



The Interplay of Motivation Regulation Strategies, Integrated Writing Strategy Use, and Integrated Writing Performance of Iranian EFL Learners

Omid Mallahi*

Abstract

The ability to write from sources or integrated writing is considered an essential competency in academic and professional settings. This study investigated the possible interactions between motivation regulation strategies, integrated writing strategy use, and integrated reading-listening-to-write (RL2W) performance of Iranian EFL learners. A convenient sample of 31 learners from an EFL essay writing course participated in the study. The required data were collected based on the learners' performance in an integrated writing task and their responses to motivation regulation and integrated writing strategies questionnaires. The correlation analysis indicated a positive moderate relationship between motivation regulation strategy use and integrated writing performance of the learners, while integrated writing strategy use showed a low relationship with these constructs. Multiple regression analysis also indicated that among the subscales of motivation regulation strategy use in writing, interest enhancement had a significant contributory power to account for the integrated writing performance of the learners. MANOVA results also pointed to the superiority of high writing proficiency learners in motivation regulation strategy use compared to their less competent counterparts, but there were no significant differences between high and low groups in integrated writing strategy use, which confirmed the importance of quality of strategy use to mere quantity. As a subsidiary aim, the challenges learners encountered in the integrated writing process were identified by analyzing their responses to a reflection question and examination of their written essays. They were identified as linguistic, psycholinguistic, and academic skill problems.

Keywords: Integrated reading-listening-to-write, Writing strategy, Motivation regulation strategies, Writing challenges

The L2 composing process is important because it allows learners to systematically refine their ideas, enhance their writing skills, and gain confidence in expressing themselves in a second language. Nevertheless, composing a passage in L2 is considered a challenging task for many EFL learners. They must simultaneously pay attention to and orchestrate a variety of linguistic, cognitive, and affective resources while engaged in the act of writing and invest in proper levels of concentration and perseverance (Zabihi, 2018). In addition, it might be highly

* Review History:

Received: 16/10/2024

Revised: 20/01/2025

Accepted: 01/02/2025

¹ Associate Professor of TEFL, Department of English Language Teaching, University of Hormozgan, Iran;
o.mallahi@hormozgan.ac.ir

How to cite this article:

Mallahi, O. (2025). The Interplay of Motivation Regulation Strategies, Integrated Writing Strategy Use, and Integrated Writing Performance of Iranian EFL Learners. *Teaching English as a Second Language Quarterly* (Formerly *Journal of Teaching Language Skills*), 44(2), 81-100. <https://doi.org/10.22099/tesl.2025.51404.3335>



difficult for EFL learners to craft well-organized passages based on the information presented in various sources (i.e., Integrated Writing (IW)). As for completing the integrated tasks, learners need to be competent enough to solicit information from listening and reading texts and use proper discourse strategies to compose a coherent text (Cheong et al., 2019; Grabe & Zhang, 2013). These tasks necessitate that L2 writers cognitively engage with source materials to comprehend both written and auditory texts; discern, select, and synthesize concepts from those sources; systematically organize and articulate these ideas in written form while rephrasing the source language; and adhere to appropriate stylistic conventions for the citation of sources (Knoch & Sitajalabhorn, 2013). Integrated writing tasks/prompts are being more commonly utilized for the assessment of academic writing. The introduction of these tasks in academic environments addresses concerns about validity and authenticity, as writing that incorporates sources closely mirrors the writing tasks that individuals typically face in both academic and professional contexts (Golparvar & Khafi, 2021; Plakans, 2015).

Achieving proficiency in integrated writing is regarded as a crucial literacy skill for university students, as they are required to complete assignments or course projects that necessitate the consultation of external sources for information and the synthesis of that material into a coherent text (Chan & Yamashita, 2022; Cumming, et al., 2016; Knoch & Sitajalabhorn, 2013). Consequently, they need to be equipped with appropriate strategies to tackle the difficulties and craft well-written passages (Yang & Plakans, 2012). It is believed that researchers have not paid adequate attention to the significance of strategy-based instruction and the effects of strategy use on EFL learners' integrated writing performance (Machili et al., 2019). Despite the prevalence of integrated writing tasks in the assessment of academic writing, there is a need for further empirical investigation on the performance of EFL student writers in these tasks and the strategies they use to compose such texts.

In addition, although L2 researchers have extensively investigated motivation in applied linguistics, L2 writing motivation has received scant attention in EFL contexts (Lee et al., 2018; Yu et al., 2023; Wang et al., 2024). Since L2 writing is highly challenging and causes anxiety and frustration for EFL learners (Hyland, 2019), motivating students to write can influence the psycholinguistic mechanisms of learning like their interests, emotions, and mindset, can enhance their engagement with writing tasks and can increase their efforts to use the learning potentials of writing tasks and improve their own writing performance (Huang et al., 2024; Solhi et al., 2024; Tahmouresi & Papi, 2021). It is commonly accepted that academic motivation serves as energization and orchestration of learners' strategy use (Bai & Wang, 2023). In fact, reviewing the existing literature, Wang et al. (2024) posited that motivational factors may enhance positive emotions associated with L2 writing, which subsequently can influence the utilization of writing strategies. L2 writing motivation can also influence the strategy use and integrated writing performance of EFL learners (Zhao et al., 2023; Zhu et al., 2022).

In this study, motivation regulation strategies (MRS), as a key component of self-regulation (SR) learning theory (Zimmerman, 2011), are used. Motivation regulation strategies

are conceptualized as a range of actions or tactics employed by students to sustain or enhance their effort and persistence in a specific academic undertaking (Wolters, 1999). In the case of writing, this construct refers to specific thoughts and actions that students deliberately use to manage their emotions and to sustain their willingness and effort while engaged in complex and multifaceted writing tasks (Teng & Zhang, 2018; Teng et al., 2020). In fact, successful writers are believed to have acquired diverse strategies for regulating motivation in order to experience positive emotions, interest, and self-generated ideas that will guide them in achieving different literary objectives, such as enhancing their writing abilities and the quality of their written work (Boscolo & Hidi 2007). Some studies have supported the positive relationship between motivation regulation strategy use and students' independent writing performance (Csizér & Tankó, 2017; Huang et al., 2024; Teng & Zhang, 2016, 2018; Teng et al., 2020). However, to the best of our knowledge, few studies have investigated the role of motivation regulation strategies in the integrated writing performance of Iranian EFL learners. Therefore, in order to probe the affect-behavior link in the EFL integrated writing context, the present inquiry intends to investigate the contribution of motivation regulation strategies to the integrated reading-and-listening-to-write (RL2W) performance of Iranian EFL students.

