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Meta-Cognitive Awareness of Writing Strategy Use among Iranian EFL Learners and Its Impact on Their Writing Performance

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Muhammad Azizi

Department of English Language Teaching
Bushehr branch, Islamic Azad University, Bushehr, **Iran**

Azadeh Nemati

(Corresponding author)

Department of English Language Teaching
Jahrom branch, Islamic Azad University, Jahrom, **Iran**

Narges Tavasoli Estahbanati

Farhangian University
Iran

ABSTRACT

It is believed that by improving students' meta-cognitive awareness of elements of language, learning can be enhanced. Therefore, this study consisted of two main objectives. First, it aimed at examining meta-cognitive awareness of writing strategy use among Iranian EFL learners. Using a Friedman test to check if there was any significant difference among the participants in their use of writing strategies, it was found that the differences among the strategies were not significant. The second objective of the study was to examine the impact of the participants' meta-cognitive awareness of writing strategy use on their L2 writing performance. This was answered using two statistical techniques, namely Pearson correlation and Multiple Regression. Using Pearson Correlation, it was found that there was a significant relationship between writing performance and all writing strategy categories (planning, monitoring, evaluation, and self-awareness). Moreover, using Multiple Regression, it was found that the p-value was significant only for evaluation strategy category, but not for the rest. That is, it was found that strategy categories such as planning, monitoring, and self-awareness did not predict students' writing performance. The result of this study responds to the ongoing problems students have in their meta-cognitive awareness of writing strategy use which can contribute to raising proficiency levels in shorter time frames.

Keywords: Meta-Cognition, L2 Writing, Meta-Cognitive Awareness, Learning Strategies

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1. Introduction

Since the inception of research on learning strategies in the late seventies, manifold researches have been done on myriad perspectives of strategic learning and upsides of heightening awareness of learning strategies, the manner in which strategy training might be affected by several individual variables such as psychological factors seems to have received very meager attention on the part of educational researchers. For instance, the way emotionally intelligent learners might differ from other less intelligent learners in terms of their success in the area of meta-cognitive strategy training appears to be one such issue toward which very scant heed has been paid.

As Dörnyei (2005, p. 166) appropriately puts it, "right from its introduction into L2 research in the late 1970s, the notion of learning strategy was intuitively appealing to researchers and it was also embraced with enthusiasm by language teachers." Oxford (1989, p. 235) defined language learning strategies as "behaviors or actions which learners use to make language learning more successful, self-directed, and enjoyable." Ever since their emergence, language learning strategies have been approached from a multitude of perspectives on the part of different scholars in the field, and accordingly several taxonomies have been offered by the pioneers in the field to address this tantalizing concept. Schmitt (2002, p.178), for instance, distinguishes

between *language learning* and *language use* strategies, the former being defined by him as "the conscious and semi-conscious thoughts and behaviors used by learners with the explicit goal of improving their knowledge and understanding of a target language," and the latter as "strategies for using the language that has been learned, however incompletely, including four subsets of strategies," namely, "retrieval strategies," "rehearsal strategies," "communication strategies," and "cover strategies."

To this binary distinction, yet, Schmitt adds a third fold, "*self-motivating strategies*," which, as he maintains, "learners can use to increase or protect their existing motivation." Furthermore, as he utters there are two other major approaches based on which strategies can be categorized. First, moving in line with mainly Oxford's (1990) tradition, strategies can be divided into four renowned categories of cognitive, meta-cognitive, affective or social, and second, based on Cohen's (1990) approach, strategies can be classified in terms of "the skill areas to which they relate" (Schmitt, 2002, p. 180). The latter categorization provides us with a different grouping for strategies: listening strategies, reading strategy use, speaking strategy use, writing strategy use, vocabulary strategies, and strategic use of translation.

2. Literature Review:

2.1 Second Language (L2) Writing

Writing is the activity of creating one's own texts which are based on their previously learned skills (Davidson, 2007). The sphere of L2 writing in Second Language Acquisition (SLA) has its origin in the studies of first language (L1) writing (Hyland, 2003); however the complications of L2 writing goes beyond the L1 border. Kroll depicts the domain of L2 writing as follows: "Second language writing is uniquely characterizable speciality area that has ties to but does not completely overlap with the fields of first language writing instruction or second language acquisition" (Kroll, 2003, p. 11).

