence of writing strategies on different types of writing anxiety among tertiary learners. Specifically, the study examines the relationship between writing strategies and writing anxiety across gender, course of study, and SPM CEFR level, as well as learners' perceptions of writing strategies, cognitive anxiety, somatic anxiety, and avoidance behaviour. This quantitative study employed a survey design involving 331 participants from various courses of study at a higher learning institution. The instrument consisted of a 5-point Likert-scale questionnaire adapted from Cheng (2004) and Raoofi et al. (2017), comprising 44 items divided into sections on writing anxiety and writing strategies. Data were analysed using SPSS through descriptive, inferential, and correlational analyses. The findings revealed significant differences in writing strategies across gender and significant differences in writing anxiety across the course of study. However, no significant differences were found across SPM CEFR levels. Correlation analysis further indicated a weak but significant negative relationship between writing strategies and both cognitive and somatic anxiety, suggesting that the increased use of writing strategies may help reduce learners' anxiety in writing. The study also showed that learners generally demonstrated positive perceptions towards the use of metacognitive, cognitive, social, affective, and effort regulation strategies in writing. The findings imply that writing instructors should integrate effective writing strategies into classroom practices to help learners manage writing anxiety and improve their writing performance. Future studies may further explore other factors influencing writing anxiety using different contexts and research approaches.

Keywords: Writing strategies; Writing anxiety; Cognitive anxiety; Somatic anxiety; Avoidance behaviour; Academic writing; Tertiary learners; ESL learners.

INTRODUCTION

Background of Study

Academic success is very much predicated upon students' language skills, particularly their writing ability. However, writing in a second or foreign language is a challenging task, as it requires learners to simultaneously manage grammar, vocabulary, organisation, and critical thinking. Thus, many learners experience writing anxiety. This is categorised by Cheng (2004) into three subcategories: somatic anxiety, cognitive anxiety and avoidance behaviour, all of which pose debilitating effects on students' writing process and performance.

To mitigate these, researchers have delved into writing strategies to help learners manage and overcome those difficulties. These include cognitive, metacognitive, social, and affective techniques used by learners to plan,

monitor, evaluate, and improve their writing process (Khalil, 2022; Ahmad et al., 2026). Consequently, writing strategies are viewed as a critical aid to increase learners' motivation and reduce their writing anxiety.

Despite the advancements of technology, writing is still considered to be highly relevant. With the adaptation of AI-assisted writing and post-pandemic education, students now have to deal with conventional writing challenges, as aforementioned, along with meeting higher expectations on their compositions, further exacerbating their writing anxiety. Ergo, understanding learners' writing anxiety and how writing strategies can help alleviate it is important to create a supportive learning environment that encourages writing and reduces writing anxiety among ESL and EFL students.

Statement of Problem

Academic writing is widely regarded as one of the most cognitively challenging and complex skills for second language learners, as it involves the recursive coordination of planning, drafting, and revising processes (Ozfidan et al., 2026). Despite its significance in academic settings, writing anxiety continues to be a widespread psychological obstacle that negatively affects students' writing performance, emotional health, and overall motivation (Cui et al., 2024; Ozfidan et al., 2026). Based on Cheng's (2004) multi-dimensional framework, previous studies suggest that writing anxiety does not occur as a single unified construct, but it comprises distinct cognitive, somatic, and avoidance-related dimensions. (Afdalia et al., 2023; Rasool et al., 2023). To actively adjust and cope with this distress, learners employ various self-regulation, affective, and process-oriented writing strategies (Cui et al., 2024; Ozfidan et al., 2026). While earlier studies generally suggest an inverse relationship between writing strategy use and overall writing anxiety, a notable gap in the empirical evidence remains (Cui et al., 2024; Ozfidan et al., 2026).

Most of the existing research conceptualises writing anxiety as a single, uniform obstacle, rather than examining how particular strategic behaviours interact differently with cognitive, somatic, or avoidance-related anxiety dimensions. Furthermore, current studies on the variables affecting writing anxiety, such as gender, specific courses of study, and language proficiency baselines remain highly contradictory and inconclusive. For instance, while some studies show that variables like gender heavily influence writing anxiety levels, others indicate no significant differences across demographic groups (Afdalia et al., 2023; Rasool et al., 2023). Additionally, although learners' linguistic proficiency and individual course-related constraints are recognised as factors that intensify structural insecurity and performance anxiety, their direct influence on interactive writing strategies remains under-researched (Cui et al., 2024; Ozfidan et al., 2026).

This issue is particularly salient in the context of Malaysian higher education, as English functions as a second language for most undergraduates, and students are required to produce academic writing as a part of assessments in English-related subjects, despite varying levels of CEFR-aligned proficiency. Many Malaysian university students often experience difficulty transitioning into academic writing demands, which further worsens their writing anxiety, and constrains strategic engagement in writing tasks. Moreover, differences across programmes of study in Malaysian universities may shape how students experience and manage writing anxiety, and may provide an interesting insight of the study..

Without identifying these subtle relationships, educators risk deploying generalised instructional models that fail to target the precise psychological roots of an individual's writing apprehension (Ozfidan et al., 2026). This study directly addresses these empirical ambiguities by systematically exploring the comprehensive relationship between writing strategies and distinct types of writing anxiety, while specifically examining how these dynamics shift across gender, course of study, and SPM CEFR proficiency levels.

Objective of the Study and Research Questions

This study is done to explore the influence of writing strategies on different types of writing anxiety. Specifically, this study is done to answer the following questions;

- Is there a significant relationship between writing strategies and writing anxiety across gender?

H₀₁: There is no significant relationship between writing strategies and writing anxiety across gender

- Is there a significant relationship between writing strategies and writing anxiety across the course of study?

H₀₂: There is no significant relationship between writing strategies and writing anxiety across the course of study

- Is there a significant relationship between writing strategies and writing anxiety across SPM CEFR level?

H₀₃: There is no significant relationship between writing strategies and writing anxiety across SPM CEFR level

- How do learners perceive their use of writing strategies?
- How do learners perceive cognitive anxiety in writing?
- How do learners perceive somatic anxiety in writing?
- How do learners perceive avoidance behaviour in writing?
- Is there a significant relationship between writing strategies and writing anxiety?