Literature Review

Integrated writing is defined as the ability to produce texts that effectively and appropriately employ source evidence both conceptually—by understanding, synthesizing, and presenting the ideas from sources—and textually—by following the stylistic conventions for citing source information (Cumming et al., 2005). Three central operations influence the quality of L1 integrated or synthesis writing: (1) Selecting, which refers to identifying the relevant information and differentiating between the main and supporting ideas; (2) Connecting, which refers to joining ideas from various sources, and (3) Organizing which highlights the use of proper strategies and text organization patterns to form the structure of their own passages (Kirkpatrick & Klein, 2009; Machili et al., 2019). In the L2 contexts, these operations are combined with discourse synthesis mechanisms and two self-regulation strategies: (1) monitoring, which refers to writers' endeavors in identifying goals, creating plans, and making informed decisions, and (2) evaluating which entails writers' practice in examining their written output based on task requirements, relevance of ideas and their linguistic appropriateness (Plakans, 2015; Yang & Plakans, 2012).

Some studies have explored the discourse and textual features of integrated tasks. For example, Gebril and Plakans (2009) investigated discourse features (e.g., lexical sophistication, accuracy, fluency, and complexity), textual features (cohesion, content, or organization), source use (direct/indirect quotation or verbatim source use) and composing processes employed by EFL learners in integrated reading-writing tasks. The results indicated significant differences in these features among students with different writing proficiency levels. Differences were also observed in the amount of coursework on integrated writing, the borrowing from the

readings, and difficulties experienced by students while engaged in integrated writing. Plakans and Gebril (2017) examined the variations in organizational patterns and coherence in summaries based on reading and listening texts across different score levels. They discovered that these two discourse synthesis sub-processes significantly distinguished writing scores. In addition, Homayounzadeh et al. (2019) found that features of the source texts (i.e., topic, lexical and conceptual loads, and structural organization) can influence test takers' source comprehension, rate, and quality of borrowing and discourse synthesis strategies, reliance on the source material or crafting original ideas and connection and organization of ideas.

Nevertheless, L2 students encounter some challenges while engaged in integrated writing and have difficulty in applying cognitive and metacognitive skills needed for completing such tasks; the conceptual integration of information from various sources has been challenging, and the task of creating a new text that meets the task requirements has been linguistically and conceptually difficult (Boscolo et al., 2007). Similarly, Plakans and Gebril (2013) maintain that most L2 students encounter challenges regarding the comprehension and integration of source information. They suggested that courses on integrated writing should attempt to improve students' reading proficiency and knowledge of integrating source materials in writing. Wette (2019) also reported difficulties in understanding, assessing, and integrating information from the sources, meeting the linguistic and discursual requirements of paraphrasing and summarizing, delivering an effective authorial voice, and formatting and citation issues. Furthermore, Safari and Ahmadi (2024) indicated that L2 students' challenges in integrated writing tasks are related to task fulfillment demands, source use, structure and organization of ideas, and grammatical, lexical, and mechanical aspects of written texts. These researchers believe that students can address these demands by employing a range of writing strategies, and the variations in their application can account for the differences in the quality of their integrated writing performance.

In the same regard, some scholars have attempted to identify the processes L2 writers engage in and the nature of strategies they use while participating in integrated writing tasks. For instance, Plakans (2008) conducted a comparison of the processes L2 writers undergo in writing-only tasks and reading-to-write tasks using data from think-aloud protocols and interviews. The findings revealed that integrated tasks engaged writers in more effective use of discourse synthesis mechanisms involving repeated reading of the main texts to formulate ideas and incorporate them into a new text according to the logical organization of ideas in the original text, a process that is particularly noticeable in writers who are interested or experienced enough in writing. In a study by Plakans (2009), the approaches of six college students to a reading-to-write task were explored. The results demonstrated that students utilize discourse synthesis in various ways, employing four main strategies: selecting, which involves choosing main ideas from the source text; connecting, which focuses on establishing links between their response and the source text; organizing, which entails adjusting the structure of their writing with the source text; and monitoring, which includes evaluating the quality of their

performance and output. Moreover, Cheong et al. (2019) asserted that comprehension of multiple texts and application of discourse synthesis strategies can significantly predict the performance of secondary students in integrated writing. They also found that intertextual processing mediates the use of discourse synthesis strategies and integrated writing achievement.

Recent studies have sought to examine the impact of strategy instruction on integrated writing. For example, Machili et al. (2019) confirmed the positive impact of explicit strategy instruction on video-mediated integrated writing. The instructional approach included enhancing awareness of the targeted strategy, providing modeling and demonstrations, offering multiple opportunities for practice, evaluating the effectiveness of the strategy, and facilitating its transfer to new tasks. In another study, Zhu et al. (2020) found that instruction on discourse synthesis strategies comprising summarizing, quoting, and connecting skills could significantly predict integrated writing abilities in both Chinese and English. Daneshfard and Saadat (2023) also indicated that strategies-based instruction could significantly improve Iranian EFL learners' use of borrowing strategies in integrated reading-writing tasks compared to other discourse synthesis strategies.

Research has also investigated the significance of students' individual characteristics in integrated writing. For example, Payant et al. (2019) indicated that students' writing anxiety could influence the quality of their prewriting planning (i.e., factors like planning time, requirement and degree, and strategies like listing, outlining, webbing, freewriting and mixed) and performance on integrated writing tasks. Golparvar and Khafi (2021) revealed that writing self-efficacy can significantly predict integrated writing strategy use and performance of Iranian EFL learners. Furthermore, Bai and Wang (2023) found that motivational variables (i.e., self-efficacy beliefs and perceived task values) were positively correlated with self-regulation strategy use in integrated reading-to-write tasks.

On the whole, compared with other language skills, writing, due to its inherently complex nature, is more emotionally laden, which necessitates higher levels of engagement and motivation (Wang & Xu, 2023). Previous research on students' independent writing has highlighted its correlation with motivational and cognitive factors (Kormos, 2012); nevertheless, a comprehensive exploration of how these variables interact to influence the integrated writing performance of EFL learners is yet to be conducted (Cumming et al., 2016; Zhao et al., 2023). Therefore, the present study intends to continue this line of research by investigating the relationship between a set of motivation regulation strategies (namely, interest enhancement, mastery and performance self-talk, environment structuring, and emotional control), integrated writing strategy use (namely, discourse synthesis, self-regulation and test-wiseness strategies) and integrated reading-and-listening-to-write (RL2W) task performance of a group of Iranian EFL learners. As a subsidiary aim, the researcher intends to find the problems these learners face in their integrated writing performance and recommend some suggestions

for resolving them. More specifically, the present inquiry attempts to respond to these questions:

1. Are there any significant relationships between motivation regulation strategies and integrated writing strategy use and the performance of Iranian EFL learners?
2. Which aspect of motivation regulation strategies can predict the integrated reading-and-listening-to-write (RL2W) performance of Iranian EF learners?
3. Are there statistically significant differences in motivation regulation and integrated writing strategies between learners with high and low writing proficiency levels?
4. What problems do Iranian EFL learners face while engaging in the integrated writing task, and what solution can be provided to resolve them?