2.2. L2 Writing Strategies

Davidson (2007) maintains that the role of the teacher is significant and it takes the form of guided teaching and modeled writing while peer interaction is another type of scaffolding in the writing process (As cited in Hyland, 2003). This approach contrasts with the idea of writing as an individual cognitive activity, which became the basis of cognitive writing

process theory in Hayes and Flower mode. It is considered that a purely cognitive approach because of its lack of the social dimension is not enough to expound the creation of L2 writing strategies (Hyland, 2003). Considering that teaching and learning are socially situated phenomena, the social dimension of L2 writing strategies – without any doubt deserves research attention.

Writing involves activating a complicated set of materials. These are consisted of content knowledge, linguistic knowledge (vocabulary, grammar and text structure) and strategic understanding (provision of relevant information). Students who explicitly know about their own learning process and what makes it effective, learn more (Oxford, 1997, 2011). Crinon and Marin (2010) found that peer collaboration leads to an enhancement of students' strategic understanding and an overall development of their writing strategies. This was shown in more coherent texts which are created by those students who promoted their awareness of the reader and who aimed to ensure that the intended message is transferred to the reader. The researchers also suggest that activating the reader's cognition processes is beneficial to the promotion of students' better argumentative and organizational skills (Oxford, 2011). These skills being transferable are then available for an application in writing tasks. Taking the role of writing mentors also offers students with a chance to experience the communicative product of writing, which helps to create a cognitive link between reading and writing processes and mingles these two together in students' minds.

2.3. Understanding Meta-Cognition

At the heart of meta-cognitive instruction is the concept of meta-cognition which was introduced in cognitive psychology more than thirty years ago (Goh, 2008). Meta-cognition has been defined as a construct that refers to thinking about one's thinking or the human ability to be conscious of one's mental processes (Nelson, 1996).

Wenden (1998) defines meta-cognition as knowledge about learning that is a part of a learner's store of acquired knowledge and a system of related ideas, relatively stable, early developing and an abstraction of a learners' experience. According to Flavell (1976) meta-cognitive knowledge is "one's knowledge concerning one's own cognitive



processes and products or anything related to them, e.g., the learning-relevant properties of information or data” (p. 232). Meta-cognition is a form of cognition and a high level thinking process that involves active control over cognitive processes (Wenden, 1998). It is also considered as the ‘seventh sense’ and one of the mental characteristics that successful learners use (Birjandi, 2006).

2.4. *Meta-Cognitive Knowledge and Success in Language Learning*

Researchers have tried to specify the characteristics of good language learners and the type of strategies they use in a specific language task (Birjandi et al., 2006). It has been found that explicit meta-cognitive knowledge about task characteristics and applying appropriate strategies for task solution is a major determiner of language learning effectiveness (Mahmoudi et al., 2010). The reason lies in the fact that meta-cognitive strategies enable learners to play active role in the process of learning, to manage and direct their own learning and eventually to find the best ways to practice and reinforce what they have learned (Chari et al., 2010).

Some other studies have focused on what proficient and successful language learners do while reading, writing, speaking, and listening with regard to the type of strategies they use, and how and under what conditions they use those strategies. The findings of these studies support the fact that proficient language learners take conscious steps to understand what they are doing by using a wider range of strategies than less proficient learners do (Anderson, 2003; Rasekh et al., 2003). Similar findings have also been reported in a number of studies for second language listeners (Goh, 1999; Vandergrift 1996). The general finding of these studies shows that high degrees of meta-cognitive knowledge helps learners to be better at processing and storing new information, finding the best ways to practice and reinforce what they have learned (Vandergrift et al., 2006) and it plays an important role in enhancing thinking and comprehension (Costa, 2001; Wenden, 1998).

2.4.1 *Flavell’s Model of Meta-cognitive Components*

Flavell (1979) proposed a model of meta-cognitive components where he made a distinction between two variables related to meta-cognition: knowledge and

experience. Flavell pointed out that meta-cognition falls into three components: (a) meta-cognitive knowledge, (b) meta-cognitive experiences, and (c) cognitive monitoring and strategy use.