H₀₄: There is no significant relationship between writing strategies and writing anxiety

LITERATURE REVIEW

Theoretical Framework of the Study

- Writing Strategies

Writing strategies provide a crucial theoretical foundation for comprehending how ESL students manage the writing process. Extensive research explores diverse aspects of writing strategies. Raoofi et al. (2017) conceptualise writing strategies as the methods and procedures students use to write better and more efficiently. Based on their validated writing strategy scale, ESL writing strategies go beyond mechanical writing behaviours and encompass five interrelated dimensions: metacognitive, effort regulation, cognitive, social, and affective strategies. Metacognitive strategies involve planning, monitoring, revising, and assessing one's writing, whereas cognitive strategies pertain to the application of linguistic skills, such as grammar, vocabulary, idea generation, and linking devices. Effort regulation strategies highlight students' perseverance and focus when completing writing assignments, particularly when the activity is challenging or boring. Social strategies include seeking assistance or feedback and engaging in peer discussion, while affective strategies pertain to managing confidence, anxiety, and motivation during writing.

- Writing Anxiety

Writing anxiety is a significant issue for learners in English as a Second Language (ESL) and English as a Foreign Language (EFL) contexts. Recent research demonstrates that students frequently experience fear, nervousness, and diminished confidence when required to write in English, particularly in academic settings. Hasni et al. (2024) identified weak grammatical knowledge and difficulty expressing ideas as primary causes of writing anxiety among Malaysian ESL learners. Similarly, Iksan et al. (2023) reported that university students exhibited moderate to high levels of anxiety during English writing tasks, primarily due to fear of making mistakes and concerns about negative evaluation. Rasool et al. (2023) found that writing anxiety among pre-service EFL teachers was influenced by linguistic challenges, limited vocabulary, and time constraints. Busse et al. (2023) demonstrated that writing anxiety negatively impacted students' text quality and writing self-efficacy, with anxious learners often producing weaker written work. Guan et al. (2023) emphasised that emotional factors, including anxiety and enjoyment, significantly affected students'

performance in L2 integrated writing tasks. In addition to individual factors, instructional approaches also shape learners' anxiety levels. Zhao and Yang (2023) showed that supportive instructional methods, such as social media-supported flipped classrooms, reduced learners' writing anxiety and improved writing performance. Jin and Eng (2024) further highlighted that writing anxiety remains a serious concern among ESL law students, for whom writing competence is essential for academic and professional success. Collectively, recent literature indicates that English writing anxiety continues to undermine learners' confidence, motivation, and writing achievement, underscoring the need for supportive pedagogical strategies to foster a less stressful writing environment.

Past Studies

Multiple studies have been conducted to understand how writing strategies affect writing anxiety. Although certain studies present conflicting results, the majority of research indicates a significant and clear correlation between these factors, where writing strategies significantly reduce writing anxiety. These are proven in multiple research studies involving multiple demographics across the globe.

For instance, an experimental study by Khalil (2022) adopted the SLWAI instrument by Cheng (2004) to understand students' writing anxiety. 100 Iraqi EFL students were involved (50 experimental and 50 control), and he found that a strategy-based writing intervention, particularly the "PLAN & WRITE" cognitive strategy, reduces writing anxiety. Additionally, in a more recent study, Ahmad et al. (2026) used Bandura's social cognitive theory to understand the relationship between writing anxiety and strategies across behavioural, personal and environmental factors. A quantitative survey using instruments adapted from Bandura (1977), Cheng (2004) and Raoofi et al. (2017) were used among 223 ESL learners. The results suggest that writing strategies, specifically support and self-regulation, are important in reducing writing anxiety. Both of the studies underscore the importance of strategy-based interventions and supportive writing environments to reduce writing anxiety and improve writers' performance.

However, not all strategies in writing can help alleviate writing anxiety. In a study conducted by Zahra and Roslin (2021), 162 responses were examined through a quantitative method, where students answered 3 instruments to understand their learning style (Kolb Learning Style, KLS), writing anxiety (Foreign Language Writing Anxiety Scale, FLWAS), and writing strategy (the Inventory of Learning Strategies for writing, ILS). Of the six writing strategies that were investigated (Memory, Cognitive, Compensation, Metacognitive, Affective and Social), the result showed that memorisation techniques cause adverse effects on students' writing anxiety.

Thus, although diverse studies in the corpus have shown that most strategies could assist in lowering students' writing anxiety, not all are as equally effective. While strategies like planning, self-regulation and structural support can help, excessive reliance on memorisation can instead increase writing apprehension. Therefore, understanding the relationship between writing strategies and writing anxiety helps educators and researchers to design more effective pedagogies and methods to improve students' writing competence and confidence.

Conceptual Framework of the Study

Figure 1 shows the conceptual framework of the study. This study explores the influence of writing strategies on different types of writing anxiety. For students in higher institutions, academic writing is not a "one-off" course they worry about for one semester. Academic writing is the vehicle through which all academic assignments are presented. As such, many students at higher institutions face writing anxiety. According to Cheng (2004), there are several types of writing anxiety: cognitive writing anxiety, somatic writing anxiety, and avoidance behaviour. If the anxiety is not rectified, the fear can snowball into other aspects of their learning (Rahmat et.al, 2020). Fear is a cycle for learners, and one way to overcome fear is to learn writing strategies (Khairuddin et al., 2021). The use of writing strategies helps writers attend to different writing tasks during the composing process. According to Raoofi et.al. (2017), among some useful writing strategies are metacognitive, effort regulation, cognitive, social, and affective. This study investigates if there is a significant relationship between writing strategies and different types of writing anxiety.

