



Original Article

Improving paragraph writing performance and reducing anxiety: the impact of writing strategy training on grade 11 students at Ambo Awaro high school

Lalisa Leta ^{1*}, Tekle Ferede ² and Teshale Tefera ³

^{1,2} Department of English Language and Literature, Dilla University

³ Department of English Language and Literature, Wollega University

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CORRESPONDING EMAIL

* lalisaleta@gmail.com

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Writing Strategy Training;
Writing Anxiety;
Paragraph Writing Performance;
Transformative Power;
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Abstract

The study investigated the impact of writing strategy training in improving paragraph writing performance and reducing anxiety of grade 11 students at Ambo Awaro high school. A quasi- experimental study was employed to compare control and experimental groups. Ninety- nine participants were assigned using lottery sampling technique to experimental (n = 52) and control (n = 47) groups. The experimental group received explicit instruction in cognitive, affective, social, compensation, and metacognitive writing strategies while the control group continued conventional instruction. Data were collected via paragraph writing tests, and a five- point Likert writing- anxiety questionnaire administered pre and post- intervention. The results from independent and paired- samples t- tests depicted, strategy training brought substantial gains across paragraph components: content, vocabulary, grammar, structure, mechanics) and a considerable reduction in writing anxiety. A strong negative relationship indicated that larger anxiety reductions were associated with greater performance improvements. These results underscore the transformative potential of strategy- based instruction in English as a Foreign Language (EFL) classrooms by addressing both cognitive and affective dimensions of writing development. To sustain benefits, teachers should include writing- strategy instruction into routine teaching while curriculum developers incorporate it into syllabi and school leaders provide supportive professional development.

1 Introduction

Writing is a cognitively and metacognitively demanding activity that requires the coordination of planning, organizing, monitoring, and rewriting to create meaningful and cohesive texts (Arliyanti and Hapsari, 2023; Teng, 2024). This complexity makes writing one of the most challenging tasks for English as a Foreign Language (EFL) learners, particularly at the secondary school level. Despite its challenges, writing remains an indispensable basic language skill for students' academic achievements and effective communication.

The challenges in writing often stem from a lack of explicit strategy- based instruction that supports students in managing cognitive and linguistic complexities. Consequently,

many learners struggle to construct cohesive paragraphs and express their ideas effectively (Chen, 2022; Bai et al., 2021). These difficulties are compounded by inadequate knowledge of key writing techniques, poor organization, and weak linguistic competence (Liu et al., 2022; Arliyanti and Hapsari, 2023). Specifically, in the Ethiopian context, students at schools like Ambo Awaro High School exhibit pronounced weaknesses in grammar, punctuation, vocabulary, organization, and overall paragraph coherence.

Beyond cognitive barriers, affective factors, particularly writing anxiety, are significant obstacles. Writing anxiety manifests as avoidance behaviors and cognitive interference, becoming prominent characteristics of less skilled writers (Yang, 2024). Prasetyaningrum (2025) noted that emotional difficulties frequently interrupt students' ability to plan, arrange, and edit their writing, lowering their achievement and confidence (System, 2024; Tsiriotakis et al., 2017). This anxiety is a severe obstacle in Ethiopian EFL classrooms, where limited exposure to English outside the classroom exacerbates linguistic limitations and underdeveloped writing habits.

Recent international research suggests that the systematic integration of specific writing strategies such as planning, drafting, rewriting, and self-monitoring can effectively reduce writing anxiety (Teng, 2020; Bai, 2020). Furthermore, instruction in cognitive and metacognitive strategies has been shown to improve students' organization, vocabulary precision, coherence, and grammatical accuracy (Graham and Harris, 2019; Ahmed, 2021). Research also indicates an inverse relationship: when students' anxiety levels decrease, their writing fluency and structural control tend to increase (Sabti et al., 2019; Bai, 2020). Therefore, writing strategy training is a potentially transformative tool that can strengthen performance and ease anxiety in the classroom.