Meta-cognitive Knowledge:

According to Schneider (1988), meta-cognitive knowledge is stable and can be articulated. It refers to one’s knowledge of cognitive processes which aim at overseeing, controlling, and regulating the cognitive processes. Meta-cognitive knowledge consists of three variable categories: person, task, and strategy (Flavell, 1979). The former includes the knowledge one has about the self as well as one’s abilities in comparison to or in contrast with the peers’. It also encompasses some universals of cognition. Bilingual learners, for example, would know that their knowledge of French may help them make appropriate guesses while reading an English text thanks to positive transfer. Task variable category refers to one’s knowledge about a task. A reader may know that he or she will find it easier to read a narrative text than an expository text. Concerning strategy use, for instance when coming across a difficult word, a reader may be aware that they can use several strategies, which include finding contextual clues or looking it up in the dictionary, for the purpose of understanding the word.

Meta-cognitive Experiences: Meta-cognitive experiences are considered as conscious thoughts about one’s cognitive processes that are happening at a particular moment (Flavell, 1979).

Cognitive Monitoring and Strategy Use: The interconnection between meta-cognitive knowledge, meta-cognitive experiences, cognitive goals, and cognitive strategies is the core of cognitive monitoring. It is perhaps noteworthy that some strategies may be considered both cognitive and meta-cognitive. For instance, Hacker, Bol, Horgan, and Rakow (2000) manifested that university students getting an A in an educational psychology course more accurately monitored their learning than lower performing students, who were generally over-confident about their understanding of course materials.

2.4.2. *Teaching Writing Meta-Cognitive Strategies: How Important is it?*

Thanks to meta-cognition, learners are provided with an array of ways to help evaluate the effect of their efforts. Meta-cognition helps learners estimate the

likelihood that they will be able to remember the learned material for a later use. Meta-cognitive skills allow students to monitor their progress when trying to understand and learn new material (Camahalan, 2006).

Meta-cognition may be an essential component for student learning in reading. Students who engage meta-cognitively in writing tasks aptly use related strategies and adapt them to other tasks (Boulware-Gooden, Carreker, Thornhill, & Joshi, 2007). In fact, meta-cognitive behaviors or skills create and become reinforced as “learners experience success and feel they are agents of their own learning” (Camahalan, 2006, p. 80).

2.5. Research on Learning Strategies in Iran

Pishghadam (2009) has investigated the relationship between the use of learning strategies with gender for learning English and the preferred learning strategies for learning English by Iranian students. He administered Oxford's (1990) language learning strategies inventory among three thousands Iranian university students. Results of the study demonstrated that Iranian students use meta-cognitive strategies more than other strategies and affective strategies less than other learning strategies. Moreover, men and women were not reported to be different in their use of learning strategies in general but men were found to use social and memory strategies more when compared with other strategies. Salarifar and Pakdaman (2010) investigated the role of meta-cognitive state components on academic performance. The participants who were high-school students completed O'Neill and Abedi's (1996) Meta-cognitive State Questionnaire. Results revealed a positive association between meta-cognitive state and academic performance.

Meshkat and Nasirifiruz (2009) investigated self-evaluation as a meta-cognitive strategy in grammar enhancement. Nelson's test (1976) was used to identify students' language proficiency. Moreover, six researcher-made grammar tests were used for data analysis. Findings revealed that self-evaluation had a positive effect in enhancing students' grammatical knowledge.

Javadi et al. (2010) investigated the relationship between meta-cognitive awareness of reading strategies and students' academic status in Isfahan

University of Medical Sciences. Meta-cognition Awareness Reading Strategies (MARS) inventory which was developed and validated by Mokhtari and Reichard (2002) was administered among participants. Results revealed that advanced students used more complex cognitive and meta-cognitive strategies than lower level students. Moreover, a relationship between meta-cognitive awareness and academic achievement was found. It was also found that meta-cognitive awareness and demographic variables such as age, gender and living area were not related.

In a recent study, Shirani Bidabadi and Yamat (2011) investigated the relationship between learning strategies used by Iranian EFL freshman university students and their listening proficiency. Finally, Rahimi and Katal (2011) investigated the level of Iranian university students' meta-cognitive listening strategies awareness in learning English by administering MALQ among university students of different majors. The overall result showed that more than 60% of the participants were fully or considerably aware of their meta-cognitive listening strategies. It was also found that girls and boys were not different with regard to their general meta-cognitive awareness of listening strategies. However, girls' awareness in directed attention was significantly higher than boys' awareness. Further, English students were found to be more aware of their problem-solving and planning and evaluation strategies and non-English majors were found to be more aware of their mental translation strategies.