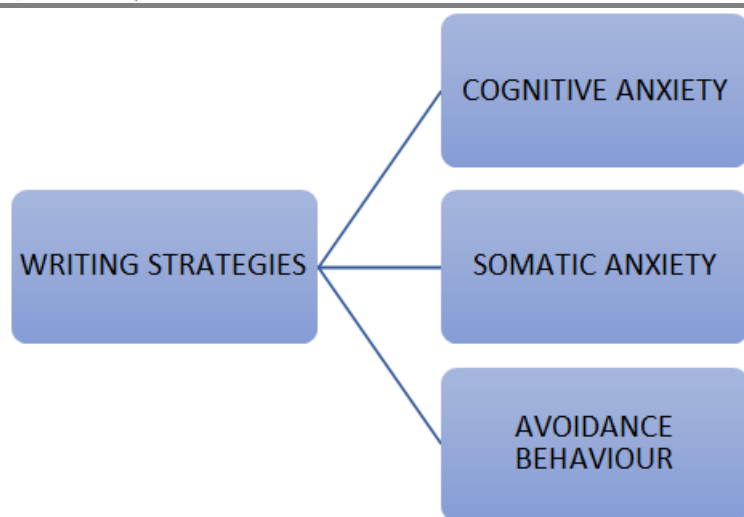


Figure 1- Conceptual Framework of the Study

Influence of Writing Strategies on Different Types of Writing Anxiety

METHODOLOGY

This quantitative study is done to explore influence of writing strategies on different types of writing anxiety. A convenient sample of 331 participants responded to the survey. The instrument used is a 5 Likert-scale survey and is rooted from who Cheng,(2004)for writing anxiety and Raoofi, et.al.,(2017) for Writing Strategies. Table 1 below shows the categories used for the Likert scale; 1 is for Strongly Disagree, 2 is for Disagree, 3 is for Undecided, 4 is for Agree and 5 is for Strongly Agree.

Table 1 – Likert Scale Use

1	Strongly Disagree
2	Disagree
3	Uncertain
4	Agree
5	Strongly Agree

Table 2 – Distribution of Items in the Survey

SECT	VARIABLE	CONSTRUCTS	No of Items/ Indicators	Tot	
B	Writing Anxiety (Cheng, 2004)	Cognitive	8	20	.796
		Somatic	6		
		Avoidance Behaviour	6		
C	Writing Strategies (Raoofi,et.al., 2017)	Metacognitive	7	24	.918

		Effort Regulation	4		
		Cognitive	6		
		Social	4		
		Affective	3		
		Total		44	.822

Table 2 shows the distribution of items in the survey for section B and C of the study. Section B comprises a total of 20 items adapted from Cheng (2004) to measure respondents' writing anxiety. This section is broken down into three subscales: 8 items for cognitive anxiety, 6 items for somatic anxiety, and 6 items for avoidance behavior. Meanwhile, Section C features 24 items on writing strategies from Raoofi et al. (2017). This section breaks down into 7 items for metacognitive, 6 for cognitive, 4 for effort regulation, 4 for social, and 3 for affective strategies. In total, the two sections comprise 44 items.

Table 3- Reliability Levels, Cronbach's Alpha Ranges, and Their Interpretations

Reliability Level	Cronbach's Alpha range	Interpretation
Excellent	0.9 and above	Indicates very high internal consistency
Good	0.80-0.89	Reflects strong internal consistency
Acceptable	0.70-0.79	Indicates acceptable internal consistency
Questionable	0.60-0.69	Reflects questionable internal consistency
Poor	Below 0.6	Indicates poor internal consistency

Table 3 presents the reliability levels by Ahmad et.al. (2024). Table 2 also shows the reliability of the survey. The analysis shows a Cronbach alpha of .796 for writing anxiety, .918 for writing strategies. The Cronbach alpha for all 44 items is .822; 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.

FINDINGS

Demographic Analysis

According to Zienefuss et al. (2021), researchers report demographic data as percentages to ensure sample representativeness and allow generalisability to a larger population. The reporting also provides an overview of participants' characteristics. Percentages provide a clear, understandable picture of the sample makeup.

Table 4 - Percentage for Demographic Profile

Question	Demographic Profile	Categories	Percentage (%)
1	Gender	Male	33%
		Female	67%
2	Course of Study	Applied Sciences	44%

		Computer Science and Mathematics	17%
		Accountancy	39%
3	SPM CEFR Level	Basic (A1 & A2)	4%
		Independent (B1 & B2)	81%
		Competent (C1 & C2)	15%

Table 4 summarises the respondents' demographic profile by gender, course of study, and SPM CEFR level. Females accounted for 67% of respondents, while males accounted for 33%. Looking at the respondents' courses of study, Applied Sciences was the largest course group (44%), followed by Accountancy (39%), and Computer Science and Mathematics (17%). Most respondents were at the Independent SPM CEFR level (B1, B2) at 81%. The Competent level (C1, C2) accounted for 15%, and 4% were at the Basic level (A1, A2).

Inferential Statistics (significant difference)

According to Shah (2023), there are three main functions of a T-test. Firstly, T-tests are done to compare means. This test is also done to determine if the average scores (mean) or values of two groups, or one group against a known value, are different enough to be considered statistically meaningful and are not just due to random chance. Secondly, T-test is done to test hypotheses. Researchers use t-tests to test hypotheses about means, such as whether a new treatment significantly impacts a variable or if there's a difference in performance between two distinct groups. Lastly, T-test is done to identify significant differences. The output of a t-test provides a p-value (significance value). If this p-value is below a pre-determined threshold (often 0.05), it indicates a statistically significant difference, allowing researchers to draw conclusions about the populations from which their samples were drawn.

However, a one-way ANOVA (Analysis of Variance) is a statistical method used to compare the means of three or more independent (unrelated) groups to determine if there is a statistically significant difference between them. It is a parametric test that evaluates the effect of a single independent variable (the factor) on a dependent variable.

Findings for Gender

This section presents data to answer the research question 1: Is there a significant relationship between writing strategies and writing anxiety across gender?

H_{01} : There is no significant relationship between writing strategies and writing anxiety across gender

Table 4: T-Test for writing strategies and writing anxiety across gender

Group Statistics					
	Q1GENDER	N	Mean	Std. Deviation	Std. Error Mean
WRITING_STRATEGIES	MALE	108	3.6941	.48274	.04645
	FEMALE	223	3.8550	.51980	.03481
WRITING_ANXIETY	MALE	108	2.7343	.47279	.04549
	FEMALE	223	2.8211	.48769	.03266

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
WRITING_STRATEGIES	Equal variances assumed	.180	.671	-2.702	329	.004	.007	-.16095	.05956	-.27811	-.04378
	Equal variances not assumed			-2.773	226.485	.003	.006	-.16095	.05805	-.27533	-.04657
WRITING_ANXIETY	Equal variances assumed	.061	.805	-1.534	329	.063	.126	-.08682	.05661	-.19818	.02455
	Equal variances not assumed			-1.550	217.811	.061	.123	-.08682	.05600	-.19719	.02356

A two-sample t-test (Table 4) was performed to compare writing strategies and writing anxiety across gender. There was a significant difference in writing strategies ($p=0.007$) across gender, but no significant difference for writing anxiety (0.126) across gender.