Method

Setting and Participants

This study was implemented in an essay writing course in an Iranian State University's Teaching English as a Foreign Language (TEFL) department. The participants were a convenient sample of 31 (19 females and 12 males) BA students of TEFL. They were native speakers of Persian, albeit from a variety of ethnic and educational backgrounds, with ages ranging from 20 to 24. Based on their results from an Oxford Placement test conducted for a different study within the department, the participants exhibited upper-intermediate to advanced levels of language proficiency. These students had previously passed two basic and advanced writing courses in which they became familiar with different techniques and methods of paragraph development (e.g., description, process, definition, comparison and contrast, and cause and effect). In the fourth semester, they are studying essay writing in which they are taught principles and conventions of expository, opinion, problem-solution, and argumentative essays and practice academic skills such as summarizing and paraphrasing source text information, which are in line with integrated writing tasks. Since the researcher used his students in the essay writing course to conduct the study, no third-party approval was solicited. However, the students were informed about the purpose and demands of the study orally, so they voluntarily participated in the data collection session.

Instruments

Integrated writing task

An integrated reading-listening-writing test task selected from *Barron's TOEFL iBT (2013, 14th edition) Model Test 7: Writing section* was used to measure the integrated writing performance of Iranian EFL learners. In order to avoid misunderstandings, the writing prompt and instructions about the expected response essay format and length were given to the learners on a printed sheet before the test. Initially, the learners had 3 minutes to read an approximately 350-word reading passage on problem-solving. Then, they listened to a two-minute lecture on the same topic but saw the issue from a different perspective. The students were allowed to take

notes during reading and listening, though the reading passage was accessible to them during the writing process. Afterward, they should have responded to a prompt requiring them to summarize the content of the lecture by relating the information to the reading passage. They had 20 minutes to write a 150 to 250-word response essay. After completing the essay, the researcher, using a reflection report technique, wrote a question on the board asking the students: "*What problems/difficulties did you encounter while writing the integrated essay?*" The students had 5 minutes to reflect upon their thoughts and actions during the writing process and write about the difficulties they experienced.

Integrated writing scoring rubric

In order to score the integrated writing, the multi-trait scale developed by Yang Plakans, 2009, 2010 and Plakans (2012) was used. This scale has been designed by modifying the TOEFL iBT integrated writing rubrics and assesses four dimensions of written texts with specific band descriptions: (1) Content which focuses on the accurate presentation of main points from the reading and listening sources and their proper connections; (2) Organization which refers to the coherence and cohesion in the presentation of ideas; (3) Language use which checks the accuracy of words, structures and mechanics; and (4) Verbatim source use considered as a chain of three or more words directly taken from the main texts. The total writing score for this scale was 20, with the top score of 5 for each dimension. The students' written texts were scored by two experienced writing instructors (including the researcher and one of his colleagues) in the ELT department. At first, these raters reviewed and discussed the criteria for evaluating the written passages and practiced scoring three essays together. After reaching an agreement, they scored each essay independently, and the average score was considered the final judgment of students' integrated writing performance. In addition, since the present study intended to compare the various writing proficiency levels' strategy use, the students receiving scores of 15 to 20 were categorized as the high writing proficiency group (N=14) and those receiving less than 15 as the low writing proficiency group (N=17).

Strategy inventory for integrated writing (SIIW)

A 24-item integrated writing strategy inventory designed by Yang and Plakans (2012) was used to capture the students' mental processes and behavioral activities in various stages of composing the integrated reading-listening-writing task. This inventory investigated discourse synthesis, self-regulation, and test-taking strategies with six factors: selecting (SEL), organizing (ORG), connecting (CON), monitoring (MON), evaluating (EVAL), and test-wisness (TW) strategies. The responses range from 1 (very rarely) to 5 (very often). The content validity of this instrument was established by researchers and academic writing instructors, and it enjoys the .87 Cronbach's reliability index.

Second language writing strategies for the motivational regulation questionnaire (L2WSMRQ)

The L2WSMRQ is a 23-item questionnaire developed to examine the strategies L2 students utilize for managing their motivation in the writing process (Teng & Zhang, 2016). Informed by self-regulation theory, this instrument intends to assess five sub-scales of

motivation regulation strategies in writing: interest enhancement (4 items), performance self-talk (4 items), mastery self-talk (5 items), emotional control (5 items) and environment structuring (5 items). Responses indicate the frequency of strategy use based on a 7-point Likert scale ranging from 1 (Not at all true of me) to 7 (very true of me). This instrument enjoys satisfactory psychometric indexes (construct and content validity and internal reliability) in the context of EFL writing (see Teng & Zhang, 2016, 2018). In the present study, the content and face validity of the instrument were confirmed by two university instructors with about 15 years of experience in researching and teaching academic writing. It also has .90 Cronbach's alpha reliability index, which makes it suitable for use in the Iranian EFL context.

Procedures of Data Collection and Analysis

The required data for the present study were collected from a single data collection session in the regular weekly schedule (spring semester of 2024 academic year) of an essay writing course in the ELT department of the University of Hormozgan, Iran. The students were informed about the objectives of the study and the kinds of tasks they had to perform in the previous week. In the data collection session, the researcher-instructor of the present study first administered the integrated writing task, and then the students responded to the integrated writing strategy inventory and motivation regulation strategies for writing the questionnaire. The students' written essays were analytically scored by two experienced raters, and the average score given was considered an index of their integrated writing performance ability. The writing scores and questionnaire responses were analyzed by SPSS version 23, and statistical tests such as correlation, multiple regression, and MANOVA were run to provide responses to the research questions. Furthermore, the students' comments regarding the problems and difficulties they encountered during the integrated writing process and composition of passages were analyzed to identify the challenges they faced and provide some practical solutions for resolving them.

Results

The present study investigated the association between motivation regulation strategies and integrated writing strategy use and the performance of Iranian EFL learners. The first question examined the correlation among the variables of the study. According to the results presented in Table 1, there was a moderately significant positive relationship between the extent of students' motivation regulation strategy use and their integrated writing performance ($r=.38$, $p<.05$). This finding indicates that learners who effectively use motivation regulation strategies tend to perform better in integrated writing tasks, which typically require synthesizing information from both reading and listening sources to produce coherent and structured written outputs. Nevertheless, there was a low correlation between integrated writing strategy use and the performance of Iranian EFL learners ($r=.13$, $p>.05$), which indicates that these students

THE INTERPLAY OF MOTIVATION REGULATION STRATEGIES

have not effectively benefited from self-regulation and discourse synthesis strategies while engaged in the integrated task.