2 Research problem

Despite the recognized importance of writing for academic achievement, many Grade 11 students in Ethiopian secondary schools, particularly at Ambo Awaro High School, struggle significantly with paragraph writing. As Anshu and Yesuf (2022) found, learners who lack collaborative practice are likely to produce paragraphs with weak development of ideas, poor logical connections, and insufficient organization. At Ambo Awaro High School, these difficulties are evident in students' poor grammar usage, punctuation, vocabulary use, and overall coherence.

The root of these writing difficulties lies in the absence of explicit training in essential writing strategies (Han, 2024). Without systematic instruction in cognitive, metacognitive, memory, affective, social, and compensation strategies, students lack the ability to plan, organize, monitor, and revise their writing effectively. Consequently, their paragraphs exhibit weak idea development, poor coherence, limited vocabulary, and frequent grammatical inaccuracies. This problem is not merely a reflection of limited linguistic proficiency but also a consequence of the absence of structured opportunities for guided writing practice and feedback (Arliyanti and Hapsari, 2023; Liu et al., 2022).

In addition to cognitive and linguistic challenges, affective factors, particularly writing anxiety, further hinder students' progress. The fear of writing is a severe obstacle that restricts learners' ability to express their ideas confidently, leading to negative emotional feelings, avoidance behavior, lack of motivation, and reduced writing output (Mogesse et al., 2025; Yang, 2024; Prasetyaningrum, 2025). Studies consistently show that high levels of writing anxiety negatively correlate with writing performance, especially in tasks demanding strategic planning, organization, and revision (System, 2024; Tsiriotakis et al., 2017). This anxiety is even more severe in contexts like Ethiopia, where English is rarely used outside the classroom and feedback opportunities are limited.

The Research Gap and Rationale: While international studies have demonstrated the positive impact of writing strategy instruction on improving writing quality and reducing anxiety (Bai, 2020; Teng, 2020), there is a remarkable gap in context-specific evidence within the Ethiopian secondary school setting. Moreover, the majority of existing studies tend to examine writing performance and anxiety as separate constructs, often overlooking the reciprocal relationship between them, and are largely conducted at the university level. This study addresses these significant gaps by investigating how writing strategy training simultaneously and integrally influences both the anxiety levels and paragraph writing performance of Grade 11 students in an Ethiopian secondary school (Ambo Awaro High School). This study is significant as it provides context-specific empirical evidence on the integrated effects of writing strategy training in Ethiopian secondary schools. The findings will equip EFL teachers with practical, emotionally supportive pedagogical tools, guide curriculum developers in incorporating explicit strategy instruction, and fill a critical research gap by exploring the reciprocal relationship between writing performance and anxiety, ultimately contributing to more holistic and effective writing instruction for Grade 11 learners. Investigating this interaction not only fills a crucial research gap but also provides pedagogically valuable insights into how EFL teachers can foster more effective and emotionally supportive writing classrooms for Grade 11 learners. Accordingly, this study was designed to address the research questions:

1. How does strategies training affect the level of writing anxiety among grade 11 students?
2. To what extent does strategies training influence the paragraph writing performance of grade 11 students?
3. What is the relationship between changes in writing anxiety and changes in paragraph writing performance among grade 11 students following strategies training?

3 Literature review

3.1 The nature of writing and its academic significance

Writing is widely recognized as a complex and recursive process involving the generation, organization, and communication of ideas through text (Hyland, 2019). It is not merely a means of linguistic expression, but also a cognitive and metacognitive task that requires planning, drafting, revising, and editing. Basically, the nature of writing is the process of expressing ideas, thoughts, and information in a structured and meaningful way through written language for a specific purpose and audience. This processes require an individual's interests. Particularly in academic contexts, writing skills serve as a fundamental tool for learning, assessment, and scholarly communication (Graham, 2020). For secondary school students, particularly those in English as a Foreign Language (EFL) setting, academic writing is a gateway to higher education and future career opportunities. Despite its importance, writing remains one of the most challenging language skills for learners to master owing to its demand for linguistic accuracy, coherent structure, and critical thinking (Teng, 2020).

