The Role of Motivational Self-Regulatory Strategies in EFL Learners' Involvement in Writing Skills: A Mixed-Methods Study

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Abstract

The present study, adopting a sequential mixed-methods design, chiefly aimed to determine the strongest predictors of EFL learners' involvement in the components of motivational self-regulatory strategies (MSRSs). In so doing, 154 English-major university students joined in the quantitative phase, and a pool of seven students was selected to participate in the qualitative phase of the study. A number of validated instruments were utilized to gather the relevant data. The Pearson moment-to-moment correlation, SEM, multiple regression, and a semi-structured interview method were used to analyze the data. The results showed a positive relationship between the components of MSRSs and involvement in writing skills. Among MSRSs components, performance self-talk, mastery self-talk, and environmental control made significant contributions to the prediction of involvement in writing skills. More specifically, the strongest predictor of involvement in writing skills in MSRSs components was performance self-talk. Following the inter-coder reliability, the responses elicited from the interviews regarding EFL learners' opinions about the role of MSRSs in increasing their involvement in writing skills delineated eight themes, including quiet talk, consistent working, interest, coping with distractions, class environment, motivating peers, regulating emotions, and teachers' help. In the end, the interplay between MSRSs components and involvement factors was discussed and several practical implications were proposed.

Keywords: Learner Engagement, Writing Skills, Self-regulation, Motivational Strategies, Self-talk

L2 writing, as a challenging and multifaceted activity, demands concentration, endeavor, and persistence while doing writing tasks (Han & Hiver, 2018). To enhance L2 writing performance, students need to engage in accomplishing the writing tasks (Christenson, Reschly, & Wylie, 2012). Indeed, the concept of involvement in the L2 learning domain implies the level of involvement, both cognitively and emotionally, in fulfilling the tasks (Schunk & Mullen, 2012). The existing literature acknowledges positive evidence for the association between learner involvement and academic achievement (Kelly, 2008; Khorsand & Modarresi, 2023). Meanwhile, language involvement is strongly related to the flow theory suggested by

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Csikszentmihalyi (1990), which is referred to as the highest level of involvement in motivated tasks (Dörnyei, 2019). As Derakhshan (2018) declared, successful learning in task-based instruction takes place when learners are totally engaged in a language task. Meanwhile, learners may have different perspectives and experiences with respect to involvement in doing the tasks, and it is most likely that some other psychological factors are pertinent to this concept, such as motivational intensity and learning strategies.

Indeed, motivation, as an effective variable for language success (Dörnyei, 2014), is considered a dynamic factor in second language learning that is prone to change and fluctuation (Dörnyei & Ryan, 2015). To be more specific, one of the key factors that help students keep engaged in the process of learning is self-regulated learning (SRL) (Ushioda, 2008). As clarified by Zimmerman (2011), SRL refers to the interactive influence of personal, behavioral, and environmental factors on educational success through which learners purposefully trigger, maintain, and fine-tune their cognition, emotions, and behaviors in order to attain their academic objectives. Meanwhile, motivational regulation is considered an essential part of SRL (Teng & Zhang, 2018), which commonly implies the cognition and behaviors by which the students purposefully try to increase their motivation for learning a new language (Zimmerman & Schunk, 2008).

Accordingly, previous studies have demonstrated solid evidence for the influence of motivational regulation on the writing development of EFL learners (e.g., Andrade & Evans, 2013; Manchón, 2009). Moreover, the motivational self-regulation factors are related to learner involvement while doing the learning tasks (Zimmerman, 2011). Indeed, according to Pintrich (2004), the interplay between motivational regulation and SRL strategies could foster the students' engagement in learning. In the Iranian context, Ghonsooly and Elahi Shirvan (2010) confirmed a positive association between MSRSs and both reading and writing skills. In her seminal work, Trowler (2018), who reviewed the related literature on student engagement, suggested that professionals in English language teaching attend to the notions of student engagement and self-involvement at higher educational levels.

