



Language Teaching Research Quarterly

2021, Vol. 21, 54–65



Investigating the Effect of Self-regulatory Strategy Development on Iranian EFL Learners' Metadiscoursal Writing Skill

Mehrnoosh Eslami*, Rahman Sahragard

Shiraz University, Iran

Received 16 August 2020

Accepted 14 January 2021

Abstract

The present research investigates the effect of self-regulatory strategy instruction on Iranian EFL learners' metadiscoursal writing abilities. To this purpose, 50 Iranian EFL intermediate learners were all native speakers of the Persian language learning the English language in an institute were selected via convenience random sampling. Self-regulated Strategies Intervention and Metadiscoursal writing pretest and post-test were the research instruments employed to collect the data. Because of the circumstance of Covid-19, the instructor made a new WhatsApp group apart from the virtual group, namely Adobe Connect, to make contact with the students. The learners were required to take a metadiscoursal writing pretest. After passing six sessions, intervention through self-regulated strategies was taught, and the participants were required to follow the guidelines. The instructor checked every single learner's progress. Ultimately, they took a post-test. The findings revealed that the self-regulatory strategy significantly impacted Iranian EFL learners' metadiscoursal writing skills. In conclusion, the results indicated that it could be suitable for teachers to gain more information regarding the self-regulated strategy and utilize it, where necessary, for its positive results.

Keywords: *Iranian EFL Learners, Metadiscoursal Writing Skill, Self-regulatory Strategy*

Introduction

Self-regulation is a psychological concept that many educational researchers have been interested in for a long time (Zimmerman, 1990). It is defined as self-generated thoughts and behaviour, planned and regularly adapted based on performance feedback to achieve self-set goals (Zimmerman, 1989). Setting goals, planning strategically, selecting and using strategies, self-monitoring one's effectiveness, and self-evaluation while learning and remembering

knowledge and academic skills are among the list of self-regulated learning (SRL) steps (Zimmerman, 2008). Correspondingly, Schunk and Zimmerman (1997) defined SRL as an approach that makes learners autonomous and causes them to become active and take responsibility for their learning and problem-solving. This process of making learners autonomous suggests that self-regulation is a skill that can be developed. There exists some evidence regarding the teachability of Self-regulation in a study by Palincsar and Brown (1984). They presented that self-regulatory processes and strategies are teachable, and teachers can train learners to develop such skills, which were in line with many other studies. (Perels, Gurtler, & Schmitz, 2005; Perry, Hutchinson, & Thauberger, 2007; Stoeger & Ziegler, 2008).

Some other studies indicate the importance of SRL in reading comprehension. For instance, Davis and Gray (2007) mentioned that self-regulated strategies help readers use their abilities to understand texts entirely. As Mulcahy-Ernt and Caverly (2009) empirically indicated, student' planning, decision-making, reflection, and evaluation of effective reading strategies can be boosted through self-regulatory reading strategies.

Writing skills are a medium for communication that shows language with signs and symbols. It is a skill that is often neglected until more advanced stages of language learning. However, it is necessary for those learners who intend to continue their English studies and majors other than English. It may also be necessary for other purposes, such as submitting papers for publication and conferences (Marandi, 2003).

Today, the use of metadiscourse markers in different texts has attracted many researchers. Metadiscourse is an area that deals with how the writers and speakers use language to interact with readers or listeners, and it is a widely used term within discourse analysis and language teaching. There are many definitions of metadiscourse; for example, Hyland (2005) says, as far as writers can engage with readers in predictable ways, metadiscourse is a key source in language. They can change and indicate their level of personality and represent themselves in ways they like, which helps any reader interpret and evaluate the text's information. Metadiscourse is, therefore, vital for positive communication. So, we can say that metadiscourse is a link between text and its context of use according to different expectations that readers have (Hyland, 2005). Crismore (1983) also defined metadiscourse as "Writing about writing, whatever does not refer to the subject matter being addressed" (p. 15). It is also used in writing to describe a word or phrase that comments on what is in the sentence, usually as an introductory adverbial clause or simply as the author's discoursing about the discourse; it is the author's intrusion into the discourse, either explicitly or non-explicitly, to direct the reader rather than inform them (Crismore, 1983). A more recent study by Abdelrahim and Abdelrahim (2020) highlighted the metadiscoursal features applicable for designing assessment instruments for evaluating voice, cohesion, and organization in argumentative writing, which can be used as an insight for metadiscourse as a target area for teaching and assessment of writing. They found out that many metadiscoursal features in students' argumentative writing are missed and need to be practised.