3.2 The complexity of writing for high school students

Academic writing is a complex activity that requires the simultaneous deployment of multiple linguistic and cognitive sub-skills, especially in EFL (English as a Foreign Language) contexts. Linguistically, it demands mastery over vocabulary, grammar, cohesion, content, mechanics, and register. Cognitively, it involves higher-order skills such as planning,

organizing, evaluating, and revising (Arliyanti and Hapsari, 2023; Teng, 2020). This complexity is further heightened by limited exposure to effective writing instruction, particularly strategy-based approaches that support planning and revising processes (Graham and Harris, 2019). Students must not only generate relevant content but also structure their ideas logically and express them accurately. As Liu et al. (2022) argue, successful paragraph development depends on a writer's ability to manage discourse-level features such as coherence and unity, while applying appropriate syntactic and lexical choices that conform to academic conventions. Moreover, the act of writing engages both cognitive and metacognitive processes; writers must set goals, monitor their progress, and revise drafts to meet communicative and task-specific requirements (System, 2024). EFL learners, in particular, often struggle because their cognitive load is divided between idea generation and managing the complexities of a second language (Teng, 2024). Without adequate instruction on how to coordinate these sub-skills, high school students tend to produce writing that is fragmented, incoherent, and linguistically flawed. This highlights the urgent need for strategy training-based instruction that explicitly supports the integration of linguistic and cognitive skills in academic writing tasks.

3.3 Understanding writing performance in the high school context

In this study, writing performance is specifically understood in relation to paragraph writing. A well-developed paragraph should demonstrate unity and coherence, with clear topic sentences, supporting details, and appropriate transitions (sek yi2024appraisal). In line with this, Orkojo (2025) added that Writing performance, therefore, is evaluated based on several key elements: content (clarity and relevance of ideas), vocabulary (range and appropriateness of word choice), grammar (accuracy of sentence structures and tenses), structure (logical flow and organization), and mechanics (correct use of punctuation, spelling, and capitalization). When students are not adequately trained in these components, their writing lacks clarity, engagement, and effectiveness (Bai, 2020). As a result, assessing writing performance in terms of these subcomponents provides a clearer picture of where support and intervention are most needed.

3.4 Writing anxiety and its effects

A significant factor that negatively influences students' writing is writing anxiety a type of situational anxiety triggered during the act of writing. Writing anxiety among high school students is common and often rooted in fear of negative evaluation, low self-confidence, and prior failures (Kim and Kim, 2022). This form of anxiety affects students both emotionally and cognitively, leading to avoidance behaviors, reduced motivation, and compromised output. Empirical studies have shown that high levels of writing anxiety correlate with poor writing performance, as anxiety impairs the learner's ability to concentrate, organize ideas, and apply writing rules effectively (Sabti et al., 2019). In EFL contexts, where learners may already struggle with language proficiency, writing anxiety becomes an even more significant barrier to academic success.

3.5 Writing strategy training as a pedagogical response

Given the complexity of writing and the emotional barriers many students face, researchers and educators have increasingly emphasized the role of writing strategy training. This instructional approach involves teaching students cognitive and metacognitive strategies such as planning, organizing, drafting, revising, and self-monitoring. These strategies are believed to enhance learners' control over the writing process, increase their confidence, and potentially reduce anxiety (Teng, 2020). Moreover, writing strategy training is

aligned with the growing recognition that writing is not simply a product to be evaluated, but a process to be supported.

Even though theoretical and empirical studies suggest a possible link between strategy training and improvements in writing performance and anxiety reduction, evidence from the Ethiopian context remains limited. For instance, Mogesse et al. (2025) found that dialogue journal writing significantly reduced EFL students' writing anxiety and improved their attitudes toward writing compared with conventional instruction. In addition, Dinsa and Taddese (2024) reported that Ethiopian EFL students who frequently employed writing strategies demonstrated better writing performance and higher writing self-efficacy, highlighting the important role of strategy use in successful writing development. However, more context-specific research is needed to determine how these relationships manifest in Ethiopian high school settings, particularly among Grade 11 learners. In this regard, the current study seeks to explore these interconnections.