Table 1

Correlation Coefficients for the Variables of the Study

Variables	Mean	SD	Integrated Writing Performance	Integrated Writing Strategies	Motivation Regulation Strategies
Integrated Writing Performance	14.87	3.66	1	.138	.388*
Integrated Writing Strategies	81.54	14.33	.138	1	.080
Motivation Regulation Strategies	83.16	12.22	.388*	.080	1

The second question examined which aspect of motivation regulation strategies (namely, interest enhancement, emotional control, performance and mastery self-talk, and environment structuring) can best predict the integrated writing performance of the students. In this regard, the multiple regression test was run (Table 2). According to the result, only the interest enhancement subscale ($B=.962$, $Beta=.509$, $t=2.618$, $p=.015<.05$) could significantly account for the integrated writing performance of the students. Interest enhancement is related to the students' affective predispositions and their situational interest in writing. In fact, the students might connect a writing task to their daily personal interests to sustain their motivation and efforts (e.g., *I associate the writing task with my real life to increase my writing interest*).

Table 2

Coefficients of Multiple Regressions

Model	Unstandardized Coefficients		Standardized Coefficients Beta	<i>t</i>	<i>Sig</i>	95% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
(Constant)	33.782	5.443		-.144	.887	-11.995	10.426
Interest enhancement	.962	.367	.509	2.618	.015	.205	1.719
Performance self-talk	.317	.343	.304	.924	.364	-.390	1.024
Mastery self-talk	.055	.278	.062	.198	.844	-.517	.627
Emotional regulation	-.008	.286	-.006	-.026	.979	-.598	.582
Environment restructuring	-.278	.327	-.240	-.848	.404	-.951	.396

a. Dependent Variable: Integrated Writing Performance

The third research question investigated whether there are any statistically significant differences between the high writing proficiency (N=14) and low writing proficiency group (N=17) students in the extent of integrated writing strategy use and their motivation regulation

THE INTERPLAY OF MOTIVATION REGULATION STRATEGIES

strategies. Multivariate Analysis of Variance (MANOVA) was run to compare these two groups of students in terms of the combined effect of the two dependent variables. The descriptive statistics accompanying this analysis (see Table 3) indicated that the low writing proficiency group ($M=82.29$, $SD=17.91$) had a higher mean score in the integrated writing strategy use compared to high writing proficiency students ($M=80.64$, $SD=.8.78$) however, this difference due to high dispersion of scores in the low writing group was rather negligible. In motivation regulation strategy use, the higher proficiency group ($M=88.92$, $SD=8.76$) outperformed their less competent counterparts ($M=78.41$, $SD=12.83$).

Table 3

Descriptive Statistics for High and Low Writing Proficiency Group Students in Integrated Writing Strategy Use and Motivation Regulation Strategies

	Writing Groups	Mean	Std. Deviation	N
Integrated Writing Strategy Use	High	80.64	8.78	14
	Low	82.29	17.91	17
	Total	81.54	14.33	31
Motivation Regulation Strategies	High	88.92	8.76	14
	Low	78.41	12.83	17
	Total	83.16	12.22	31

In addition, in order to see whether there were statistically significant differences between these two groups of students on the linear combination of motivation regulation and integrated writing strategy use as the dependent variables, the results of multivariate tests of significance were consulted (see Table 4). The results of this analysis showed that there was a statistically significant difference between high and low writing proficiency groups on the combined dependent variables, $F(2, 28)=.3.459$, $p=.045<.05$; *Wilks' Lambda*=.802; *Partial Eta Squared*=.198.

Table 4

Multivariate (MANOVA) Tests for High and Low Writing Proficiency Students

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.988	1.163E3 ^a	2.000	28.000	.000	.988
	Wilks' Lambda	.012	1.163E3 ^a	2.000	28.000	.000	.988
	Hotelling's Trace	83.079	1.163E3 ^a	2.000	28.000	.000	.988
	Roy's Largest Root	83.079	1.163E3 ^a	2.000	28.000	.000	.988
	Root						
Writing group	Pillai's Trace	.198	3.459 ^a	2.000	28.000	.045	.198
	Wilks' Lambda	.802	3.459 ^a	2.000	28.000	.045	.198
	Hotelling's Trace	.247	3.459 ^a	2.000	28.000	.045	.198
	Roy's Largest Root	.247	3.459 ^a	2.000	28.000	.045	.198
	Root						

a. Exact statistic

b. Design: Intercept + Writing group

THE INTERPLAY OF MOTIVATION REGULATION STRATEGIES

Furthermore, Tests of Between-Subjects Effects (Table 5) indicated no significant difference between high and low writing proficiency students in integrated writing strategy use ($F(1,29)=.099, p=.755>.05, \text{partial Eta Squared}=.003$), but there was a statistically significant difference between these learners in their motivation regulation strategies ($F(1,29)=6.774, p=.014<.05, \text{partial Eta Squared}=.189$) confirming the superiority of high writing proficiency students in regulating their affective resources while writing.

Table 5
Tests of Between-Subjects Effects for High and Low Writing Proficiency Students

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Integrated strategy	20.934 ^a	1	20.934	.099	.755	.003
	Motivation regulation	849.147 ^b	1	849.147	6.774	.014	.189
Intercept	Integrated strategy	203823.643	1	203823.643	962.568	.000	.971
	Motivation regulation	214989.147	1	214989.147	1.715E3	.000	.983
Writing group	Integrated strategy	20.934	1	20.934	.099	.755	.003
	Motivation regulation	849.147	1	849.147	6.774	.014	.189
Error	Integrated strategy	6140.744	29	211.750			
	Motivation regulation	3635.046	29	125.346			
Total	Integrated strategy	212316.000	31				
	Motivation regulation	218874.000	31				

a. R Squared = .003 (Adjusted R Squared = -.031)

b. R Squared =.189 (Adjusted R Squared = .161)

The final research question aimed at identifying the challenges Iranian EFL learners face while engaged in integrated reading-listening-writing task by examining their written texts and their personal responses solicited based on the open-ended question requiring them to reflect upon their performance and write the difficulties. The problems identified are categorized into three categories: linguistic, psycholinguistic, and academic skills, which are further elucidated with suggested solutions in Table 6.