However, according to Safdari and Maftoon (2016), the number of empirical research into motivational self-regulation is rare. This debate requires further investigation in the Iranian context to shed light on the relationship between MSRSs constructs and learner involvement in writing skills. Moreover, as noted by Plenty and Heubeck (2011), learners may be motivated and involved in one subject but demotivated and disengaged in the others; hence, it is necessary to examine these variables in specific courses like writing skills. As Shulin et al. (2019) suggested, despite the increase in research on second language writing over the past few decades, there has been a lack of focus on students' motivation and involvement in L2 writing classes across various instructional settings. In this respect, Akbari et al. (2016) suggest that

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writing primarily concerns itself with essay writing techniques, neglecting the students' involvement in a meaningful context.

Actually, the attention to MSRSs would help the students to increase their effort and sustain their motivation so that they can participate actively in writing tasks. Moreover, the regulation of motivation can contribute to the understanding of involvement dimensions in learning a second language. Indeed, taking the significance of involvement in learners' academic success (Fan & Xu, 2020; Lee, 2014), we need more knowledge of motivation and involvement in L2 writing courses to comprehend the students' perceptions of L2 writing fully and to create their immersion in the classroom. To be more exact, it seems that no research has investigated the association between MSRSs and the level of involvement in writing skills for English-major students. Therefore, the present study explores the extent to which motivational regulation predicts involvement in writing skills. In this study, task involvement or engagement is referred to as a condition of increased focus and participation, where involvement is evident not just in the cognitive aspect but also in the behavioral, social, and emotional factors (Philp & Duchesne, 2016).

Literature Review

Learner Involvement and Writing Skills

The previous literature indicates that there is a positive relationship between learner involvement and academic success (Aubrey et al., 2020; Finn & Zimmer, 2012). More specifically, a number of research in the L2 context acknowledge that task involvement is strongly linked to heightened focus and involvement in a learning activity (Aubrey, 2017; Farsad & Modarresi, 2023; Modarresi, 2021; Philp & Duchesne, 2016). In the same vein, according to Ellis (2018), learner engagement is effective in implementing task-based instructions since it triggers cognitive mechanisms such as noticing that assist learners in acquiring the L2 more efficiently. Furthermore, Bailey (2017) found that psycho-social factors underlying learner involvement, entailing emotions and self-regulation, can regulate attention and cognitive involvement in a writing task. In this respect, Piniel and Csizér (2015) developed a meaningful subsystem for examining the impact of involvement factors on L2 writing development. Within the context of Iran, the related research into involvement shows that it influences both the students' and the teachers' academic success (e.g., Fathi, et al., 2021; Modarresi, 2019; Shahian, et al., 2017). Brown and Heekyeong (2015) concluded that a key principle for teaching writing skills is to ensure that all aspects of writing processes are emphasized, utilizing interactive engagement. Moreover, the earlier investigation carried out by Bond et al. (2020) provided a solid rationale for learner involvement in writing by means of diverse resources. More recently, Modarresi and Nezakatgoo (2024) found a significant association between learner engagement in writing skills and students' imagined communities.

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Meanwhile, concerning the current involvement or engagement models, the relevant literature in L2 settings witnesses a number of models for involvement in language learning (see Handelsman et al., 2005). In this respect, Skinner and Belmont (1993) gathered data for designing an engagement or disengagement model with two major sub-constructs, entailing emotional and behavioral engagement; nevertheless, this model was left unexamined because of a lack of attention to cognitive engagement. Later, Fredricks, Blumenfeld, and Paris (2004) scrutinized the concept of engagement with its emotional, behavioral, and cognitive dimensions; however, they noticed overlapping constructs for behavioral and cognitive engagement. Similarly, Handelsman et al. (2005) designed an instrument for assessing learner involvement, named the student course engagement questionnaire, entailing four factors. Haneda (2008) investigated various ways in which university-level students of Japanese as a foreign language could become engaged in writing tasks, and concluded that using an activity-theoretical perspective can be helpful for identifying writing problems systematically. Following this, Redmond et al. (2018), having reviewed the related literature, suggested an online framework including a compilation of 24 metrics of involvement for higher education.