Statement of the Problem

Self-regulated learners are students who are actively participating in their learning, rather than solely relying on teachers, parents, or other external change agents to impart knowledge (Alexander, 1997). Teachers describe students who exhibit self-regulated behaviour as self-starters who persist on instructional tasks, prevail over problems, and react appropriately to task performance outcomes (Zimmerman, 1997). In contrast, students who lack self-regulation are more likely to exhibit impulsive behaviour, set lower academic goals, inaccurately assess their abilities, engage in self-criticism, experience limited academic success, and give up easily.

Studies on academic self-regulation learning started as a possible outgrowth of a psychological investigation of self-control among grownups and its development in children (Zimmerman, 2001). Most of the early self-regulation studies were therapeutic, which means researchers tried to teach the participants the skill of changing dysfunctional behaviour such as aggression, addiction, and other behavioural problems. However, nowadays, researchers apply self-regulatory principles to academic situations (Schunk, 2005).

In terms of academic achievement, self-regulation is the fusion of skill and will. Students with effective self-regulation have learned to plan, control, and evaluate their cognitive, motivation, and affective, behavioural, and contextual processes. They understand how to learn, self-motivate, and recognize their possibilities and limitations. As a function of this knowledge, they can control and regulate their learning processes in order to adjust to task objectives and context, to optimize their performance, and improve skills through practice (Artino, 2008; Miller & Bricman, 2004; Montalvo & Torres, 2004; Paris, 2004). Murcia (2001) claims that within the communicative framework of language teaching, the skill of writing enjoys a special status. Writing is a tool that different types of messages can be conveyed and can bring the readers and the writer closer to each other. Hence, as a communicative activity, attention must be paid to writing skills during the language learning course.

Chastein (1976) defines writing as a basic communication skill and a unique asset in learning a second language. Both writing aspects are important in the typical language class, and both can reinforce the other. Like those in the other three language skills, the learner adds writing goals that vary with the teacher. Some teachers almost entirely focus on the language itself, some on communication, and others on both the form and message.

Having the ability to compose grammatically and lexically acceptable essays is a sign of an EFL learner's language command. However, there exist difficulties in essay writing, especially narrative essays and stories. Such difficulties can result from different learning factors or teaching environments, and to overcome these problems; it is important to look for other tools that could improve students' writing skills. Hence, it necessitates the consideration of another method to be employed in teaching, which could be designing the curriculum of teaching students' metadiscourse writing.

Metadiscourse is an area, which has got attention in the last few decades. Having the ability to recognize metadiscourse markers in a text will help readers better understand the text and make the text easier to read. There are hundreds of standard articles that have been written in this area and across different registers. Metadiscourse markers are closely related to registers. They can

guide readers through the text easily. Many articles have focused on using metadiscourse markers in specific registers and sub-registers. However, a few studies on register variation of metadiscourse markers in general (Zhang, 2017) has done multidimensional analyses of written and spoken registers. Therefore, finding the appropriate methods to teach metadiscourse writing in the EFL context is of paramount importance. One of these methods is developing a self-regulatory strategy (SR) among learners. To this end, the current study was an attempt to investigate the effect of self-regulatory strategy instruction on Iranian EFL learners' metadiscourse writing skill.

Significance of the Study

In the domain of language teaching, the importance of understanding the dynamic interaction between personal and contextual factors that are involved in the process of learning English as a foreign language is undeniable (Albert, 2006; Dörnyei & Skehan, 2003). Therefore, SR plays an important role in psychological trends. Moreover, it is largely believed that learners' psychological factors play an important role in learning a language (Lightbown & Spada, 2013). It is also assumed that establishing a self-regulated learning environment in the classroom may optimize language learning and teaching.