Table 6
Difficulties Encountered by Students in Integrated Writing Tasks and Suggested Solutions

Problems	Subtypes and Solutions
Linguistic	1-Reading: Difficulty in understanding some vocabulary and structure and not being able to have a full comprehension of the passage; problem in distinguishing main ideas from details and difficulty in retrieving and connecting main ideas
	2-Listening: Challenges in following the chain of ideas in the lecture and thus using more content from the reading than the listening passage
	3-Writing: Struggles with organizing ideas, using appropriate academic style and structure due to limited grammatical and lexical knowledge

THE INTERPLAY OF MOTIVATION REGULATION STRATEGIES

Problems	Subtypes and Solutions
	<p>Solutions:</p> <ul style="list-style-type: none"> a. language proficiency enhancement b. further practice in reading and listening to academic texts by encouraging extensive reading and listening, c. regular opportunities for further practices to build familiarity and confidence and improve (integrated) writing accuracy, fluency and complexity, d. provision of detailed feedback on the written essays highlighting strengths and areas for further improvement
Psycholinguistic	<p>1-Cognitive load: Managing information from two different sources (reading and listening) and integrating information into a unified passage puts extra burden on learners' cognitive resources like their working memory and information processing capacity</p> <p>2- Concentration deficiency: Difficulty in maintaining attention and thus failing to comprehend and forgetting the main points of the lecture audio</p> <p>Solutions:</p> <ul style="list-style-type: none"> a. conducting strategies based instruction for different subskills, components and phases of integrated writing b. teaching students strategies to identify and differentiate between the main and supporting details in reading and listening passages c. teaching strategies for enhancing attentional control, d. building topical knowledge of specific subject matters e. modelling the process of integrating information from reading and listening sources <p>1-Unfamiliarity with the integrated RL2W genre: Lack of previous practice in integrated writing and inadequate knowledge about the requirements of this genre</p> <p>2-Unsystematic note-taking: Ineffective not taking during listening and reading which led to missing important points</p>
Academic Skills	<p>3-Deficient time management: Difficulty in allocating sufficient time for reading, listening, planning and writing within the given timeframe</p> <p>4-Inadequate paraphrasing and summarizing skills: Exact copying of information or use of strings of words from the original texts and incorporating them into their own sentences</p> <p>Solutions:</p> <ul style="list-style-type: none"> a. teaching the conventions and requirements of integrated tasks by providing examples of well-integrated essays and analyze them with students b. providing opportunities for summarizing and paraphrasing practices c. introducing different note-taking methods and practice them during lectures d. providing practice tasks with time limits to improve pacing and allocation of time for different aspects and phases of integrated writing

Discussion

The ability to compose a passage based on the information presented in external sources (i.e., integrated writing) is considered an important literacy skill in academic and professional settings. The present study investigated the status of integrated writing performance among a group of Iranian EFL learners. The correlation analysis indicated that there was a positive moderate relationship between motivation regulation strategies and integrated reading-listening-to-write performance of Iranian EFL learners. The justification for this finding lies in

the cognitive and affective demands of integrated writing tasks. Integrated writing involves several layers of cognitive processing: comprehension of the reading and listening materials, integration of information from different sources, planning and organizing thoughts, and actual text production. These tasks can be daunting and exhausting, especially for EFL learners who may struggle with language barriers, unfamiliar content, or the pressure to perform well. Learners who can regulate their motivation are more likely to persist through difficulties, stay focused, cultivate a positive mindset, manage their emotions, cope with cognitive and linguistic challenges, use effective strategies, and ultimately produce better quality work (Bai et al., 2024; Huang et al., 2024). Similarly, previous research has also demonstrated that L2 writing motivation is closely associated with students' engagement in integrated writing and helps them use more constructive strategies to manage their negative emotions during the writing process and enhance their performance (Huang et al., 2024; Solhi et al., 2023; Teng & Zhang, 2016, 2018; Zhu et al., 2022). Zhao et al. (2023) also maintain that some practitioners have designed and implemented interventions to enhance students' motivation and ideal L2 writer vision in integrated writing. These interventions involve providing explicit corrective feedback, encouraging reflection, facilitating group discussions, conducting interviews with successful writers, and setting short-term writing goals.

Furthermore, there was a low correlation between integrated writing strategy use and integrated reading-listening-writing performance of the learners. This low correlation suggests that although learners may be using these strategies, their use does not significantly enhance their performance in integrated reading-listening-to-write tasks. This finding might be due to the "recursive, strategic, and multi-dimensional" (Harris et al., 2011, p. 188) nature of writing, which makes it a highly complex activity for EFL learners. Contrary to this finding, some researchers have indicated that categories of integrated writing strategies such as self-regulation, discourse synthesis, source use, and test-wiseness strategies mediated by students' motivational and emotional resources could significantly predict their integrated writing performance (Cheong et al., 2019; Yang & Plakans, 2012). Empirical research has also indicated that the use of learning strategies does not have a direct correlation with improved academic performance. This suggests that it is crucial to apply these strategies cautiously and appropriately (Cai et al., 2022; Wang et al., 2021). Integrated reading-listening-to-write tasks are cognitively demanding. They require not just writing skills but also strong reading and listening comprehension, as well as the ability to synthesize information from multiple sources. If learners struggle with these foundational skills, their use of writing strategies might not significantly improve their performance. Since the students were unfamiliar with integrated tasks and were not accustomed to using specific strategies for such tasks, their strategy use might have been less effective. In fact, learners may report using strategies but might not apply them effectively, resulting in minimal impact on their performance.

This finding also confirms that other factors—such as language proficiency, motivation, cognitive abilities, or even the nature of the integrated tasks—play a more significant role in

determining students' performance in these complex tasks (Csizér & Tankó, 2017; Teng & Zhang, 2018; Zhang, 2016). Thus, it is necessary to consider the role of learners' linguistic knowledge and skills, higher-order thinking skills like evaluating, selecting, connecting and constructing, information processing mechanisms, discourse and rhetorical conventions, citation and synthesis rules, metacognition, self-regulation, affective characteristics, quality of pedagogical interventions and support, learning resources and social context of learning (i.e., contextual and cultural awareness) that might influence the learners' integrated writing performance (Cheong et al., 2019; Plakans & Gebril, 2013; Teng & Zhang, 2018). As a result, writing instructors must form an integrative perspective of the role of cognitive, emotional, and motivational factors and incorporate them in their process-oriented approaches for teaching writing from multiple sources with the goal of creating competent self-regulated writers (Papi & Khajavi, 2021).

The results of multiple regression analysis also indicated that among the subscales of motivation regulation strategy use in writing, interest enhancement has a statistically significant predictive power to account for the integrated writing performance of the learners. In fact, learners are more willing to engage in writing and put in the required efforts when they understand the value and utility of writing tasks and get interest and enjoyment in the writing process (Bai et al., 2023). This is in contrast with the previous studies, which reported the lowest use of interest enhancement compared with other motivation regulation strategies (Wang et al., 2021; Wolters & Benzon, 2013) and attributed this finding to the teacher-centered classroom environments, decontextualized teaching and demotivating and detailed error feedback that could not foster an interest in EFL writing and willingness to apply motivation regulation strategies in learning to write process. Interest enhancement refers to strategies that learners use to increase their personal and situational interest in the learning material or an educational task (Teng & Zhang, 2016). It is believed that students who use strategies to make a task more personally significant and situationally interesting persist longer while facing obstacles in academic tasks and sustain or increase their motivation compared with those who do not use interest enhancement strategies (Wolters & Mueller, 2010). In fact, when learners are genuinely interested in the task at hand and have a positive mindset about writing, they are more motivated to put in the effort required to produce higher-quality texts. This affective variable can lead to deeper engagement with the material, greater persistence in the face of challenges, further personal relevance to the task, higher attention to detail, and the use of more thoughtful and creative approaches to integrated writing, all of which contribute to better performance. Therefore, educators should focus on strategies that make writing tasks more interesting and personally relevant to the students. It is commonly thought that EFL learners cannot "develop a conscious, goal-oriented, and task-focused use of different learning strategies" without systematic strategy-based writing instruction (Teng et al., 2020, p. 22).