Motivational Regulation Strategies and Writing Skills

In general, the regulation of motivation deals with the learners' conscious effort to manage their motivation (Winne & Hadwin, 2008; Wolters, Pintrich, & Karabenick, 2005). Indeed, there is increasing evidence that the motivation and involvement of students are strongly connected to their learning and success in higher education (Kahu, 2008). In their seminal work, Dent and Koenka (2016) demonstrated that in the previous three decades, theories of self-regulated learning could strongly predict learners' task performance. In this regard, Bandura (1991) stated that self-regulated learners could motivate themselves and control their actions. However, the related literature acknowledges the need to conduct research on the effectiveness of self-regulated strategies in increasing and sustaining students' motivation (Dörnyei, 2005; Kormos & Csizér, 2014). To this end, a number of researchers provided empirical evidence for the positive relationship between self-regulation and motivation (e.g., Wilby, 2020; Wolters, 1999; Zimmerman & Schunk, 2008).

To be more specific, in recent years, studies of motivation and self-regulation have focused on writing task performance (Teng & Zhang, 2018). For example, Raoofi and Maroofi (2017), in their large-scale study, found that intrinsic values could strongly predict writing performance in both descriptive and argumentative essays. Moreover, the existing literature witnesses that motivational self-regulatory strategies significantly boost learners' level of engagement (Dörnyei, 2001; Zimmerman, 2011). Shulin et al. (2019) found learners were mostly motivated to write in English and involved in L2 writing courses. They identified three sketches of L2 learners' motivation and engagement: the motivated and engaged, the ambiguously motivated

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and engaged, and the ambivalently motivated and engaged L2 writers. In the most recent lines of inquiry, Wilby (2020) examined the association of writing task motivation and self-regulation with essay scores and found that learners improved significantly following the treatment phase. Just recently, Zhang (2024), in her study on self-regulation and engagement in speaking skills, found that Google Assistant could enhance a more engaging educational experience, possibly encouraging the development of self-regulation in accordance with the fundamental principles of oral proficiency interviews.

Taken together, the present study adopts the theoretical framework developed by Dörnyei (2005), who proposes that the basic hypothesis underpinning motivational self-regulation is the one based on which those students who can sustain their motivation are more successful than those who are not able to do so. This study hypothesizes that the components of MSRSs could predict involvement in writing for English-major students within the context of Iran. Furthermore, the study explores the influence of MSRSs on increasing involvement in writing skills from the perspectives of EFL learners. Consequently, this study examines the following research questions:

1) Is there any significant relationship between MSRSs and involvement in writing skills for English-major students?
2) Do motivational self-regulatory strategies predict involvement in writing skills?
3) What factors mainly emerge from the students' opinions about the role of MSRSs in increasing their involvement in writing skills?

Method

Research Design

This study utilized a sequential mixed-methods approach, including a quantitative dominant phase supplemented by a qualitative phase to enrich the investigation by means of a semi-structured interview technique (Johnson & Christensen, 2012).

Participants

A pool of 154 English-major BA students (females: n=89, 57.80%; males: n=65, 42.20%; Mean age= 21.93, SD=1.47) from Islamic Azad University of Quchan and Islamic Azad University of Mashhad joined in this research based on convenience sampling. The participants were in junior and senior years of their academic careers, and they had already passed the two-credit course of advanced writing. Additionally, the Oxford quick placement test (OPT) was administered to the participants, and those who were classified as intermediate level participated in this study. Finally, to fulfill the interview step of the study, seven students were selected based on purposive sampling. The information was collected until no additional information emerged.

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Instruments

The first instrument used to determine the students' language proficiency was OPT, consisting of 60 vocabulary and grammar items in a multiple-choice format which classifies the learners into different levels of overall language knowledge: elementary (1-14), pre-intermediate (15-29), intermediate (30-44), upper-intermediate (45-50), and advanced (51-60).

The second instrument used to measure MSRSs was Wolters' (1999) motivational self-regulation questionnaire with 25 items on a five-point Likert scale. The main constructs of the questionnaire include interest enhancement (α=.90), performance self-talk (α=.84), self-consequating (α =.87), mastery self-talk (α=.85), and environmental control (α=.73).

The third instrument employed to assess involvement in writing skills included engagement in writing inventory, designed and validated by Modarresi (2022), which is composed of 23 items on a five-point Likert scale with four underlying traits: behavioral, emotional, cognitive, and social constructs. The behavioral component is measured using five elements, the emotional component is measured by means of five elements, the cognitive component is measured using six items, and the social component is measured by means of six items. The overall reliability of the items, assessed by means of Cronbach's Alpha, was satisfactory (r=0.80).