Findings for course of study

This section presents data to answer the research question 2: Is there a significant relationship between writing strategies and writing anxiety across the course of study?

H_{02} : There is no significant relationship between writing strategies and writing anxiety across the course of study.

Table 5: ANOVA for writing strategies and writing anxiety across the course of study

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
WRITING_STRATEGIES	AS	147	3.8325	.47089	.03884	3.7557	3.9092	2.29	5.00
	CS & M	56	3.8765	.51437	.06874	3.7387	4.0142	2.92	4.88
	ACC	128	3.7357	.55320	.04890	3.6389	3.8324	2.29	5.00
	Total	331	3.8025	.51287	.02819	3.7470	3.8579	2.29	5.00
WRITING_ANXIETY	AS	147	2.8051	.46863	.03865	2.7287	2.8815	1.40	4.05
	CS & M	56	2.6509	.48397	.06467	2.5213	2.7805	1.45	3.50
	ACC	128	2.8406	.49309	.04358	2.7544	2.9269	1.60	3.95
	Total	331	2.7927	.48388	.02660	2.7404	2.8451	1.40	4.05

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
WRITING_STRATEGIES	Between Groups	1.010	2	.505	1.931	.147
	Within Groups	85.791	328	.262		
	Total	86.801	330			
WRITING_ANXIETY	Between Groups	1.443	2	.721	3.120	.045
	Within Groups	75.825	328	.231		
	Total	77.268	330			

An ANOVA (Table 5) was performed to compare writing strategies and writing anxiety across the course of study. There were no significant difference in writing strategies ($p=0.147$) across course of study. However, there is a significant difference for writing anxiety (0.045) across course of study.

Findings for SPM CEFR Level

This section presents data to answer the research question 3: Is there a significant relationship between writing strategies and writing anxiety across SPM CEFR level?

H_{03} : There is no significant relationship between writing strategies and writing anxiety across SPM CEFR level

Table 6: ANOVA for writing strategies and writing anxiety across SPM CEFR level

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
WRITING_STRATEGIES	BASIC	14	3.6726	.49782	.13305	3.3852	3.9601	2.96	4.46
	INDEPENDENT	269	3.7898	.51438	.03136	3.7281	3.8516	2.29	5.00
	COMPETENT	48	3.9115	.50152	.07239	3.7658	4.0571	2.63	5.00
	Total	331	3.8025	.51287	.02819	3.7470	3.8579	2.29	5.00
WRITING_ANXIETY	BASIC	14	2.8393	.47724	.12755	2.5637	3.1148	2.25	3.60
	INDEPENDENT	269	2.7978	.48322	.02946	2.7398	2.8558	1.45	4.05
	COMPETENT	48	2.7510	.49696	.07173	2.6067	2.8953	1.40	3.70
	Total	331	2.7927	.48388	.02660	2.7404	2.8451	1.40	4.05

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
WRITING_STRATEGIES	Between Groups	.849	2	.425	1.621	.199
	Within Groups	85.952	328	.262		
	Total	86.801	330			
WRITING_ANXIETY	Between Groups	.121	2	.060	.256	.774
	Within Groups	77.147	328	.235		
	Total	77.268	330			

An ANOVA (Table 6) was performed to compare writing strategies and writing anxiety across the SPM CEFR level. There were no significant difference in writing strategies ($p=0.425$) and writing anxiety (0.774) across SPM CEFR level.

Descriptive Statistics

Why is there a need to report the mean and standard deviation? According to Vetter (2017), Mean (M) represents the average, or centre of a data set. Standard deviation (SD) indicates the typical distance of individual observations from the mean which shows the data's variability or spread. A low SD means the data points are clustered close to the mean while a high SD indicates they are more spread out. It is good to have a high SD.

Findings for Writing Strategies

This section presents data to answer research question 3- How do learners perceive their use of writing strategies? In the context of this study, this is measured by (i) metacognitive, (ii) effort regulation, (iii) cognitive, (iv) social and (v) affective writing strategies.

Table 5- Mean (M) and Standard Deviation (SD) for METACOGNITIVE (MWS)

ITEM	M	SD
MWSQ1 I organize my ideas prior to writing.	3.74	0.86
MWSQ2 I check my spelling.	4.21	0.78
MWSQ3 I check my writing to make sure it is grammatically correct.	4.17	0.77
MWSQ4 I evaluate and re-evaluate the ideas in my essay.	4.05	0.77
MWSQ5 I monitor and evaluate my progress in writing.	3.86	0.90
MWSQ6 I go through the planning stages in my writing.	3.79	0.92
MWSQ7 I go through the revising and editing stages in my writing.	3.88	0.88

Table 5 shows how students use metacognitive strategies to manage their writing (MWS). It highlights a clear focus on active self-monitoring. Students pay the most attention to the final editing phase, as indicated by high scores for checking spelling ($M=4.21$, $SD=0.78$) and grammar ($M=4.17$, $SD=0.77$). They also place great importance on conceptual revision, reaching a strong agreement on re-evaluating the main ideas in their essays ($M=4.05$, $SD=0.77$). In contrast, pre-writing strategies received the least focus, with organizing ideas before writing scoring the lowest overall ($M=3.74$, $SD=0.86$). In general, the higher standard deviations in these planning stages suggest that while students generally agree on the need to polish a draft, their habits differ significantly when preparing to write.