Furthermore, the finding that higher proficiency students use motivation regulation strategies more effectively suggests that proficient writers are not only better at the technical

THE INTERPLAY OF MOTIVATION REGULATION STRATEGIES

aspects of writing (such as grammar, vocabulary, and organization) but also excel at managing the psychological and motivational aspects of the writing process. This ability to regulate motivation likely enables them to persist through challenging tasks, maintain concentration, and stay committed to producing high-quality work. Previous studies have also found that writing proficiency is connected to the degree of control the learners have over their motivation to regulate their thinking, emotions, and efforts and deploy effective strategies to properly complete a task (Csizér & Tankó, 2017; Manchón et al., 2007). In the same vein, Teng and Zhang (2018) showed that proficient learners are typically more strategic and effective in managing their motivation, which correlates with better writing outcomes. Teng et al. (2020) also found that higher writing proficiency students use more motivation regulation strategies such as performance self-talk, emotion regulation, and interest enhancement and show more flexibility and maturity in developing these strategies, which could help them develop a sense of accomplishment, triggering their desire to sustain learning efforts, nurturing their passion and cultivating interest for writing in English.

Lower proficiency writers, on the other hand, lack the relevant declarative/procedural knowledge about learning strategies and have limited writing motivation and self-efficacy beliefs, which are essential for recruiting motivation regulation strategies in the writing process (Wang et al., 2021). They also show "limited cognitive capacity to balance language processing and strategy acquisition" (Huang et al., 2024, p. 13). While low-performing writers struggle with textual aspects of writing, such as word-level comprehension, their more competent counterparts establish a coherent mental representation of the information from multiple documents and think about the proper deployment of discourse synthesis and source use strategies such as comparing, contrasting, summarizing and paraphrasing (Cheong et al., 2018; Plakans & Gebril, 2013). Higher proficiency students have more experience with writing tasks and have developed a stronger sense of self-efficacy. This confidence enables them to engage more effectively in motivation regulation strategies, as they believe in their ability to succeed and see the value in investing effort. These students often have more cognitive resources available to devote to task management and strategy use as well. Nevertheless, Macaro (2019) noted that while proficient learners often use motivation regulation strategies more effectively, the availability of resources, such as instructional support and feedback, also plays a crucial role. This suggests that while proficient students are more adept at using these strategies, external factors can also influence their effectiveness.

The findings also indicated that learners face linguistic problems related to language skills and components, psycholinguistic challenges that put an extra burden on their cognitive and information processing resources, and academic skill deficiencies like unfamiliarity with the genre and ineffective use of time management and note-taking strategies while engaged in integrated writing. Similarly, Safari and Ahamdi (2024) found problems in most aspects of integrated writing, such as task fulfillment demands, source use strategies (e.g., understanding, comparing, contrasting, summarizing, paraphrasing, recalling, and synthesizing), organization

and structuring of ideas as well as grammatical, lexical and mechanical dimensions of integrated writing. The main problems the students encountered in the present study are related to their limited reading and listening comprehension abilities and ineffective transformation and integration of ideas from the sources. In fact, prior research has indicated that source text comprehension, by accounting for half of the variance in integrated writing test scores, can influence the integrated writing performance of the learners to a great extent (Chan & Yamashita, 2022; Homayounzadeh et al., 2019). The linguistic challenges students face may also lead to misunderstandings of source material, incorrect interpretations, and poorly structured written responses.

The examination of written texts also revealed that students have heavily depended on the information from a single source (i.e., the reading passage that was available to them) to write their essays, which confirms the finding that students have more difficulty processing information presented via aural medium than written texts (Plakans & Gebril, 2017). In addition, most of the students were unfamiliar with the academic conventions required in integrated tasks, such as proper citation, paraphrasing, and source analysis, and they were not competent enough in academic skills like note-taking. These skills are often underdeveloped since students have not received explicit instruction in integrated writing, which can hinder their ability to express their ideas clearly and accurately in writing (Safari & Ahamadi, 2024). Therefore, identifying the students' challenges and addressing them with appropriate interventions and feedback focused on each issue can assist them in having better performance (Darowski et al., 2022). Furthermore, providing strategies-based instruction with appropriate modeling and scaffolding on various sub-skills and components of integrated writing (e.g., note taking, main idea identification, paraphrasing, connecting and synthesizing ideas, etc.) and encouraging students to practice integrated tasks regularly can help them improve their cognitive flexibility and processing speed in writing.

Conclusion

The present study was a modest attempt to investigate the status of the integrated reading-listening-to-write performance of a group of Iranian EFLs. The findings indicated a positive correlation between motivation regulation strategy use and integrated writing performance of the learners but a low relationship between this construct and integrated writing strategy use. The justification for this finding lies in the cognitive and affective demands and multifaceted nature of integrated writing tasks, which make them daunting and exhausting, especially for EFL learners who may struggle with language barriers, unfamiliar content, or the pressure to perform in a new genre. Motivation regulation plays a crucial role here by helping learners manage the stress and effort required.

When students use strategies to boost their motivation, such as setting clear goals for their writing task and relating the task to their personal interests, they are more likely to overcome these challenges. These strategies reduce the likelihood of giving up or producing

substandard work due to a lack of persistence or frustration. Therefore, EFL learners might benefit from training and resources that help them develop motivation regulation skills. In addition, the lower status of integrated writing strategy use in the present study suggests that while strategies are important, they are not the sole determinants of success in complex integrated tasks. This finding highlights the need for a more comprehensive approach to language instruction that builds foundational skills, tailors strategy training to learners' needs, and considers other factors influencing performance.

Furthermore, the students encountered various challenges while engaged in the integrated writing tasks. Teachers should be equipped with strategies and interventions to help students overcome linguistic, psycholinguistic, and academic skills challenges, as well as methods for providing effective feedback on these aspects of writing. They can implement strategies-based instruction, but this instruction should be tailored to the students' proficiency levels and the specific demands of integrated tasks. Training should focus not only on the strategies themselves but also on how and when to use them effectively. In addition, writing tasks should be designed to scaffold learners' abilities gradually, allowing them to apply strategies effectively as they gain proficiency.