The fourth instrument utilized to explore EFL learners' opinions about the role of MSRSs in increasing their involvement in writing skills entailed four open-ended questions, addressing their familiarity with the concept of involvement and motivational self-regulatory strategies, their experience of deploying such strategies while working on task-based activities, and the level of their cognitive and emotional involvement in a writing task. The students took part in a face-to-face interview format. Concerning the content validity of the questions, a pilot study was conducted in which four non-participating colleagues offered some comments on the questions, and the researcher made further revisions based on their feedback.

Data Collection Procedure

The relevant data were gathered from the participants in four major steps, lasted from April 2023 to June 2023. Firstly, the OPT was administered to the students to make them homogenized with respect to language proficiency. Secondly, he distributed MSRSs to the participants, and they were advised on how to respond to the items, and they were informed about the allocated time. The questionnaire includes five constructs which were explained to the students. To elaborate, interest enhancement mainly includes items about their desire to make the task amusing and enjoyable. Performance self-talk consists of items about their talk with themselves to reinforce their tendency to fulfill the task with an emphasis on performance goals like receiving good scores. Self-consequating revolves around their use of rewards offered by themselves to increase their tendency to accomplish academic assignments. Mastery self-

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talk includes items about their desire to gain mastery over task materials so as to strengthen their motivation. Environmental control includes items about their reported attempt to avoid distractions while doing learning tasks. Thirdly, the data on the extent to which the students could involve themselves in learning cognitively, emotionally, behaviorally, and socially were collected using the validated inventory of engagement in writing tasks.

Finally, the researcher collected the pertinent information from seven EFL learners by means of semi-structured interview questions. The interviews were conducted as a face-to-face interview format through which they could freely voice their opinions. Every interview ranged from 20 to 30 minutes in duration. The students were allowed to reply to the questions in either English or Persian language. The information was collected over a period of three weeks. Each of the interviews varied slightly in duration to guarantee that the responses from the interviewees achieved saturation.

Data Analysis

To find the answer to the first research question concerning the significant association between MSRSs and EFL learners' involvement in writing skills, the researcher opted for Pearson's moment-to-moment correlation. Following this, to provide the answer to the second research question, multiple regression was run to determine the strongest predictor of involvement in writing skills in MSRSs components. Finally, as for the last research question regarding the themes that emerged from the students' responses on the influence of MSRSs on enhancing involvement in writing skills, the researcher utilized "theme-based categorization" (Dörnyei, 2007, p. 245). The inter-rater reliability for coded transcripts was calculated. It is important to note that, as suggested by Krippendorff (2004), inter-coder reliability necessitates that both raters select the identical code for the same text unit.

Results

MSRSs and Involvement in Writing Skills

To address the first research question of the study, the researcher examined the assumptions of normality for the scores before running Pearson's moment-to-moment correlation. First, the scatter plot demonstrated that the association between the variables was positive since if we drew a line through the points, the direction extended from lower left to upper right (Brown & Rodgers, 2002). Following this, the assumption of the normality of data was assessed and because skewness and kurtosis fell within the range of +2 and -2 for the variables, there was no violation of the normality of data. The reports of the descriptive statistics indicated the means and standard deviations for MSRSs (M= 83.05; SD=9.82) and for involvement in writing skills (M= 78.87; SD=10.29).

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Table 1.

Results of correlation between the variables

		involvement in writing skills
MSRSs	Pearson Correlation	.736
	Sig. (2-tailed)	.000
	N	154

As shown in Table 1, the results indicated a significantly positive correlation between MSRSs and involvement in writing skills [r=.73, n=154, p<.05], with higher scores on MSRSs related to greater learner involvement in writing skills. Moreover, the effect size was large, according to the guidelines set forth by Cohen (1992).