4 Research methodology

4.1 Research design and paradigm

The study utilized a quasi-experimental design supported by the pragmatic research paradigm. The quasi-experimental approach was selected to examine the impacts of strategies training on the students' writing performance, and anxiety. To carry out this, the pragmatic paradigm guided the selection of mixed-method tools and techniques enabling the researcher to draw on both quantitative and qualitative data to better understand the phenomenon in its educational context. Furthermore, Pragmatism was selected as the philosophical foundation for this study because it is centred on solving real-world problems and producing findings that are practically useful. This approach avoids strict methodological boundaries, allowing for the combined use of quantitative and qualitative methods where appropriate. It also recognises that participants' experiences are shaped by their specific contexts while still valuing objective evidence. In this way, pragmatism offers a balanced and flexible framework to ensure the research outcomes are both credible and relevant to practice.

4.2 Population and study site

Grade 11 students of Ambo, Awaro high school were the participants of the study. This site was selected due to the researcher's long-term professional experience at the school, which provided contextual familiarity and ease of access to participants and data sources. Grade 11 was specifically targeted because it represents a critical academic stage for students preparing for national exams and academic transitions, and it is where writing challenges are especially evident.

4.3 Sampling techniques

A combination of convenience, purposive, and systematic sampling techniques was employed to identify the study participants. The school was selected through convenience sampling because of its geographical proximity and accessibility to the researcher, which allowed repeated visits for data collection and follow-up. Within the school, purposive sampling was applied to focus specifically on Grade 11 students. This level was chosen not only because it represents a critical stage in preparing for national examinations and

academic transition to higher education, but also because the researcher has long- standing teaching experience with Grade 11, providing deep familiarity with students' needs and challenges in writing. Finally, two intact sections of Grade 11 were selected through systematic sampling in an orderly manner, ensuring fairness and minimizing selection bias. This combined approach made sure that the study was both methodologically consistent and relevant to the context.

4.4 Data collection instruments

The study employed paragraph writing test as data gathering tool that was designed to evaluate students' writing performance. The task required students to produce a complete paragraph within an hour guided by a provided topic sentence. A five- point Likert scale questionnaire was administered to measure students' levels of writing anxiety. The items were slightly adapted from Cheng (2004) with slight adjustments were made to better align with the Grade 11 context. Semi- structured interview guidelines were developed to collect qualitative data from 10 selected participants offering deeper insight into students' experiences with writing and strategy use.

4.5 Methods of data analysis

Descriptive and inferential statistical methods of data analysis were employed to analyze the quantitative data. The descriptive statistical analysis includes means and standard deviations that were computed to summarize students' writing scores and anxiety levels. To determine the significance of the intervention, independent sample t- test was conducted to compare the students' performance in control and experimental groups. Additionally, a paired samples t- test was applied for assessing pre- and post- intervention changes within the experimental group. Thematic analysis was used for interview data.

4.6 Validity and reliability

The researcher checked the validity of the instruments by conducting a pilot study with 99 participants from Ambo, Awaro high school prior to the main intervention. The process was essential for confirming the clarity, appropriateness, and relevance of the paragraph writing test regarding content, grammar, vocabulary, structure, and mechanics, as well as the writing anxiety questionnaire administered at both before and after treatment stages. The pilot results indicated that the instruments were well aligned with the intended constructs and suitable for measuring the students' writing performance and anxiety.

Moreover, the researcher confirmed that the reliability of the instruments was strictly applicable. The anxiety questionnaires were acceptable at the internal consistency level of Cronbach's alpha coefficient (0.78). Furthermore, the inter- rater reliability of the paragraph writing scores was examined by employing two independent raters. Cohen's kappa statistic was computed, which indicated substantial consistency between raters. Collectively, these procedures confirmed that the instruments were both valid and reliable, providing a sound basis for accurately capturing the effects of writing strategy training on students' performance and anxiety levels.

5 Results and discussion

5.1 Findings

5.1.1 Results of the analysis prerequisite tests

Table 1: Result of Variance Homogeneity Test of Writing Performance

Levene's Statistic (<i>F</i>)	df1	df2	Sig.
2.49	1	97	.118

Homogeneity test Table 1 indicates that Levene's test examined the assumption that there was equal distribution of writing performance scores across the control and experimental groups. As the results indicated, the variances were not significantly different, $F(1, 97) = 2.49$, $p = .118$. Therefore, the assumption of homogeneity of variances was satisfied as the significance value was greater than .05.