The growing need for promoting SR has led to some educators, such as Dam (1995) and Ku (2009), to attach great importance to SR's necessity in learning. According to their findings, self-regulated students can succeed academically and are more motivated. Therefore, being aware of how to increase understanding of this notion and improve it will accelerate the learning process. Based on previous studies in this field, awareness of every individual's learning styles is a useful solution to ease learning and achieve the ultimate goal of language learning, which can communicate. Hence, it is highly recommended that every learner learns about his learning styles before starting the learning process. EFL teachers, learners, curriculum, and syllabus designers, as well as policymakers, can gain benefit from the current research.

Review of the Literature

Researchers have studied self-regulation and language skills in the past (e.g., Tseng, Dörnyei & Schmitt, 2006). Studies investigating the relationship between students' self-regulatory strategy and their success in several learning domains have indicated a positive relationship between these two constructs. For example, strategic learning has been proved to be effective in teaching vocabulary to students. (Pérez & Alvira, 2017; Moivaziri, 2018). A study by Sentürk (2016) found a relationship between Turkish EFL learners' self-regulated learning components and vocabulary knowledge in terms of their proficiency level and vocabulary depth and breadth. Her findings showed a strong positive relationship between self-regulation, vocabulary depth, and breath. In addition, Hardi (2014) sought to examine Hungarian primary school learners' vocabulary learning strategies in the framework of self-regulation. He used interviews and questionnaires, and classroom observations to find out the perceptions of their learning processes. The findings showed that students used different vocabulary learning strategies.

Nabavi Ekhlas and Shangarffam (2012), in another study, examined the relationship between self-regulated strategies and each language skills along with the overall proficiency of Iranian IELTS candidates. There was a direct positive relationship between self-regulated behavioural strategies and language skills.

Additionally, Zarei and Hatami (2012) studied the relationship between Iranian EFL college students' self-regulated learning and their vocabulary knowledge and reading skill. The intended tests and questionnaires found different findings in the relationship between the various self-regulated learning elements. Moreover, it was concluded that no significant relationship was found between self-regulated components and vocabulary knowledge. The use of self-regulatory strategy and other types of strategies such as metacognitive ones was also investigated in a study by Amini, Anhari & Ghasemzadeh (2020). Their findings support the positive effect of self-regulatory engagements in reading development. Among the studies done on writing skills, Di Zhang (2020) studied paraphrasing as a useful one for academic writing and avoiding plagiarism. To realize the self-regulatory strategies in which elementary students of a school in the United States use while writing, Varier et al. (2020) analyzed their responses on a survey to see their self-regulatory behaviour while writing. Their results revealed that strategies like reviewing, brainstorming, and help-seeking– strategies were useful to improve their writing performance. Bai (2019) also studied motivation and its effect on SRL strategy use. It has been indicated that SLR varies among students while writing with different motivating factors.

Reviewing the literature also shows that some research has demonstrated gender differences in using self-regulated learning strategies in their learning. For instance, Lee (2002) proposed three main gender differences in SLR strategies from literature. Likewise, in another study, Young and McSporran (2001) found other gender differences regarding self-regulation, motivation, strategies learning, and skill learning. Fatemipour and Najafgholikhan (2015) studied the effect of self-regulated strategy on the language component of vocabulary among Iranian EFL students and the role of gender in such cases. Sixty Iranian intermediate EFL learners participated in the study. The experiment was taught using additional training in using a self-regulated strategy on vocabulary. As revealed, self-regulated strategies had a significant positive effect on the learners' vocabulary learning, while no difference was found among genders in using such strategies.

This effect of the self-regulated strategy was investigated in academic areas and other non-academic ones. For instance, Anthonysamy et al. (2020) and Li, Ye, Tang, Zhou, and Hu (2018) investigated the issue, and results indicated that self-regulated strategy correlates positively with non-academic outcomes in digital learning within a blended learning environment. Due to the world's circumstances (Covid-19) and online and virtual learning wherever possible in both standardized e-learning situations or non-standard ones, the need to develop a self-regulatory strategy in students is recommended. (Greene et al., 2018). This strategy has also been useful in reducing the student's amount of stress. In a study by de la Fuente (2019), it has been revealed that having higher levels of self-regulation in learners can cause positive emotion in them, hence, helping them in handling negative emotions. In the same vein, Pawlak, Csizér and Soto (2020)

searched for self-regulatory strategy use for students who have study abroad experiences indicating a positive relationship between the two.