MSRSs as Predictor of Involvement in Writing Skills

The researcher performed multiple regression to answer the second research question of the study regarding the strongest predictor of involvement in writing skills in MSRSs components, including interest enhancement, performance self-talk, consequating, mastery self-talk, and environmental control. At first, the assumption of multicollinearity was examined.
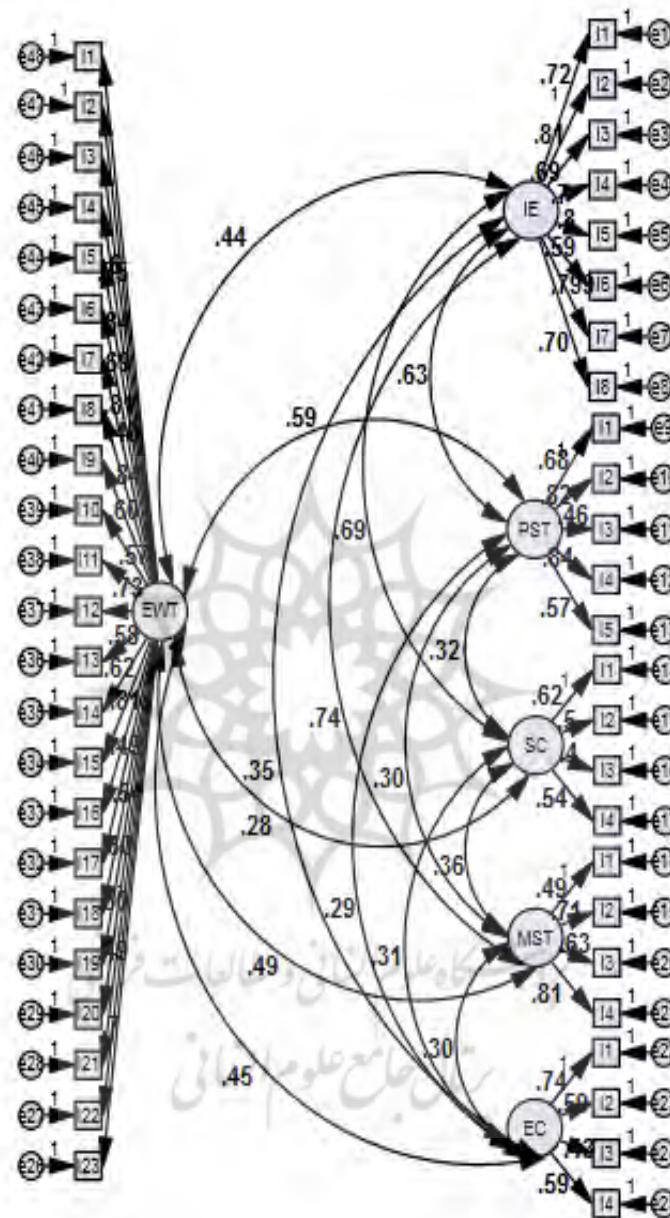
Figure 1. *Measurement model for involvement in writing skills*

As displayed in Figure 1, the independent variables showed some relationship with the dependent variable, i.e., involvement in writing skills (above .3 preferably). Regarding the association among factors, interest enhancement and involvement in writing skills had an acceptable correlation of .44; performance self-talk and involvement in writing skills had an acceptable correlation of .59; self-consequating and involvement in writing skills had a correlation of .28; mastery self-talk and involvement in writing skills had the acceptable

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correlation of .49; and environmental control and involvement in writing skills had the acceptable correlation of .45. The higher correlation was between performance self-talk and involvement in writing skills and the lower correlation was between self-consequating and involvement in writing skills.

Furthermore, the tolerance threshold for every independent variable was not less than .10, so no violation of the multicollinearity assumption was observed (Tabachnick & Fidell, 2011). This was also reinforced by the VIF value, which stayed significantly under the threshold of 10. Finally, outliers were checked by inspecting the Mahalanobis distances; the number of independent variables in this study was five and, following the guidelines by Tabachnick and Fidell (2001), the critical value should be less than 20.52, which was 18.32 in this study, so that there was no violation.

Following this, the researcher examined the value of R square, which showed how much of the variance in the scores on involvement in writing skills was explained by the model, and the value was .610. Presented as a percentage (i.e., multiplying by 100), the value displayed that the model, including scores on the five components, accounted for 61 percent of the variance in the scores. Then, an ANOVA test was performed to determine the statistical significance of the results. The findings from the ANOVA test verified that the model achieved statistical significance (F=24.43, Sig $p<.05$). Finally, to identify which variable(s) could contribute to the prediction of involvement in writing skills, the beta value was checked.

Table 2.