Table 6- Mean (M) and Standard Deviation (SD) for EFFORT REGULATION (ERS)

ITEM	M	SD
ERSQ1 I write a lot to develop my writing skills.	3.19	0.92
ERSQ2 I often work hard to do well in my writing even if I don't like English writing tasks.	3.72	0.94
ERSQ3 Even if the writing activities are difficult, I don't give up but try to engage in them.	4.05	0.76
ERSQ4 I concentrate as hard as I can when doing a writing task.	4.16	0.75

Table 6 shows the mean scores (M) and standard deviations (SD) for items that measure students' effort regulation strategies (ERS) during writing. The data reveals a strong sense of resilience among the respondents. They reported the highest level of agreement for concentrating as hard as possible during writing tasks ($M=4.16$, $SD=0.75$). This persistence is shown by their willingness to push through challenging writing activities instead of giving up ($M=4.05$, $SD=0.76$). However, students were less enthusiastic about working hard when they disliked the assigned English writing tasks ($M=3.72$, $SD=0.94$). Notably, the lowest score and highest variability were related to practicing writing extensively to develop skills ($M=3.19$, $SD=0.92$). This suggests that while students invest significant effort into required assignments, they are less likely to write extra on their own.

Table 7- Mean (M) and Standard Deviation (SD) for COGNITIVE (CWS)

ITEM	M	SD
CWSQ1 I use memorized grammatical elements such as singular and plural forms, verb tenses, prefixes and suffixes, etc, in my writing	3.63	0.90
CWSQ2 I put newly memorized vocabulary in my sentences.	3.69	0.87
CWSQ3 In order to generate ideas for my writing, I usually engage myself in brainstorming.	3.79	0.81
CWSQ4 I use different words that have the same meaning.	3.61	0.87
CWSQ5 I use my experiences and knowledge in my writing.	4.19	0.76
CWSQ6 I try to use effective linking words to ensure clear and logical relationship between sentences or paragraphs	3.96	0.83

Table 7 shows learners' perceptions of the use of cognitive writing strategies (CWS) in their writing. Overall, all items recorded relatively low SD (≤ 0.90), indicating fairly consistent responses and use of strategies among

learners. Of the 6 strategies, CWSQ5 indicates the highest mean ($M=4.19$, $SD= 0.76$), followed by CWSQ6 ($M=3.96$, $SD=0.83$). This suggests that most students frequently used their experience and knowledge in their writing (CWSQ5) and employed linking words to show transitions of ideas (CWSQ6). The least used strategies are CWSQ4 (using synonyms in writing) and CWSQ1 (memorizing grammatical elements) with $M=3.61$, $SD=0.87$ and $M=3.63$, $SD=0.90$, respectively.

Table 8 – Mean (M) and Standard Deviation (SD) for SOCIAL (SWS)

ITEM	M	SD
SWSQ1 In order to generate ideas for my writing, I usually discuss the writing topic with a friend or classmate.	3.51	0.90
SWSQ2 After revising and editing my essay thoroughly, I ask a friend or my classmate to read and comment on it.	3.38	1.07
SWSQ3 I try to identify friends or classmates whom I can ask for help in my writing.	3.69	0.97
SWSQ4 When I have trouble writing my essay, I try to do it with my classmates or friends.	3.61	1.04

Table 8 depicts students' use of social writing strategy (SWS) in their writing. From the results, 3 of the 4 items showed a relatively high SD ($SD>0.90$), suggesting mixed responses and diverse learning strategies employed. The most frequent use of social writing strategy is SWSQ3 ($M=3.69$, $SD=0.97$), followed by SWSQ4 ($M=3.61$, $SD=1.04$). In contrast, the least employed strategy is SWSQ2 ($M=3.38$, $SD=1.07$). This section shows that most students used social strategy to identify friends that could help them and collaborate with friends when they faced challenges. However, they are less inclined to use social strategy in revising and editing their composition.

Table 9 – Mean (M) and Standard Deviation (SD) for AFFECTIVE (AWS)

ITEM	M	SD
AWSQ1I try to write an essay in class with confidence and ease.	3.61	0.85
AWSQ2I try to relax whenever I feel afraid of writing.	3.79	0.88
AWSQ3I encourage myself to write even when I am afraid of making mistakes	3.99	0.78

Table 9 presents the mean scores and standard deviations for Affective (AWS). Overall, the means for all 3 items are close to 4 (agree), indicating that respondents agree that they use affective strategies in writing. Among the items surveyed, AWSQ3 ("I encourage myself to write even when I am afraid of making mistakes") yielded the highest mean score ($M = 3.99$, $SD = 0.78$). This was closely followed by AWSQ2 ("I try to relax whenever I feel afraid of writing"), which reflects the respondents' attempts to deliberately relax when experiencing apprehension ($M = 3.79$, $SD = 0.88$). AWSQ1 "I try to write an essay in class with confidence and ease" received the lowest relative score, though it was still considered a moderate-to-high value ($M = 3.61$, $SD = 0.85$).

Findings for Cognitive Writing Anxiety

This section presents data to answer research question 4: How do learners perceive cognitive anxiety in writing?

Table 10 – Mean (M) and Standard Deviation (SD) for Cognitive Anxiety (CA)

ITEM	M	SD
CAQ1. While writing in English, I feel nervous.	3.07	1.02
CAQ2. While writing English compositions, I feel worried and uneasy if I know they will be evaluated.	3.07	1.05
CAQ3. I worry that my English compositions are a lot worse than others’.	2.56	1.15
CAQ4. If my English composition is to be evaluated, I would worry about getting a very poor grade.	3.73	1.12
CQQ5. I’m afraid that other students would deride my English composition if they read it.	3.26	1.23
CAQ6. I worry about what other people would think of my English compositions.	2.71	1.07
CAQ7. I’m afraid of my English composition being chosen as a sample to be discussed in class.	3.43	1.15
CAQ8. I’m afraid that my English compositions would be rated as very poor.	2.45	1.20

Table 10 presents the mean scores and standard deviation for cognitive anxiety (CA) among the respondents. The item with the highest mean was CAQ4 (“If my English composition is to be evaluated, I would worry about getting a very poor grade”) ($M = 3.73$, $SD = 1.12$), followed by CAQ7 (“I’m afraid of my English composition being chosen as a sample to be discussed in class”) ($M = 3.43$, $SD = 1.15$), and CQQ5 (“I’m afraid that other students would deride my English composition if they read it”) ($M = 3.26$, $SD = 1.23$). These findings indicate that the participants experience a pronounced cognitive fear of evaluation and judgment by both their classroom instructor and their peers. CAQ1 (“While writing in English, I feel nervous”) and CAQ2 (“While writing English compositions, I feel worried and uneasy if I know they will be evaluated”) yielded identical mean scores ($M = 3.07$, $SD = 1.02$ and $M = 3.07$, $SD = 1.05$, respectively), indicating moderate anxiety and uneasy feelings during the writing process. Conversely, CAQ6 (“I worry about what other people would think of my English compositions”) presented a moderate-to-low mean ($M = 2.71$, $SD = 1.07$). This is followed by CAQ3 (“I worry that my English compositions are a lot worse than others”) ($M = 2.56$, $SD = 1.15$). The lowest mean score was recorded for CAQ8 (“I’m afraid that my English compositions would be rated as very poor”) ($M = 2.45$, $SD = 1.20$). This lower score presents an interesting divergence, as items CAQ4 and CAQ7 also relate to being judged and evaluated yet yielded high mean scores, whereas CAQ6, CAQ3, and CAQ8 remained comparatively low.