Table 2: Results of Normality Tests on Performance and Anxiety

Variable	Groups	Test	N	Kolmogorov-Smirnov	Shapiro-Wilk
Writing Performance	Control	Pre	47	4.067	.87
		Post	47	4.200*	.248
	Experimental	Pre	52	5.120	.276
		Post	52	5.200*	.157
Writing Anxiety	Control	Pre	47	4.200*	.720
		Post	47	4.200*	.488
	Experimental	Pre	52	5.200*	.768
		Post	52	5.200*	.312

Normality test * This is the lower bound of the true significance

As shown Table 2, the normality of the data on writing performance and anxiety scores for the control and experimental groups was tested using the Kolmogorov Smirnov and Shapiro Wilk tests. The results indicated that all significance (p) values were greater than .05, showing that pre and post- test scores were normally distributed; therefore, the assumption of normality was satisfied.

5.1.2 Findings on paragraph writing performance on the pre-test

Table 3: Results of Independent Sample t-test on the Elements of Paragraph (Pre-test)

Paragraph Elements	Control			Experimental			df	<i>t</i> -value	<i>p</i>
	N	Mean	SD	N	Mean	SD			
Content	46	1.69	.51	52	1.50	.67	96	1.60	.108
Grammar	46	1.39	.49	52	1.44	.53	96	-.48	.628
Structure	46	1.32	.55	52	1.36	.56	96	-.34	.730
Mechanics	46	1.30	.46	52	1.40	.49	96	-1.02	.308
Vocabulary	46	1.21	.41	52	1.36	.59	96	-1.40	.154

Table 3 shows that students in the experimental group ($M = 1.69$, $SD = .67$) scored almost the same as the control group ($M = 1.5$, $SD = .51$). The independent sample t-test revealed no significant difference between the two groups $t(96) = 1.60$, $p = .10$. The difference in the mean (mean difference = -1.19 , $df = 96$, t -value < table value, p -value > .05) and the effect size ($d = .25$) were small. This indicates that the control and experimental groups of students showed similar performance in writing content.

Table 3 shows that the experimental group ($M = 1.44$, $SD = .53$) scored as similarly to the control group ($M = 1.39$, $SD = .49$). The independent samples t-test revealed no significant difference between control and treatment groups, $t(96) = -.48$, $p = .62$. The difference in the mean (mean difference = $-.05$, $df = 96$, t -value < table value, p -value > .05) and the effect size $d = .10$ was small. This indicates that the participants in the control and experimental groups showed similar vocabulary performance before training.

As shown in Table 3, the treatment group scored ($M = 1.36$, $SD = .56$) almost the same as the control group ($M = 1.33$, $SD = .55$). Therefore, the independent sample t-test revealed, no significant difference between the control and treatment groups at $t(96) = -.35$, $p > .05$. The difference in the mean (mean difference = $-.03$, $df = 96$, t -value < table value, p -value > .05) and the effect size Cohen's $d = .05$ was small. This indicates that the participants in the control and experimental groups showed almost the same performance in grammar usage in writing before the training began.

Table 3 shows that control group scored ($M = 1.3$, $SD = .46$) almost the same as the experimental group ($M = 1.4$, $SD = .49$). The results from the independent samples t-test revealed no significant difference between the mean scores of the control and treatment groups $t(96) = -.1$, p value = .3. The difference in the mean (mean difference = $-.1$, $df = 96$, t -value < table value, p -value > .05) and the effect size ($d = .2$) were small. Therefore, the results indicates that participants in both groups exhibited relatively the same achievements in writing structure before the training.

As indicated in table 3, the participants in the control group scored ($M = 1.22$, $SD = .42$) which was similar to the experimental group ($M = 1.36$, $SD = .59$). The independent sample t-tests revealed no significant difference between the two groups, $t(96) = -1.4$, $p = .15$. The difference in the mean (mean difference = $-.14$, $df = 96$, t -value < table value, p -value > .05) and the effect size $d = .28$ were small. The results indicate that the control and experimental groups had the same performance of mechanics usage in writing before the training.