The predictors of involvement in writing skills in MSRSs components

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.84	6.34		1.70	.09
	interest enhancement	.33	.20	.15	1.65	.10
	performance self-talk	1.39	.32	.40	4.31	.00
	self-consequating	.28	.30	.07	.92	.35
	mastery self-talk	1.33	.30	.34	4.37	.00
	environmental control	.92	.28	.24	3.28	.00

As indicated in Table 2, the largest beta coefficient was .40, belonging to performance self-talk. In other words, this variable provided the greatest contribution to explaining involvement in writing skills, when the variance explained by all other variables in the model was controlled. The Beta values were also significant for mastery self-talk and environmental control but not for interest enhancement and self-consequating because the significant values for these variables were .10 and .35, respectively, which were more than .05; therefore, they made no significant contribution to the prediction of involvement in writing skills. Therefore, the

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strongest predictor of involvement in writing skills in MSRSs components was performance self-talk.

Results of the Thematic Analysis of the Interviews with the Students

As for the third research question of the study, after constructing four semi-structured open-ended questions, the researcher made use of the thematic analysis to report the findings. Several statements produced by the students, accompanied by the researcher's concise comments, are presented below:

The students feel that reflecting on their performance and putting in more effort to succeed in tasks encourage them to wholeheartedly engage in the writing assignments and to willingly dedicate more time to fulfill the tasks. Actually, such self-talk triggers their thinking processes and enhances their involvement in accomplishing the tasks. One of the interviewees mentioned:

> *I sense that I have become more attentive which can be because of speaking with myself. For this reason, I encourage myself to perform well in my assignments and exams.*

It appears that focusing on performance self-talk, as a motivational technique, immerses the students in a writing task. Additionally, the students embrace novel challenges in the tasks provided that they tend to exert more effort. By focusing on their learning rather than on their scores, they could become engaged more deeply in the tasks. One of the students mentioned:

> *I mostly push myself to write English essays, but, in practice, I feel that I am unable to write down my ideas and I think that I cannot sustain studying; however, recently, I try to warn myself not to quit.*

It could be implied that the students can deploy mastery self-talk as a motivational strategy to heighten their involvement in accomplishing the writing tasks. Actually, the focused attention devoted to the tasks and the act of self-talk are related to higher involvement, and this close linkage strengthens the relation between MSRSs and learner involvement. Furthermore, social factors positively influence the enhancement of involvement. Another student noted:

> *Sometimes, life problems occupy my mind and disengage me from my lessons, but I strive to handle the distractions. To tackle this, I think that the classroom setting as well as peers are significant as some of my classmates could motivate me to engage in the activities, while others might distract me from the learning process through their behavior and conversations.*

Actually, the findings derived from the students' replies reveal that those who are able to tackle issues and eliminate distractions can focus their efforts on the assignments and create improved writing. Actually, the classroom environment and the peers refer to environmental

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control as a construct of MSRSs, which is, in turn, closely tied to behavioral engagement. Focusing on the environmental control strategy may assist the students in enhancing their behavioral engagement while performing writing tasks.

Subsequently, regarding the inter-coder reliability, once the first coder assigned codes to the obtained information, he provided the second coder, who was a faculty member in applied linguistics, with the data to code. Afterward, the second coder categorized the replies by detecting the similarities and developed fairly comparable results with insignificant discrepancies. In this process, following the recommendations put forth by Campbell et al. (2013), the researcher initially calculated the ratio of coding agreements to the total of agreements and disagreements combined, and he attained satisfactory inter-rater reliability. To clarify, there were 11 recurring codes where at least one rater assigned a code, and among these, there were eight common themes in which both raters had applied the code. Thus, the inter-coder reliability for the commonalities yielded 72 percent dependability (8/11).

Table 3.