Studies on self-regulatory strategy were also done to examine the relationship between students' self-regulation and their language learning strategies. Erdogan (2018) showed a medium positive correlation between these constructs. Moreover, it has been indicated that achievement and grade level were influential in student self-regulation and their language learning strategies.

There is little research on the effect of self-regulatory strategy on English language learners' writing skills, specifically in Iran and particularly during forced online leanings due to the spread of Covid-19 around the world. More precisely, the literature does not report empirical studies on self-regulatory strategy's efficiency in learners' metadiscoursal writing skills in an EFL context. Hence, the present study tried to fill the gap in the literature on strategic learning. If the students could benefit from this strategy to improve their metadiscoursal writing skill, the model can be recommended in other contexts.

Method

Participants

This study's participants included 50 Iranian intermediate EFL learners studying the English language in an institute in Shiraz, Iran. Due to the recent COVID-19 restrictions, all the classes were held online. The participants' age range was 19 to 26, with a mean age of 22.5. The researcher selected the learners through convenience random sampling from among intermediate learners, native Persian speakers.

Instruments

Self-regulated Strategies Intervention

The self-regulation strategies intervention was selected from Graham and Harris (2005b). They developed six stages for self-regulation development called SRSD, which allowed students to learn and apply a reading strategy (Graham & Harris, 2005b). However, these stages were intended to be used as a beginning framework for instruction and can be reordered, combined, modified, and repeated based on the students' needs.

Metadiscoursal Writing Pretest and Posttest

As pretest and post-test, two tests were conducted by the researcher to measure the participants' metacognitive writing knowledge. It included three topics from which students could choose, and then they were given 40 minutes to write a piece of metadiscoursal writing about it. The ACT Aspire assessment rubric for writing was used to score the participants' writings during this stage. In addition, their writing was rated by two raters.

Procedure

For the current study, a pretest-posttest research design was used. To this end, first, 50 Iranian EFL male and female learners of an institute in Iran participating in virtual courses were

selected. They were then divided into one experimental and one control group. To this end, the instructor taught both groups through online teaching. She also made a WhatsApp group to contact the learners of each group. The learners were supposed to follow the instructions. Then, they took a metadiscoursal writing pretest. The participants were then taught via self-regulated strategies, intervention for six sessions. Learner's progress was looked upon until the students were ready to participate in a post-test. The data was then analyzed through paired samples t-test.

Results

Before comparing the two groups' performance, it is essential to check the parametric test hypothesis before selecting the appropriate statistical test. According to Field (2013), hypotheses using parametric statistical tests include the normality of the distribution, the uniformity of the variance, and the interval variable's independence and measurement. The kurtosis and skewness values of each group and their corresponding z-scores are calculated to test the first hypothesis.

Table 1.

Skewness and kurtosis values

	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
Experimental	-.112	.328	-.624	.749
Control	.165	.314	-.759	.616

Regarding the experimental group, the z-score of skewness was 0.35, and the kurtosis z-score was 0.909. The control group's z-score of skewness was 0.46, and their kurtosis z-score was 1.009. Comparing the z-scores against the known values for the normal distribution indicates that a value greater than 1.86 is significant at $p < .05$. As evident, none of the z-scores was higher than 1.86, which indicates a normal distribution of the scores. Furthermore, to examine the second assumption, namely, the homogeneity of variances, Levene's test was run. Table 2 presents the results.

Table 2.

Levene's test results

	Levene..Statistic	df1	df2	Sig.
Based on Mean	.084	1	48	.722
Based on Median	.078	1	48	.719
Based on Median and with adjusted df	.078	1	46	.719
Based on trimmed mean	.082	1	48	.720

According to Table 2, Levene's test is non-significant at $p \leq .05$. Thus, it is concluded that the difference between the groups' variances is not significant and is roughly equal, and therefore the assumption of homogeneity of variances is met. Since the parametric test's main assumptions were met, the independent sample t-test could be run. The descriptive statistics of the two groups were calculated and presented.