5.1.3 Students' paragraph writing performance on the post-test

Table 4 The Results of Independent Sample t-test on Elements of Paragraph Performances

Table 4: Results of Independent Sample t-test on Elements of Paragraph Performances (Post-test)

Paragraph Elements	Control			Experimental			df	t-value	p
	N	Mean	SD	N	Mean	SD			
Content	47	1.90	.60	52	3.33	1.10	97	-7.09	.000
Vocabulary	47	1.72	.54	52	3.17	1.09	97	-7.99	.000
Grammar	47	1.56	.54	52	2.96	1.09	97	-7.65	.000
Structure	47	1.50	.59	52	2.88	1.10	97	-7.41	.000
Mechanics	47	1.61	.57	52	2.90	1.06	97	-7.16	.000

As shown in Table 4, an independent samples t- test was conducted to compare how well content was incorporated in paragraphs. The results indicated significant difference, $t(97) = -7.09$, $p < .001$, between the scores of the control ($M = 1.90$, $SD = .60$), and experimental ($M = 3.23$, $SD = 1.10$) groups. The mean difference (-1.32) and 95% CI: -1.69 to -0.95). therefore, the results indicate that there is a substantial difference between the means of the two groups.

As shown in Table 4, the control group ($M = 1.72$, $SD = 0.54$) scored lower than the experimental group ($M = 3.17$, $SD = 1.09$) on vocabulary use in writing. The t- test revealed a significant difference between the two groups, $t(97) = -7.99$, $p < .05$. The magnitude of the difference in the mean was substantial with a mean difference of (-1.44) and (95% CI: -1.80 to -1.08) indicating a statistically significant difference.

As shown in Table 4, an independent- sample t- test was conducted to compare the grammar scores, control ($M = 1.56$, $SD = .56$) and experimental ($M = 2.96$, $SD = 1.09$). The results of the t- test ($t(97) = -7.65$, p value = $.000$) which proved that there was a significant difference in the mean scores. The magnitude of the differences in the means (mean difference = -1.39 ; 95% CI: -1.75 to -1.03) was significant. Hence, the alternative hypothesis has been retained.

As shown in Table 4, an independent sample t- test was conducted to examine the mean difference between the control and experimental groups in including an appropriate structure in paragraph writing. The experimental group ($M = 2.96$, $SD = 1.09$) scored higher than the control group ($M = 1.50$, $SD = .59$). The results of the t- test, $t(97) = -7.41$, $p = .000$. which showed significant a difference between the mean scores of the control and treatment groups as the magnitude of the difference (mean difference = -1.38 , 95% CI: -1.75 to -1.04).

The results presented in Table 4, show that the participants in the experimental group ($M = 2.9$, $SD = 1.0$) scored higher than those in the control group ($M = 1.61$, $SD = 0.57$) in their appropriate use of mechanics in writing. The results of the t- test revealed a significant difference between the control and experimental group $t(97) = -7.16$, $p < .05$, and the mean difference was (-1.28) , with a 95% CI of: -1.64 to -0.93 . Therefore, there was a significant improvements in the treatment group in using the correct mechanics in writing.

Table 5: Results on overall writing performance at pre- and post-training

Overall Writing Performance	Group	N	Mean	SD	Mean Diff	Df	t	P
Pre-training	Control	46	6.8	1.57	-.186	97	-.479	.633
	Experimental	52	7.02	2.195				
Post-training	Control	48	8.31	2.18	-6.85	97	-8.39	.000
	Experimental	52	15.15	5.00				

As revealed in Table 5, an independent sample t- test was computed to compare the overall performance in paragraph writing at pre- training for the control and experimental groups. There was no statistically significant difference ($t(97) = -.479$, $p = .633$) in the scores for the control group ($M = 6.89$, $SD = 1.622$) and the experimental group ($M = 7.08$, $SD = 2.195$) with the magnitude of the difference in the means (mean difference = $-.186$, 95% CI: $-.954$ to $.583$). The effect size ($d = 0.1$) was small in this study.