2.7. Studies on Meta-Cognitive Awareness of Strategy Use in Iran

In this respect, Farahian (2015) made an attempt to develop and validate a meta-cognitive awareness writing questionnaire (MAWQ). In order to construct the questionnaire, an interview with 59 EFL learners was conducted. Based on the content analysis as well as the literature, a framework for meta-cognitive awareness of writing was developed which led to a hypothesized model, as well as a preliminary inventory.

Goudarzi and Ghonsooly (2014) investigated the relationship between meta-cognitive awareness and test-taking strategies used by Iranian learners studying English as a foreign language (EFL). They also investigated the possible effects of participants' test-taking



strategies and meta-cognitive awareness on their language test performance. 79 Iranian EFL learners studying English as a foreign language participated in this study. They were at intermediate level and included both male and female learners. All participants were asked to complete a meta-cognitive awareness inventory and a test-taking strategies questionnaire. The participants were divided into three groups (low, average, and high) based on test-taking strategy use score and the score of meta-cognitive awareness. The achievement of learners was investigated through their performance on final exam. Findings showed that a) learners' meta-cognitive awareness and test taking strategy use significantly affected their test performance and their final achievement score; besides, b) there was a significant correlation between meta-cognitive awareness and test taking strategy used by learners during their exam.

In another study, Reshadi and Aidinlou (2012) attempted to investigate the relationship between writing meta-cognitive awareness and the use of two types of cohesive ties among Iranian EFL learners in the process of writing. A questionnaire developed and validated by the researchers was used to gather data about the Iranian English learners' writing meta-cognitive awareness. Moreover, the researchers administrated a writing test to find out if Iranian EFL learners made use of three types of conjunctions including coordinating, correlative and transitional conjunctions and also three types of references, i.e., anaphoric, exospheric and anaphoric in their writing. The researchers used Linear Regression to analyze the relationship between writing meta-cognitive awareness and the use of cohesive ties. The results were arguable in that there was only a significant relationship between writing meta-cognitive awareness and the use of references.

3. Methodology

3.1 Framework of the Study

This study made use of Razi's (2012) classification of meta-cognitive awareness of writing strategy use which had been adapted from Hong's (2005) classification of writing strategy use. Razi (2012) divided the meta-cognitive awareness of writing strategy use into four main components, namely planning, evaluation, monitoring, and self-awareness.

3.2 Participants of the Study

A total of 30 Iranian EFL learners studying in a language academy within the city of Estahban, Fars province, were asked to take part in the study by filling out a questionnaire as well as taking an essay writing test. They were chosen through the process of convenience sampling. All of the participants taking part in the study were female EFL learners as the researcher of the study had only access to the female participants. They were adult learners of English. Their English proficiency level ranged from upper intermediate to advance. Their age ranged from 20 to 26, with the mean of 21.80. The reason for choosing only female students was that the researcher could not have access to male students from other institutes. Other institutes did not allow the researcher to collect the data.

3.3 Instruments of the Study:

A meta-cognitive awareness of writing strategy questionnaire constructed by Razi (2012) was utilized to collect the data needed to find answers to the research questions. It consisted of 32 Likert type items divided into 4 main categories, including planning (11 items), evaluation (14 items), monitoring (2 items), and self-awareness writing strategies (5 items). The questions were mixed up in the final form of the questionnaire in order to prevent student guesses. It was adapted from Hong's (2005) dissertation. To determine the degree of the reliability of the questionnaire, Cronbach alpha was run for Iranian student. The reliability of the questionnaire was assessed by the Cronbach's alpha to be 0.987 which was very high index of reliability; showing that the questionnaire was reliable (Appendix).

3.4 Data Collection Procedure:

This study consisted of two phases. In the first phase, a total of 30 Iranian EFL learners taking a writing course were asked to fill out a questionnaire examining their meta-cognitive awareness of writing strategy use. Subsequently, they were asked by their teacher to write an essay so that their writing performance could be assessed. The teacher scored students' writing from 0 to 100.