Table 3.
The descriptive analysis of the experimental and control groups

	N	Min.	Max.	M	SD
EG	25	68	78	73	2.56
CG	25	65	73	69	2.28

Table 4. illustrates the results of the independent samples t-test for two groups.

Table 4.
Independent samples t-test for two groups

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of Difference	
								Lower	Upper
Equal variances assumed	.772	.382	.077	48	.939	.067	.866	-1.649	1.782
Equal variances not assumed			.077	46.905	.939	.067	.866	-1.649	1.782

As shown in Table 4. since Levene's Test result is significant, we observed $p < 0.05$, then we would use the "Equal variances assumed" output. In the t-test for Equality of Means, since $p < .939$ is less than our chosen significance level $\alpha = 0.05$, it is concluded that there is a significant difference between the two groups' performance. That is, the experimental group outperformed their counterparts in the control group verifying the effect of self-regulatory strategy instruction on Iranian EFL learners' metadiscourse writing skill.

Discussion

Today, some EFL/ESL teachers might pave the way for the learners to practice language skills and self-regulating behaviours. Also, the learners may get feedback during the language learning process, which might encourage them to become independent in driving their learning. Another effective element in enhancing the learners' self-regulated learning is the learning environment. According to Zimmerman (2002), the role of environment in learners' self-regulated learning proves that the environmental factor affects bidirectional interaction with learners' personal and behavioural features. This interaction with the environment leads to a cyclical development and adaptation of learners' self-regulation. Therefore, the environment can be effectively applied to enhance students' self-regulation.

This study's findings were in line with several other studies conducted in this regard. For instance, Graham, Harris, and Adkin (2015) investigated the implementation of self-regulatory strategy in story writing in which the results showed a significant effect of the strategy on the skill. In another study, Bakry and Alsamadani (2014) studied the impact of self-regulatory strategy on writing persuasive essays. They indicated that the strategy was effective in writing

persuasive essays, and the most predictable skills to be improved were creating ideas, sentence structure, paragraph writing, organization, and vocabulary. Self-regulatory strategy development on students' descriptive writing and reflective thinking was also examined by Samanian and Roohani (2018), indicating the same result.

Some more recent studies conducted in the same area were also indicating the influence of Self-regulatory strategy on writing skill, although not specifically on metadiscourse writing. Hashey, Miller and Foxworth (2020), for instance, investigated the effect of self-regulated strategy development with another design on writing skill and indicated that it is a support for all writers in today's classrooms. Mitchell, McMillan & Rabbani (2019) have also investigated writing self-efficacy and writing self-regulatory behaviours in undergraduate writing but from nursing students and not foreign or second language learners. However, their results indicated the important role of self-regulatory behaviours in their writing.

Self-regulatory strategy can act as a layout and projection for the EFL learners to write better. It helps them go through the steps of discourse writing more easily. In other words, it guides them in rarely missing or forgetting the steps. Moreover, this self-regulatory strategy's advantage goes beyond learners and helps teachers run their classes in a more learner-centred manner given that learners' needs and requirements are the goals of the class and the focus is to make them responsible and enthusiastic in writing skill. Hence, students become more autonomous, responsible, and independent as far as they are in the process of practising this skill.

Additionally, the present study's findings support Bandura's (1986) concept of the agency, which suggests that while learners try to be agents, they are aware of the process they go through and can control and adjust it. Moreover, Yun (2008) mentioned that reflecting on our works improves learners' metacognition knowledge about what they are doing at each stage. As such, a self-regulatory strategy can increase students' reflective thinking.

Conclusion

As a result of the literature and the present study's findings, it is recommended that the teachers study and practice more on the self-regulated strategy and its positive consequences. Although it is not currently applied in EFL classrooms, this strategy must be further investigated and clarified in different contexts. In-service training sessions can be a good place for experienced and newly hired teachers to get to know this term and apply it to improve their learners' metacognitive writing skills. Additionally, institutions of English Language and other EFL centres can integrate this strategy into their curriculum, providing their learners with a chance to develop their metacognitive writing. This strategy can also be applied at universities, particularly for those who want to teach in the future. Lastly, it is recommended that further research be conducted on the impact of self-regulated strategy development in teaching other languages.