As shown in Table 5, an independent sample t- test was conducted to examine the overall paragraph writing performance of the control and experimental groups. The results indicated that the experimental group ($M = 15.15$, $SD = 5.00$) scored significantly higher than the control group ($M = 8.31$, $SD = 2.18$). on the self- efficacy scale. The t- test

showed a statistically significant difference between the two groups, $t(97) = -8.39$, $p < .05$) with a large effect size ($d = 0.86$). The magnitude of the difference was significant (mean difference = -6.85 , 95% CI: -8.49 to -5.21) confirming that it was a significant difference; therefore, the alternative hypothesis was retained.

5.1.4 Results of independent samples t-test on writing anxiety

Table 6: Writing Anxiety Results Before and After Treatment

Time	Control Group			Experimental Group			<i>t</i>	df	<i>p</i>	<i>d</i>	95% CI	
	N	Mean	SD	N	Mean	SD					Lower	Upper
Pre	47	2.73	.31	52	2.82	.53	-1.00	83.9	.260	0.2	-.26	.08
Post	47	2.79	.34	52	3.07	.31	-4.30	92.5	.000	1.0	-.41	-.15

41 to $-.15$], and the effect size ($d = 1$) was large.

5.1.5 Results of Paired Samples t-test on Writing Anxiety

Table 7: Pre- and Post-training Results of Writing Anxiety for Control and Treatment Groups

Group	Pre-Training			Post-Training			df	<i>t</i>	<i>p</i>	<i>r</i>	95% CI	
	N	Mean	SD	N	Mean	SD					Lower	Upper
Control	47	2.73	.31	47	2.79	.34	46	-.80	.420	-.19	-.21	.08
Treatment	52	2.28	.53	52	3.07	.30	51	-2.91	.005	-.03	-.42	-.08

As indicated in Table 7, a paired samples *t*-test was conducted using SPSS version 25 to compare the mean scores of writing anxiety for students in the control group before and after the training. The results revealed that the mean score for writing anxiety in the control group prior to training ($M = 2.73$, $SD = .31$) was nearly identical to the mean score after the usual teaching method was applied ($M = 2.79$, $SD = .34$). At the 0.05 level of significance, the *t*-test results were $t(46) = -.08$, $n = 47$, $p = .42$ with a 95% confidence interval ranging from $-.21$ to $.08$ and $r = -.19$. On average, the post-treatment score was only about $-.06$ points higher than the pre-treatment score, indicating that there was no statistically significant difference between the pre- and post-treatment mean values for the control group; the difference could be attributed to chance.

The results of the paired samples *t*-test presented in Table 9 indicate that the mean score for the experimental group before the treatment was $M = 2.28$, $SD = .53$, while the mean score after the treatment was $M = 3.07$, $SD = .30$. The results were statistically significant at the 0.05 level, with $t(51) = -2.91$, $n = 52$, $p = 0.005$ and a 95% confidence interval ranging from $-.42$ to $-.08$ with a correlation coefficient of $r = -.03$. On average, the post-treatment score was $-.25$ points higher than the pre-treatment score. Therefore, there was a statistically significant difference between the pre- and post-treatment mean values for the experimental group, indicating that the treatment was effective in this group.

5.2 Discussion

5.2.1 *The impacts of writing strategies training on writing anxiety*

The study found statistically significant reduction in writing anxiety among students in the experimental group after the intervention, indicating that writing strategy training effectively mitigated students' emotional barriers to writing. This outcome aligns with the 'Control- Value Theory of Achievement Emotions,' which posits that students' perceptions of control and the value they place on tasks significantly influence their emotional responses (Pekrun, 2018).

The results resonate with Cheng (2004) findings that structured writing instruction alleviate anxiety by enhancing students' sense of control. Moreover, Bai (2020) confirmed that strategy- based instruction contributes to lower anxiety and higher confidence among EFL learners. Teng (2020) also reported a longitudinal reduction in writing anxiety through motivational and metacognitive strategy training. In this study, strategies such as planning, outlining, and revising provided students with a clear framework, reducing ambiguity and performance pressure. These findings validate Graham and Harris (2019) meta-analysis, which showed that writing instruction with strategic modeling reduces anxiety by providing students with procedural knowledge.