Some excerpts and the themes elicited from the students' responses

Participants	Excerpts	Themes
Interviewee A	I tell myself that I should write and revise more pieces of writing with more attention to fluency, accuracy and complexity.	quiet talk
Interviewee B	I try to work on writing mechanics and techniques since I can see my progress and this motivates me more to continue my studies.	consistent working
Interviewee C	I am fond of writing because it can involve me and I do not feel how the time is passing.	interest
Interviewee D	Writing is great and I write down the distracting thoughts to identify the causes and minimize them	coping with distractions
Interviewee E	The class atmosphere is warm and I have two classmates who are inspiring. They increase my motivation.	class environment, motivating peers
Interviewee F	I enjoy doing writing tasks and I believe that positive emotions can lead to thinking and writing creatively.	regulating emotions
Interviewee G	My teacher, who provides me with prompts and hints, is supportive and energetic.	teachers' help

As shown in Table 3, the common themes included: quiet talk, consistent working, interest, coping with distractions, class environment, motivating peers, regulating emotions, and teachers' help.

Discussion

The current study demonstrated that among MSRSs components, performance self-talk, mastery self-talk, and environmental control made significant contributions to the prediction of involvement in writing skills. Furthermore, the findings emerged from the students' perspectives of the influence of MSRSs on their involvement in writing generated eight themes,

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substantiating that the deployment of MSRSs, as a strategy use, is genuinely productive in increasing involvement in writing skills.

Considering the first and second research questions of the study, the findings revealed that self-talk in terms of performance self-talk and mastery self-talk made significant contributions to explaining involvement in writing skills. Since the components of involvement in writing skills consist of behavioral, cognitive, emotional, and social factors, the focus on self-talk is closely tied to the cognitive and emotional sides of involvement. The contents of the items in performance self-talk and mastery self-talk highlight the students' use of self-talk to make themselves work harder and pursue their studies more seriously; likewise, the contents of the cognitive component of involvement address the difficulties encountered by the students in accomplishing the writing assignments and reflect their ability to handle challenging tasks while becoming immersed in doing writing tasks. Furthermore, the contents of the emotional component relate to the feelings and sensations experienced by the learners during writing activities, so having positive self-talk to regulate motivation would increase the level of involvement in terms of emotional issues. Likewise, a considerable amount of literature supports the value of self-regulatory speech-for-self in learning (e.g., Vygotsky, 1962; Lidstone et al., 2010). Similarly, according to Racy and Morin (2024), experiencing self-talk is considered a completely normal and healthy act to control oneself, even in a conversational form. In the same vein, Yaghoubi and Farrokh (2022) found a significant association between the forms of private speech uttered by EFL students and their foreign language proficiency in the Iranian context; nevertheless, they found no significant correlation between the forms of private speech and the gender of the participants. Furthermore, the results of the present study are in line with the previous studies carried out by Berducci (2004) and Ebadi (2014), who concluded that self-talk can be regarded as a form of mediation in the cognitive regulation of learners while accomplishing learning tasks. The obtained results also revealed that environmental control made a significant contribution to the prediction of involvement in writing skills, and this factor is more related to the behavioral dimension of involvement in writing skills. Indeed, the contents of the environmental control factor highlight factors such as spending more time and getting rid of distractions through focused attention. Similarly, the behavioral component of involvement in writing skills concerns the amount of time learners dedicate to learning a new language and the extent to which they participate actively in accomplishing the task so that they can boost their energy. Indeed, the results offer empirical proof for the debate that MSRSs could interact with the cognitive, emotional, and behavioral variables to heighten involvement in writing skills which is in line with the earlier study by Teng and Zhang (2018) who found that motivation regulation and behavioral, cognitive, and personal factors all operate as determining factors for academic achievement. The findings are also in agreement with the preceding studies (e.g., Ghonsooly & Elahi Shirvan, 2010; Oxford

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et al., 2014) that suggest that the attention to regulation of motivation leads to successful learning through the interaction of contextual factors. This study is also in agreement with the findings by Wilby (2020) who confirmed that self-regulator strategies enhance writing skills.