Findings for Somatic Writing Anxiety

This section presents data to answer research question 5 - How do learners perceive somatic anxiety in writing?

Table 11- Mean (M) and Standard Deviation (SD) for Somatic Writing Anxiety

ITEM	M	SD
SAQ1. I feel my heart pounding when I write English compositions under time constraint.	2.94	1.06
SAQ2. My mind often goes blank when I start to work on an English composition.	2.89	0.94
SAQ3. I tremble or perspire when I write English compositions under time pressure.	2.77	1.09

SAQ4. My thoughts become jumbled when I write English compositions under time constraint.	2.95	0.98
SAQ5. I often feel panic when I write English compositions under time constraint.	2.87	1.04
SAQ6. I freeze up when unexpectedly asked to write English compositions.	2.31	0.96

Table 11 presents the mean and standard deviation scores for somatic anxiety in writing among the respondents. The highest mean score was recorded for SAQ4, “My thoughts become jumbled when I write English compositions under time constraint” ($M = 2.95$, $SD = 0.98$), followed closely by SAQ1, “I feel my heart pounding when I write English compositions under time constraint” ($M = 2.94$, $SD = 1.06$). This suggests that time pressure may cause learners to experience physical and mental discomfort during writing. Additionally, two other items also show relatively high endorsement, SAQ2 “My mind often goes blank when I start to work on an English composition” and SAQ5 “I often feel panic when I write English compositions under time constraint” with ($M = 2.89$, $SD = 0.94$) and ($M = 2.87$, $SD = 1.04$) respectively. However, the lowest mean score was recorded for SAQ6, “I freeze up when unexpectedly asked to write English compositions” ($M = 2.31$, $SD = 0.96$), indicating that learners were less likely to completely freeze when unexpectedly asked to write.

Findings for Avoidance Behaviour in Writing

This section presents data to answer research question 6- How do learners perceive somatic anxiety in writing?

Table 12- Mean (M) and Standard Deviation (SD) for

ITEM	M	SD
ABQ1. I often choose to write down my thoughts in English.	2.41	1.14
ABQ2. I usually do my best to avoid writing English compositions.	2.22	1.09
ABQ3. I do my best to avoid situations in which I have to write in English.	2.19	0.96
ABQ4. Unless I have no choice, I would not use English to write composition.	2.29	1.07
ABQ5. I would do my best to excuse myself if asked to write English compositions.	2.71	1.04
ABQ6. I usually seek every possible chance to write English compositions outside of class.	3.13	0.97

Table 12 shows the data regarding students' approach and avoidance behaviours (AB) related to English writing. Overall, the low scores on most items suggest that students do not feel a strong dislike for writing in English. They showed little agreement with avoiding English compositions ($M=2.22$, $SD=1.09$) and avoiding writing situations ($M=2.19$, $SD=0.96$). However, they also lack a strong initiative to write voluntarily in English. The mean score for choosing to write down their thoughts in English is notably low ($M=2.41$, $SD=1.14$). Interestingly, the highest mean score indicates that students are somewhat open to finding opportunities to write English compositions outside of class ($M=3.13$, $SD=0.97$). However, since the standard deviations for almost all items are around 1.00, it shows that individual student attitudes toward engaging with or avoiding English writing vary greatly.

Exploratory Statistics (correlation)

According to He (2024), correlation is a statistical technique that shows how strongly two variables are related to each other or the degree of association between the two. It's a common tool for describing simple relationships without making a statement about cause and effect. This section presents data to answer the research question on correlation.

Findings for Relationship between writing strategies and writing anxiety

This section presents data to answer research question 7- Is there a significant relationship between writing strategies and writing anxiety?

H₀₄: There is no significant relationship between writing strategies and writing anxiety

To determine if there is a significant association in the mean scores between writing strategies and writing anxiety (cognitive, somatic, avoidance behaviour), data is analysed using SPSS for correlations. Results are presented separately in table 13 below.

Table 13- Correlation between Social Support and Expectancy Components

		Cognitive	Somatic	Avoidance Behaviour
Writing Strategies	Pearson (Correlation	-.114*	-.134*	-.103
	Sig (2-tailed)	.038	.014	.061
	N	331	331	331

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

According to He (2024), 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.

Table 13 shows there is an association between writing strategies and cognitive and somatic anxiety. Correlation analysis shows that there is a negative weak significant association between writing strategies and cognitive($r = -.114^*$) and somatic anxiety ($r = -.134^{**}$) and ($p = .000$). However, there is no significant relationship between writing strategies and avoidance behaviour.

CONCLUSION

Summary of Findings and Discussions

This study explored the influence of writing strategies on different types of writing anxiety among tertiary ESL learners. Overall, the findings unveiled that learners generally demonstrated positive perceptions towards the use of writing strategies while experiencing moderate levels of writing anxiety, particularly cognitive and somatic anxiety. The findings further showed that writing strategies play an important role in helping learners manage writing anxiety, especially anxiety related to evaluation, time pressure, and emotional discomfort during writing tasks.

The findings showed a significant difference in writing strategies across gender, suggesting that male and female learners may employ different approaches when managing writing tasks. However, no significant difference was found in writing anxiety across genders, indicating that both genders experience relatively similar levels of anxiety during writing activities. This finding is consistent with Afdalia et al. (2023) and Rasool et al. (2023), who also reported inconsistent findings regarding the influence of gender on writing anxiety. The present study therefore, supports the view that writing anxiety may be shaped more strongly by emotional and contextual influences rather than gender alone.