The present study suffers from limitations such as a small sample size and use of self-report data, which influence the reliability and generalizability of the findings. Utilization of qualitative measures such as interviews, diaries, reflection journals, and think-aloud protocols can provide rich and accurate information about the actual nature of the strategies used. Empirical studies can be conducted to examine the effects of explicit strategy instruction on various subskills and components of integrated writing such as comprehension and integration of ideas from multiple sources, discourse synthesis, self-regulation, note taking, and time management techniques. Future research can also explore how these strategies interact with other factors, such as anxiety, task complexity, and external feedback, to influence integrated writing outcomes.

Acknowledgments

We would like to thank the editorial team of TESL Quarterly for granting us the opportunity to submit and publish the current synthesis. We would also like to express our appreciation to the anonymous reviewers for their careful, detailed reading of our manuscript and their many insightful comments and suggestions.

Declaration of conflicting interests

The authors declare no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for this article's research, authorship, and/or publication.

References

- Bai, B., & Wang, J. (2023). Conceptualizing self-regulated reading-to-write in ESL/EFL writing and investigating its relationships to motivation and writing competence. *Language Teaching Research*, 27(5), 1193-1216. <https://doi.org/10.1177/1362168820971740>
- Bai, B., Guo, W., & Wang, C. (2024). Relationships between struggling EFL writers' motivation, self-regulated learning (SRL), and writing competence in Hong Kong primary schools. *Applied Linguistics Review*, 15(1), 135-159.
- Boscolo, P., & Hidi, S. (2007). The multiple meanings of motivation to write. In S. Hidi & P. Boscolo (Eds.), *Writing and motivation* (pp. 1-14). Oxford: Elsevier.
- Boscolo, P., Arfé, B., & Quarisa, M. (2007). Improving the quality of students' academic writing: An intervention study. *Studies in Higher Education*, 32 (4), 419-438. <https://doi.org/10.1080/03075070701476092>
- Cai, Y., Yang, M., & Yao, J. (2022). More is not always better: The nonlinear relationship between formative assessment strategies and reading achievement. *Assessment in Education: Principles Policy & Practice*, 29(6), 711-728.
- Chan, S., & Yamashita, J. (2022). Integrated writing and its correlates: A meta-analysis. *Assessing writing*, 54, 100662. <https://doi.org/10.1016/j.asw.2022.100662>
- Cheong, C. M., Zhu, X., Li, G. Y., & Wen, H. (2019). Effects of intertextual processing on L2 integrated writing. *Journal of Second Language Writing*, 44, 63-75. <https://doi.org/10.1016/j.jslw.2019.03.004>.
- Csizer, K. & Tankó, G. (2017). English majors' self-regulatory control strategy use in academic writing and its relation to L2 motivation. *Applied Linguistics*, 38(3), 386-404. <https://doi.org/10.1093/applin/amv033>
- Cumming, A., Kantor, R., Baba, K., Erdosy, U., Eouanzoui, K., & James, M. (2005). Differences in written discourse in independent and integrated prototype tasks for next-generation TOEFL. *Assessing Writing*, 10(1), 5-43. <https://doi.org/10.1016/j.asw.2005.02.001>
- Cumming, A., Lai, C., & Cho, H. (2016). Students' writing from sources for academic purposes: A synthesis of recent research. *Journal of English for Academic Purposes*, 23, 47-58. <https://doi.org/10.1016/j.jeap.2016.06.002>
- Daneshfard, F., & Saadat, M. (2023). The role of strategy use instruction in improving EFL learners' integrated writing ability and their affective state: A mixed-methods study. *Journal of Modern Research in English Language Studies*, 10(3), 117-1143. DOI: 10.30479/jmrels.2023.18047.2145
- Darowski, E. S., Helder, E., & Patson, N. D. (2022). Explicit writing instruction in synthesis: Combining in-class discussion and an online tutorial. *Teaching of Psychology*, 49(1), 57-63. doi:10.1177/0098628320979899
- Gebril, A., & Plakans, L. (2016). Source-based tasks in academic writing assessment: Lexical diversity, textual borrowing, and proficiency. *Journal of English for Academic Purposes*, 24. <https://doi.org/10.1016/j.jeap.2016.10.001>
- Golparvar, S. E., & Khafi, A. (2021). The role of L2 writing self-efficacy in integrated writing strategy use and performance. *Assessing Writing*, 47, 1-15. <https://doi.org/10.1016/j.asw.2020.100504>
- Grabe, W., & Zhang, C. (2013). Reading and writing together: A critical component of English for academic purposes teaching and learning. *TESOL Journal*, 4(1), 9-24. <https://doi.org/10.1002/tesj.65>

- Harris, K. R., Graham, S., MacArthur, C., Reid, R., & Mason, L. H. (2011). Self-regulated learning processes and children's writing. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 187–202). New York: Routledge.
- Homayounzadeh, M., Saadat, M., & Ahmadi, A. (2019). Investigating the effect of source characteristics on task comparability in integrated writing tasks. *Assessing Writing*, 41, 25–46. <https://doi.org/10.1016/j.asw.2019.05.003>.
- Huang, Z., Hu, X., Yu, X., & Deng, J. (2024). Profiles of EFL Learners' motivational regulation strategies and their nonlinear relationship to English writing performance in mainland China. *Metacognition and Learning*, 1-22. <https://doi.org/10.1007/s11409-024-09386-x>
- Hyland, K. (2019). *Second language writing* (2nd ed.). Cambridge University Press.
- Kirkpatrick, L. C., & Klein, P. D. (2009). Planning text structure as a way to improve students' writing from sources in the compare–contrast genre. *Learning and Instruction*, 19(4), 309–321. <https://doi.org/10.1016/j.learninstruc.2008.06.001>
- Knoch, U., & Sitajalabhorn, W. (2013). A closer look at integrated writing tasks: Towards a more focused definition for assessment purposes. *Assessing Writing*, 18(4), 300–308. <https://doi.org/10.1016/j.asw.2013.09.003>
- Kormos, J. (2012). The role of individual differences in L2 writing. *Journal of Second Language Writing*, 21(4), 390–403. <https://doi.org/10.1016/j.jslw.2012.09.003>
- Lee, I., Yu, S., & Liu, Y. (2018). Hong Kong secondary students' motivation in EFL writing: A survey study. *TESOL Quarterly*, 52, 176–187.
- Macaro, E. (2019). Language learner strategies and individual differences. In A. U. Chamot & V. Harris (Eds.), *Learning strategy instruction in the language classroom: Issues and implementation* (pp. 68–80). Multilingual Matters. <https://doi.org/10.21832/9781788923415-011>
- Machili, I., Papadopoulou, I., & Kantaridou, Z. (2019). Effect of strategy instruction on EFL students' video-mediated integrated writing performance. *Journal of Second Language Writing*, 48, 100708. <https://doi.org/10.1016/j.jslw.2019.100708>
- Manchón, R. M., Roca de Larios, J., & Murphy, L. (2007). A review of writing strategies: Focus on conceptualization and impact of first language. In A. D. Cohen & E. M. Macaro (Eds.), *Language learner strategies: Thirty years of research and practice* (pp. 229–250). Oxford: Oxford University Press
- Papi, M., & Khajavy, G. H. (2021). Motivational mechanisms underlying second language achievement: A regulatory focus perspective. *Language Learning*, 71(2), 537–572. <https://doi.org/10.1111/lang.12443>
- Payant, C., McDonough, K., Uludag, P., & Lindberg, R. (2019). Predicting integrated writing task performance: Source comprehension, prewriting planning, and individual differences. *Journal of English for Academic Purposes*, 40, 87–97. <https://doi.org/10.1016/j.jeap.2019.06.001>.
- Plakans, L. (2015). Integrated second language writing assessment: Why? What? How? *Language and Linguistics Compass*, 9(4), 159–167. <https://doi.org/10.1111/lnc3.12124>.
- Plakans, L. (2009). The role of reading strategies in integrated L2 writing tasks. *Journal of English for Academic Purposes*, 8(4), 252–266. <https://doi.org/10.1016/j.jeap.2009.05.001>
- Plakans, L. (2008). Comparing composing processes in writing-only and reading-to-write test tasks. *Assessing Writing*, 13(2), 111–129. <https://doi.org/10.1016/j.asw.2008.07.001>
- Plakans, L., & Gebril, A. (2013). Using multiple texts in an IW assessment: Source text used as a predictor of score. *Journal of Second Language Writing*, 22(3), 217–230. <https://doi.org/10.1016/j.jslw.2013.02.003>
- Plakans, L., & Gebril, A. (2017). Exploring the relationship of organization and connection with scores in integrated writing assessment. *Assessing Writing*, (31), 98–112.
- Safari, F., & Ahmadi, A. (2024). L2 learners' challenges in integrated writing tasks: implications for writing teachers and developers of diagnostic assessments. *The Language Learning Journal*, 1-18. <https://doi.org/10.1080/09571736.2023.2301604>