References

- Abdelrahim, A. A., & Abdelrahim, M. A. (2020). Teaching and Assessing Metadiscourse Features in Argumentative Writing: A Professional Development Training for EFL Teachers. *International Journal of Applied Linguistics*, 30(1), 70-91.

- Abednia, A., Hovassapian, A., Teimournezhad, S., & Ghanbari, N. (2013). Reflective journal writing: Exploring in-service EFL teachers' perceptions. *System*, *41*(3), 503-514.
- Akbari, R. (2007). Reflections on reflection: A critical appraisal of reflective practices in L2 teacher education. *System*, *35*(2), 192-207.
- Amini, D., Anhari, M. H., & Ghasemzadeh, A. (2020). Modeling the relationship between metacognitive strategy awareness, self-regulation and reading proficiency of Iranian EFL learners. *Cogent Education*, *7*(01), 1787018.
- Andrusyszyn, M. A., & Davie, L. (1997). Facilitating reflection through interactive journal writing in an online graduate course: A qualitative study. *Journal of Distance Education*, *12*(1), 103-126.
- Aneiro, S. (1989). The influence of receiver apprehension in foreign language learners on listening comprehension among Puerto Rican college students. Unpublished doctoral dissertation. New York, NY: New York University.
- Anthony, L., Koo, A., & Hew, S. (2020). Self-regulated learning strategies and non-academic outcomes in higher education blended learning environments: A one-decade review. *Educ Inf Technol*, *25*, 3677-3704. <https://doi.org/10.1007/s10639-020-10134-2>
- Bai, B., & Wenjuan, G. (2019). Motivation and self-regulated strategy use: Relationships to primary school students' English writing in Hong Kong. *Language teaching journal*, <https://doi.org/10.1177/1362168819859921>.
- Barkhuizen, G. (2011). Narrative knowledging in TESOL. *TESOL Quarterly*, *45*(3), 391-414.
- Bakery, M. S., & Alsamadani, H. A. (2014). Improving the persuasive essay writing of students of Arabic as a foreign language: Effect of self-regulation strategy development. *Procedia-Social and Behavioral*, *182*, 89-97.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Greene, J. A., Copeland, D. Z., Deekens, V. M., & Yu, S. B. (2018). Beyond knowledge: Examining digital literacy's role in the acquisition of understanding in science. *Computers and Education*, *117*, 141-159. <https://doi.org/10.1016/j.compedu.2017.10.003>
- de la Fuente, J., Martínez-Vicente, J. M., Peralta-Sánchez, F. J., Garzón-Umerenkova, A., Vera, M. M., and Paoloni, P. (2019). Applying the SRL vs ERL theory to the knowledge of achievement emotions in undergraduate university students. *Front. Psychol.* *10*, 2070. doi: 10.3389/fpsyg.2019.02070
- Di Zhang, E. An investigation of novice ESL writers' cognitive processes and strategy use of paraphrasing. *Lang Test Asia* *10*, 9 (2020). <https://doi.org/10.1186/s40468-020-00104-3>
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston, MA: Houghton Mifflin.
- Erdogan, T. (2018). The Investigation of Self-regulation and Language Learning Strategies. *Universal Journal of Educational Research*, *6*. 10.13189/ujer.2018.060708.
- Graham, S., & Harris, K. R. (2005). *Writing better: Effective strategies for teaching students with learning difficulties*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Griffith, B., & Frieden, G. (2000). Facilitating reflective thinking. *Counselor Education & Supervision*, *40*(2), 82-92.
- Hashey, A. I., Miller, K. M., & Foxworth, L. L. (2020). Combining Universal Design for Learning and Self-Regulated Strategy Development to Bolster Writing Instruction. *Intervention in School and Clinic*, 1053451220910733.
- Hawkins, M., & Norton, B. (2009). Critical language teacher education. In A. Burns & J. Richards (Eds.), *Cambridge guide to second language teacher education* (pp. 30-39). Cambridge, MA: Cambridge University Press.