In terms of course of study, the findings showed no significant difference in writing strategies across disciplines. Nevertheless, a significant difference was found in writing anxiety across courses of study, suggesting that learners from different academic programmes may experience varying levels of writing pressure and anxiety due to different academic expectations and disciplinary demands. This finding supports

Ozfidan et al. (2026), who highlighted that contextual and academic factors had fundamental contribution to writing anxiety. Similarly, Jin and Eng (2024) explained that specialised academic fields often put greater pressure on learners' writing performance due to professional and academic expectations.

The findings also discovered no substantial difference in writing strategies and writing anxiety across SPM CEFR proficiency levels. This suggests that learners' prior English proficiency may not necessarily determine their use of writing strategies or their experience of writing anxiety in higher education. The finding supports Cui et al. (2024), who argued that writing anxiety is multidimensional and impacted by a number of psychological and contextual components beyond language proficiency alone.

With regard to learners' perceptions towards writing strategies, respondents generally demonstrated positive perceptions in relation to all five categories of writing strategies; namely metacognitive, effort regulation, cognitive, social, and affective strategies. Among the metacognitive strategies, checking spelling and grammar showed the highest responses, while organising ideas before writing showed the lowest response. This indicates that learners focus more on revising and editing their writing rather than on pre-writing planning activities. This finding supports Raoofi et al. (2017), who emphasized the prominence of metacognitive strategies in helping learners monitor and improve their writing process.

For effort regulation strategies, concentrating during writing tasks and persisting through difficult writing activities recorded the highest responses, whereas writing extensively to improve writing skills showed the lowest response. This suggests that learners are willing to remain focused and persistent during assigned writing tasks but may lack motivation to practise writing independently outside the classroom. This finding supports Ahmad et al. (2026), who found that self-regulation strategies influence positively towards reducing writing anxiety and improving writing performance.

In terms of cognitive strategies, learners most frequently used their own experiences and prior knowledge in writing, while using synonyms and memorised grammatical elements recorded the lowest responses. This suggests that learners rely more on familiar experiences and practical comprehension rather than memorisation techniques when generating ideas in writing. This finding is consistent with Khalil (2022), who reported that cognitive strategies help learners to efficiently organise ideas and reduce writing anxiety.

For social strategies, identifying peers for assistance and collaborating with classmates showed the highest responses, whereas asking peers to review completed essays showed the lowest response. This suggests that learners prefer collaborative support during the writing process but may feel less comfortable sharing completed work for evaluation. This finding supports Zhao and Yang (2023), who emphasised that supportive and collaborative learning environments can help reduce learners' writing anxiety.

Similarly, affective strategies showed that learners often encouraged themselves to continue writing despite fear of making mistakes, although writing confidently and comfortably in class recorded comparatively lower responses. This indicates that learners attempt to regulate their emotions positively during writing tasks, despite still experiencing some lack of confidence. This finding supports Busse et al. (2023) and Guan et al. (2023), who emphasized the important role of emotional regulation in learners' writing performance and anxiety.

The findings on cognitive anxiety revealed that fear of receiving poor grades and fear of classroom evaluation recorded the highest responses, while fear of compositions being rated as very poor recorded the lowest response. Overall, learners experienced moderate levels of cognitive anxiety, particularly related to evaluation and peer judgement. This finding corroborates with Iksan et al. (2023), who found that learners frequently experience anxiety due to fear of criticism and negative evaluation. Similarly, Hasni et al. (2024) reported that concerns related to writing quality and grammatical weaknesses play a significant role towards writing anxiety among ESL learners.

For somatic anxiety, learners most frequently experienced jumbled thoughts, nervousness, and panic under time constraints, whereas freezing when unexpectedly asked to write recorded the lowest response. This suggests that time pressure highly affect the learners' physical and emotional discomfort during writing tasks,

although learners are still generally able to cope with unexpected writing situations. This finding supports Rasool et al. (2023), who identified time pressure and linguistic challenges as common contributors to writing anxiety among ESL learners.

The findings on avoidance behaviour showed that learners generally demonstrated low levels of avoidance towards English writing. Learners disagreed with avoiding writing situations and writing tasks, although they were also not highly motivated to voluntarily write outside the classroom. This insinuates that while learners experience moderate anxiety, they are still keen in engaging with writing tasks rather than completely avoiding them. This finding partially supports Rahmat et al. (2020), who explained that anxiety and fear may gradually influence learners' behaviour if left unmanaged.

Finally, the correlation analysis displayed a weak but significant negative relationship between writing strategies and both cognitive and somatic anxiety. This indicates that learners who frequently use writing strategies tend to experience lower levels of cognitive and somatic anxiety. However, no significant relationship was found between writing strategies and avoidance behaviour, suggesting that avoidance tendencies may be influenced by other psychological or environmental factors beyond the scope of this study. These findings strongly support previous studies by Khalil (2022), Ahmad et al. (2026), and Cui et al. (2024), which consistently reported that effective writing strategies can help reduce learners' anxiety and improve their writing experiences.

Implications and Suggestions for Future Research

Theoretical and Conceptual Implications

This study adds to the theoretical understanding of writing anxiety by supporting Cheng's (2004) multidimensional framework of writing anxiety, which categorises anxiety into cognitive, somatic, and avoidance dimensions. The findings exhibit that writing anxiety is not a single or uniform construct, as learners experienced different forms and levels of anxiety depending on emotional, contextual, and academic factors.

The findings also support Raoofi et al.'s (2017) framework of writing strategies, which includes metacognitive, cognitive, social, affective, and effort regulation strategies. The negative relationship found between writing strategies and writing anxiety further strengthens Bandura's social cognitive theory, particularly the idea that learners' self-regulation, emotional management, and interaction with their environment influence their confidence and behaviour during writing tasks. Overall, the conceptual framework of this study was supported, as writing strategies were found to influence different dimensions of writing anxiety among tertiary ESL learners.

Pedagogical Implications

The findings of this study suggest that writing instructors should place greater emphasis on strategy-based instruction in academic writing classrooms. Teachers should explicitly guide learners on how to plan, organise, revise, monitor, and evaluate their writing through metacognitive strategies. Since learners were found to experience anxiety related to evaluation and time pressure, educators should also create engaging and warm classroom environments that encourage gradual improvement rather than focusing solely on grades and grammatical accuracy.