Taking the third research question of the study into consideration, the results of the semi-structured interview with the students revealed that the components of MSRSs and involvement in writing skills are interdependent. They pinpointed that their self-talk and their surroundings are conducive to their motivation and these factors are related to the engagement components, including behavioral, emotional, cognitive, and social engagement. For example, that the students tell themselves to do well or cope with distractions highlights the effectiveness of MSRSs in behavioral engagement, or that the students push themselves to finish the tasks or gain as much knowledge as they can implies the association between MSRSs and cognitive engagement. The results of the study are in agreement with the study by Pishghadam et al. (2016) who concluded that writing evokes negative emotions such as boredom and hopelessness in Iranian learners and the reason can refer to cultural differences. In the same vein, the findings are in line with the study conducted by Mercer and Dörnyei (2020) who confirmed that the association of involvement with active participation, concentrated attention, and heightened motivation was significant and that there was a close connection between motivational strategies and engagement in learning. Likewise, the emerging themes in terms of codes highlight the role that performance self-talk and mastery self-talk can have in enhancing engagement, and this is aligned with the dual continuum model of motivation (Pishghadam et al., 2021) while participating in learning tasks. The present study substantiates the role that more recent teaching modes, such as prompt-based pedagogy or immersion programs, could play in increasing the level of involvement, which has already been supported by Rouhani and Modarresi (2023). In the same vein, Furrer et al. (2006) commented that involvement seems to be a key factor within a motivational framework because of its interaction with contextual variables. The results of the study indicate that instrumental motivation could increase involvement in learning since performance self-talk deals with achieving good grades by which the students remind themselves of the importance of getting good grades in order to practice harder by reflecting on attaining good grades, and in this way, they become more engaged in doing the task. In this regard, Safdari and Maftoon (2016) concluded that although nearly all of the students seek external incentives for motivation regulation, those students who achieve greater success work harder towards objectives such as gaining higher scores.

Furthermore, this study substantiates Vygotsky's (1978) sociocultural theory that emphasizes the equilibrium between emotion and cognition, whereas, as noted by (2013), the Western perspective has prioritized the cognitive aspect of this theory, mostly ignoring the emotional side. However, employing self-regulatory strategies to maintain positive and energetic self-talk could foster emotional involvement in writing skills. Indeed, MSRSs are

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most likely determining in increasing engagement in and decreasing disengagement from doing a writing task, and this is aligned with the earlier research conducted by Wu and Lie (2004), who concluded that self-regulation strategies increase involvement in writing skills.

Conclusion

The present study strengthens the conclusion that regulation of motivation would provide students with a new perspective on motivational self-regulatory factors. Indeed, the focus on the regulation of motivation in second language learning assists students to become actively involved in writing tasks provided that they could deploy MSRSs while accomplishing the writing tasks. The findings from this study highlight the potential usefulness of inner speech in the form of self-talk that can regulate motivation and foster involvement in learning, while demotivation would lead to disengagement from learning. Furthermore, it seems that self-talk is also linked to self-mediation through which students can mediate their own learning via talking to themselves, and such an active interaction is fruitful in increasing learning effort and involvement (Zimmerman & Schunk, 2008). The results of this research provide compelling evidence for embracing writing tasks as highly challenging activities that require higher mental loads, which are perceived as difficult but interesting by engaged students.

Pedagogically, EFL teachers are suggested to equip their students with motivational strategies that, in turn, immerse them in problem-solving tasks. They can provoke students' positive self-talk and emotions. Teachers are recommended to help students develop an awareness of MSRSs and instruct them on how to manage their thoughts, emotions, learning behaviors, and classroom environment. They can act as scaffolders for the students to make them exert more effort and maintain their involvement in learning writing skills. Moreover, they should acknowledge that positive emotional aspects can enhance students' persistence and boost their motivational intensity since cognition without emotion has nothing to do with effective learning development. Actually, EFL teachers can serve as instructional scaffolding, assisting students in becoming directly involved in the activities by identifying the reasons for their disengagement, whether behavioral, emotional, cognitive, or social. Finally, they can inspire the students to boost their interests, participation, and collaboration in accomplishing the writing tasks, with a greater focus on motivational regulation strategies.

Although the current study provides several intriguing insights, it has some limitations and also some suggestions for further research. First, the external generalizability of the findings should be reported with caution as the sample does not represent all English-major students. Second, this research can be broadened by exploring the association of MSRSs and involvement in writing skills with factors like writing self-efficacy, writing emotions, and writing proficiency in terms of complexity, accuracy, and fluency. Finally, regarding the association between MSRSs and learner involvement, a productive area for additional studies could explore

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the extent to which these factors are conducive to writing development taking the students' grit into consideration so that now the opportunity is available for involved researchers to conduct additional studies in this regard in order to create an all-encompassing depiction of self-regulatory strategies and involvement for the acquisition of a new language.

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