- Karimvand, P., Hessamy, G., & Hemmati, F. (2014). The place of postmethod pedagogy in teacher education programs in EFL language centers of Iran. *Iranian Journal of Applied Linguistics (IJAL)*, 17(2), 59-91.
- King, P., & Kitchener, K. (1994). *Developing Reflective Judgment: Understanding and Promoting Intellectual Growth and Critical Thinking in Adolescents and Adults*. San Francisco, CA: Jossey-Bass.
- Kumaravadivelu, B. (2003). *Beyond Methods: Macro Strategies for Language Teaching*. London: Yale University Press.
- Kumaravadivelu, B. (2006). *Understanding Language Teaching: From Method to Post Method*. Mahwah, NJ: Lawrence Erlbaum.
- Li, J., Ye, H., Tang, Y., Zhou, Z., & Hu, X. (2018). What are the effects of self-regulation phases and strategies for Chinese students? A meta-analysis of two decades research of the association between self-regulation and academic performance. *Frontiers in Psychology*, 9 (DEC), 1–13. <https://doi.org/10.3389/fpsyg.2018.02434>.
- Mitchell, K. M., McMillan, D. E., & Rabbani, R. (2019). An Exploration of Writing Self-Efficacy and Writing Self-Regulatory Behaviours in Undergraduate Writing. *The Canadian Journal for the Scholarship of Teaching and Learning*, 10(2).
- Moiinvaziri, M. (2018). Exploring the Role of Self-Regulatory Capacity in Vocabulary Learning of Iranian EFL Learners. *Research in English Language Pedagogy*, 6 (2): 241-256. DOI: 10.30486/relp.2018.542584
- Pawlak, M., Csizer, K., & Soto, A. (2020). Interrelationships of motivation, self-efficacy and self-regulatory strategy use: An investigation into study abroad experiences. *System*, 93, 102300.
- Pérez, L. & Alvira, R. (2017). The acquisition of vocabulary through three memory strategies. *Colomb. Appl. Linguist. J.*, 19(1), 103-116.
- Shokouhi, H., Daram, M., & Sabah, S. (2011). Shifting between third and first-person points of view in EFL narratives. *Arts and Humanities in Higher Education: An International Journal of Theory, Research and Practice*, 10(4), 433-448.
- Tang, R. (2009). Developing a critical ethos in higher education: What undergraduate students gain from a reader response task? *Reflections on English Language Teaching*, 8(1), 1-20.
- Weisberg, H. F., Krosnick, J. A., & Bowen, B. D. (1996). *An Introduction to Survey Research, Polling, And Data Analysis* (3rd ed.). Newbury Park, CA: Sage.
- Young, S., & McSporry, M. (2001). Confident men - successful women: Gender differences in online Learning. In C. Montgomerie & J. Viteli (Eds.), *Proceedings of Ed Media 2001 Conference* (pp. 2110-2112), Chesapeake, VA: AACE.
- Yu-Ling, L. (2005). Teaching vocabulary learning strategies awareness, beliefs, and practices. A survey of Taiwanese EFL Senior high school teachers. Unpublished master's thesis, University of Essex.
- Yun, J. A. H. (2008). *Critical Reflection Among Elementary School Teachers: An Examination of Content, Cognitive Style, And Integrative Complexity*. London: Longman.
- Varier, D., Zumbunn, S., Conklin, S., Marrs, S., Stringer, J. K., & Furman, J. (2020). Getting stuck in writing: exploring elementary students' writing self-regulation strategies. *Educational Studies*, 1-20.
- Zarei, A. A., & Hatami, G. (2012). On the relationship between self-regulated learning components and L2 vocabulary knowledge and reading comprehension. *Theory and Practice in Language Studies*, 2(9), 1939-1944.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41 (2), 64-70.

Acknowledgments

Not applicable.

Funding

Not applicable.

Ethics Declarations**Competing Interests**

No, there are no conflicting interests.

Rights and Permissions**Open Access**

This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. You may view a copy of Creative Commons Attribution 4.0 International License here: <http://creativecommons.org/licenses/by/4.0/>.