- Solhi, M., Derakhshan, A., Pawlak, M., & Ünsal-Görkemoglu, B. (2024). Exploring the interplay between EFL learners' L2 writing boredom, writing motivation, and boredom coping strategies. *Language Teaching Research*, <https://doi.org/10.1177/13621688241239178>
- Tahmouresi, S., & Papi, M. (2021). Future selves, enjoyment and anxiety as predictors of L2 writing achievement. *Journal of Second Language Writing*, 53, 1–14.
- Teng, L. S., & Zhang, L. J. (2016). Fostering strategic learning: The development and validation of the writing strategies for the motivational regulation questionnaire (WSMRQ). *Asia-Pacific Education Researcher*, 25, 123–134.
- Teng, L.S., & Zhang, L.J. (2018). Effects of motivational regulation strategies on writing performance: A mediation model of self-regulated learning of writing in English as a second/foreign language. *Metacognition and Learning*, 13, 213–240.
- Teng, L. S., & Zhang, L. J. (2020). Empowering learners in the second/foreign language classroom: Can self-regulated learning strategies-based writing instruction make a difference? *Journal of Second Language Writing*, 48, Article 100701. <https://doi.org/10.1016/j.jslw.2019.100701>
- Teng, L. S., Yuan, R. E., & Sun, P. P. (2020). A mixed-methods approach to investigating motivational regulation strategies and writing proficiency in English as a foreign language context. *System*, 88, Article 102182. <https://doi.org/10.1016/j.system.2019.102182>
- Wang, C., Cai, Y., Zhao, M., & You, X. (2021). Disentangling the relation between motivation regulation strategy and writing performance: A perspective of the Island Ridge curve. *Foreign Language World (Chinese)*, 3, 46–54.
- Wang, Y., & Xu, J. (2023). A latent profile analysis of L2 writing emotions and their relations to writing buoyancy, motivation, and proficiency. *Applied Linguistics Review*. <https://doi.org/10.1515/applirev-2022-0080>
- Wang, Y., Xu, J., Li, H., & Qi, J. (2024). The impact of future L2 selves and positive emotions on self-regulated writing strategies: A mixed method approach. *Language Teaching Research*, 1-22. <https://doi.org/10.1177/13621688241229534>.
- Wette, R. (2019). Embedded provision to develop source-based writing skills in a Year 1 health sciences course: How can the academic literacy developer contribute? *English for Specific Purposes*, 56, 35-49. <https://doi.org/10.1016/j.esp.2019.07.002>
- Wolters, C. A. (1999). The relation between high school students' motivational regulation and their use of learning strategies, effort, and classroom performance. *Learning and Individual Differences*, 11, 281–299.
- Wolters, C. A., & Benzon, M. B. (2013). Assessing and predicting college students' use of strategies for the self-regulation of motivation. *Journal of Experimental Education*, 81, 199–221.
- Wolters, C. A., & Mueller, S. A. (2010). Motivation regulation. In P. P. B. McGaw (Ed.), *International encyclopedia of education* (3rd ed., pp. 631–635). Oxford: Elsevier.
- Yang, H. C., & Plakans, L. (2012). Second language writers' strategy use and performance on an integrated reading-listening-writing task. *TESOL Quarterly*, 46(1), 80-103. <https://doi.org/10.1002/tesq.6>
- Yu, S., Jiang, L., & Zhou, N. (2023). The impact of L2 writing instructional approaches on student writing motivation and engagement. *Language Teaching Research*, 27, 958–973.
- Zabihi, R. (2018). The role of cognitive and affective factors in measures of L2 writing. *Written Communication*, 35(1), 32-57. <https://doi.org/10.1177/0741088317735836>
- Zhao, P., Zhu, X., Yao, Y., & Liao, X. (2023). Ideal L2 self, enjoyment, and strategy use in L2 integrated writing: A self-regulatory learning perspective. *System*, 115, 103033. <https://doi.org/10.1016/j.system.2023.103033>
- Zhu, X., Guan, Y., & Yao, Y. (2022). Transfer of ideal L1 and L2 writing selves and their impacts on L2 writing enjoyment and integrated writing performance. *Assessing Writing*, 54, 1–10.
- Zhu, X., Li, G. Y., Cheong, C. M., Yu, G., & Liao, X. (2020). Secondary school students' discourse synthesis performance on Chinese (L1) and English (L2) integrated writing assessments. *Reading and Writing*, 34(1), 49–78. <https://doi.org/10.1007/s11145-020-10065-x>.

THE INTERPLAY OF MOTIVATION REGULATION STRATEGIES

Zimmerman, B. J. (2011). Motivational sources and outcomes of self-regulated learning and performance. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 49–64). Mahwah: Erlbaum.