In addition, collaborative activities such as peer discussions, group writing tasks, and peer review should be incorporated more frequently to strengthen learners' social writing strategies and reduce writing apprehension. Teachers may also integrate emotional support into writing lessons by promoting positive reinforcement, confidence-building activities, and stress-management techniques to help learners manage anxiety more effectually during writing tasks.

Furthermore, educational institutions may consider organising workshops or support programmes focusing on writing confidence, emotional management, and academic writing development, particularly for students who

experience higher levels of writing anxiety. Since learners demonstrated strong effort regulation strategies, educators should continue encouraging persistence through meaningful and interactive writing activities.

Suggestions for Future Research

Future studies may explore other factors influencing writing anxiety beyond writing strategies, such as motivation, self-efficacy, personality traits, teacher feedback, or the influence of AI-assisted writing technologies. Researchers may also employ qualitative or mixed-method approaches to gain a more in-depth understandings into learners' emotional experiences, perceptions, and coping strategies during the writing process.

In addition, future researches could focus on specific academic disciplines to examine how disciplinary writing demands influence learners' writing anxiety and strategy use. Longitudinal studies may also provide a clearer understanding of how writing anxiety and writing strategies develop throughout learners' academic journey. Finally, future researchers may investigate the effectiveness of specific strategy-based interventions in reducing writing anxiety among ESL learners in different educational settings and contexts.

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APPENDIX

Writing Anxiety And Writing Strategies

(This instrument is adapted from Cheng, 2004, and Raoofi et al., 2017)

SECT	VARIABLE	CONSTRUCTS	No of Items/ Indicators	Tot
B	Writing Anxiety (Cheng, 2004)	Cognitive	8	22
		Somatic	7	
		Avoidance Behaviour	7	
C	Writing Strategies (Raoofi,et.al., 2017)	Metacognitive	7	24
		Effort Regulation	4	
		Cognitive	6	

		Social	4	
		Affective	3	
		Total		46

Section B- Writing Anxiety

Cognitive Anxiety (CA)

1	Strongly Disagree
2	Disagree
3	Uncertain
4	Agree
5	Strongly Agree

ITEM	1	2	3	4	5
CAQ1. While writing in English, I feel nervous.					
CAQ2. While writing English compositions, I feel worried and uneasy if I know they will be evaluated.					
CAQ3. I worry that my English compositions are a lot worse than others'.					
CAQ4. If my English composition is to be evaluated, I would worry about getting a very poor grade.					
CAQ5. I'm afraid that other students would deride my English composition if they read it.					
CAQ6. I worry about what other people would think of my English compositions.					
CAQ7. I'm afraid of my English composition being chosen as a sample to be discussed in class.					
CAQ8. I'm afraid that my English compositions would be rated as very poor.					

Somatic Anxiety (SA)

1	Strongly Disagree
2	Disagree
3	Uncertain
4	Agree

5	Strongly Agree
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ITEM	1	2	3	4	5
SAQ1. I feel my heart pounding when I write English compositions under time constraints.					
SAQ2. My mind often goes blank when I start to work on an English composition.					
SAQ3. I tremble or perspire when I write English compositions under time pressure.					
SAQ4. My thoughts become jumbled when I write English compositions under time constraints.					
SAQ5. I often feel panic when I write English compositions under time constraints.					
SAQ6. I freeze up when unexpectedly asked to write English compositions.					
SAQ7. I usually feel my whole body rigid and tense when I write English compositions.					

Avoidance Behaviour (AB)

1	Strongly Disagree
2	Disagree
3	Uncertain
4	Agree
5	Strongly Agree

ITEM	1	2	3	4	5
ABQ1 I often choose to write down my thoughts in English.					
ABQ2 I usually do my best to avoid writing English compositions.					
ABQ3 I do my best to avoid situations in which I have to write in English.					
ABQ4 Unless I have no choice, I would not use English to write a composition.					
ABQ5 I would do my best to excuse myself if asked to write English compositions.					
ABQ6 I usually seek every possible chance to write English compositions outside of class.					

ABQ7 Whenever possible, I would use English to write compositions.

Section C- Writing Strategies

Metacognitive (Mws)

ITEM	1	2	3	4	5
MWSQ1 I organize my ideas prior to writing.					
MWSQ2 I check my spelling.					
MWSQ3 I check my writing to make sure it is grammatically correct.					
MWSQ4 I evaluate and re-evaluate the ideas in my essay.					
MWSQ5 I monitor and evaluate my progress in writing.					
MWSQ6 I go through the planning stages in my writing.					
MWSQ7 I go through the revising and editing stages in my writing.					

Effort Regulation (Ers)

ITEM	1	2	3	4	5
ERSQ 1I write a lot to develop my writing skills.					
ERSQ 2I often work hard to do well in my writing even if I don't like English writing tasks.					
ERSQ 3Even if the writing activities are difficult, I don't give up but try to engage in them.					
ERSQ 4I concentrate as hard as I can when doing a writing task.					

Cognitive (Cws)

ITEM	1	2	3	4	5
CWSQ1 I use memorized grammatical elements such as singular and plural forms, verb tenses, prefixes and suffixes, etc, in my writing					
CWSQ2 I put newly memorized vocabulary in my sentences.					
CWSQ3 In order to generate ideas for my writing, I usually engage myself in brainstorming.					
CWSQ4 I use different words that have the same meaning.					
CWSQ5 I use my experiences and knowledge in my writing.					
CWSQ6 I try to use effective linking words to ensure clear and logical relationship between sentences or paragraphs					

Social (Sws)

ITEM	1	2	3	4	5
SWSQ1 In order to generate ideas for my writing, I usually discuss the writing topic with a friend or classmate.					
SWSQ2 After revising and editing my essay thoroughly, I ask a friend or my classmate to read and comment on it.					
SWSQ3 I try to identify friends or classmates whom I can ask for help in my writing.					
SWSQ4 When I have trouble writing my essay, I try to do it with my classmates or friends.					

Affective (Aws)

ITEM	1	2	3	4	5
AWSQ1 I try to write an essay in class with confidence and ease.					
AWSQ2 I try to relax whenever I feel afraid of writing.					
AWSQ3 I encourage myself to write even when I am afraid of making mistakes					