5.2.2 *The impacts of writing strategies training on writing performance*

The results after the intervention showed that the experimental group significantly outperformed the control group across all dimensions of paragraph writing such as content, vocabulary, grammar, structure, and mechanics. This supports the process- oriented view of writing which sees writing as a cyclical process involving planning, drafting, and revising (Hyland, 2019). Similar improvements in writing performance following strategy training were observed in Chen (2022) study which found that strategy instruction enhanced clarity and coherence in EFL students' paragraphs. In addition, students develop metacognitive awareness in using writing strategies. Olinghouse and Graham (2009) emphasized that students who receive planning and revision instruction produce higher quality texts, particularly in terms of organization and development.

Moreover, writing performance improvement can be linked to sociocultural theory, which suggests that teacher scaffolding helps students internalize effective writing practices (Lantolf and Thorne, 2006). By using think- aloud modeling and peer feedback techniques integrated into the intervention, students likely gained metacognitive awareness, boosting their ability to self- regulate and improve. These findings are echoed in a meta-analysis that found a strong positive correlation between strategy use and writing quality across EFL (Bai et al., 2021).

5.2.3 *The interplay among easing anxiety and improving writing performance*

The third objective revealed an inverse relationship, meaning that as students' writing anxiety decreased, their writing performance increased. As Krashen (1982) suggests, emotional barriers such as anxiety block language input and impede performance.

This conclusion was supported by empirical research by Sabti et al. (2019), who found that EFL learners' capacity to properly organize their thoughts and apply writing rules was negatively impacted by high levels of writing anxiety. Kim and Kim (2022) also found that students' writing abilities were stronger when they had higher writing self- efficacy and

less anxiety. This cognitive- emotional interaction was shown to considerably improve the paragraph scores of the students. Students seem to have devoted more cognitive resources to writing assignments rather than stress management when structured procedures were available to them. Similarly Tsegaye and Haile (2022) found that Ethiopian secondary students with reduced anxiety were more likely to engage in pre- writing and revision behaviors directly associated with higher quality writing.

Overall, the study confirms that training writing strategies has both cognitive and affective advantages for the learners. The intervention addressed crippling emotional elements such as writing anxiety and improved paragraph writing performance by providing students with disciplined procedures. These findings are pedagogically significant, particularly in EFL environments where a lack of language exposure and instructional support exacerbates writing difficulties.

6 Conclusion

This quasi- experimental study showed that teaching pupils writing strategies greatly enhanced their ability to write paragraphs and decreased their writing anxiety in grade 11. After the session, the experimental group's anxiety levels significantly decreased, and they showed significant improvements in all aspects of writing paragraphs, including content, vocabulary, grammar, structure, and mechanics. Lower anxiety is linked to greater writing achievement, as evidenced by a substantial inverse relationship between writing anxiety and performance. The results demonstrated the simultaneous cognitive and affective benefits of strategy- based writing instruction, confirming its effectiveness in helping EFL learners enhance their skills and emotional confidence. Overall, the results support the idea that teaching students systematic writing strategies in high school English instruction can improve their academic writing outcomes in Ethiopian EFL classes by making them more capable, driven, and self- reliant writers.

7 Recommendation

Teachers should incorporate structured writing strategy training into routine classroom instruction using scaffold techniques such as think- aloud modeling and peer feedback to simultaneously address performance and anxiety.

Curriculum developers should redesign writing syllabi to integrate evidence- based strategy training manuals with measurable benchmark settings for teachers to equip them with pedagogical proficiency.

Researchers are encouraged to extend this work by replicating the quasi- experimental design in diverse contexts of age groups or languages, testing complementary interventions (digital writing aids), and evaluating the long- term retention of strategy training effects.

School administrators should allocate targeted resources to writing support programs, such as small- group workshops or peer mentoring, prioritizing students with high baseline anxiety levels identified through pre- intervention screening.

8 Authorship contribution

Lalisa Leta: Investigation, data checking, made formal analysis, and writing original draft.

Dr. Tekle Ferede and Dr. Teshale Tefera: Supervision, writing, reviewing and editing of the study.

9 Declaration

There was no conflict of an interest between the authors.

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