It should be mentioned that the teacher focused on grammatical and vocabulary errors when scoring students' writing. Therefore, it can be mentioned that the focus of his assessment was students' linguistic competence. That is, he was only paying attention to students' accuracy. In addition, it should be

mentioned that the students had to write a 200 word essay. The maximum writing score was 95 while the minimum score was 51, with the total mean of 76.43.

3.5. Data Analysis Procedure

To analyze the data needed to answer the research questions, both descriptive and inferential statistics were utilized. Descriptive statistics was used to provide mean and standard deviation for the participants' age, writing score, and four main components of the meta-cognitive writing strategy use questionnaire; namely planning, evaluation, monitoring, and self-awareness writing strategies.

4. Results and Discussions:

4.1. Descriptive Statistics

A total of 30 participants took part in the study by filling out a questionnaire and taking an essay writing test respectively. As indicated in Table 1, the participants' age ranged from 20 to 26, with the mean of 21.8, and the standard deviation of 1.690. Based on the table below, the students' writing score ranged from 51 to 95, with the mean of 76.43, and the standard deviation of 13.823.

Table 1: Statistics of Research Variables

Variable	N	Mean	Std. Dev.	Skewness	Kurtosis	Min	Max
Age	30	21.80	1.690	1.301	-1.013	20	26
Writing Score	30	76.43	13.823	-0.353	-1.349	51	95
Planning	30	3.26	1.140	-0.278	-1.764	1.55	4.64
Evaluation	30	3.29	1.167	-0.325	-1.802	1.64	4.64
Monitoring	30	3.40	1.206	-0.333	-1.454	1.50	5.00
Self-Awareness	30	3.24	1.162	-0.312	-1.555	1.40	4.80
Meta-cognitive	30	3.28	1.138	-0.340	-1.823	1.69	4.53

The meta-cognitive writing strategy use questionnaire encompassed four main components, namely planning, evaluation, monitoring and self-awareness. The total score of all of the items of the questionnaire has been given under the title of meta-cognitive variable. To be able to compare different strategies, the scores are defined as the average of relevant Likert type items whose scale ranged from strongly disagree (1) to strongly agree (5). The meta-cognitive mean was 3.28 with standard deviation of 1.138.

Taking a close look at the mean of each of the main components of the questionnaire, it can be noticed that "monitoring" had the highest mean (M=3.40). However, the lowest mean among the four main subsections of meta-cognitive writing strategy use questionnaire belonged to the "self-awareness" with the mean of 3.24.

Skewness of research variables were in the accepted range, between -1 and

1, while the kurtosis was out of the range. This may affect the normality of distribution within each of the variables in question. To ensure the normality of distribution the Kolmogorov-Smirnov test is used in the next section.

4.2. Inferential Statistics:

In this section research questions will be studied and answered. At the beginning it is needed to determine the normality of variables. Then, one can choose the appropriate statistical test. Thus firstly, the normality of the variables distribution was investigated by using Kolmogorov-Smirnov test.

Table 2: Kolmogorov-Smirnov test of Normality

Variable	Z	Sig.
Age	0.923	0.362
Writing Score	1.230	0.097
Planning	1.257	0.085
Evaluation	1.044	0.226
Monitoring	1.019	0.250
Self-Awareness	1.399	0.040
Meta-cognitive	0.923	0.362

Table 2 shows the results for the Kolmogorov-Smirnov test. Since p-values were greater than 0.05 ($p > 0.05$) for all variables (except for self-awareness), the statistics were not significant which means that the distributions were normal. For the self-awareness, the p-value was close to 0.05 thresholds so its deviation from the normal distribution can be ignored.

4.2.1. Meta-Cognitive Writing Strategies Used by Iranian EFL Learners

To study this question, the Friedman Test was used as an appropriate statistical technique. The findings are depicted in the following table. The Friedman test is a non-parametric statistical test. Similar to the parametric repeated measures ANOVA, it is used to detect differences in treatments across multiple test attempts. The procedure involves ranking each row (or block) together, then considering the values of ranks by columns.

Table 3. Friedman Test for Comparison of Different Strategies

Mean Rank	Chi-Square	df	Sig.				
Planning	2.53	2.45	2.67	2.35	0.990	3	0.804
Evaluation							
Monitoring							
Self-awareness							

Results of the Friedman test in Table 3 indicated that the differences among the strategies were not significant ($p > 0.05$). Thus, it can be inferred from this finding that the participants make use of meta-cognitive writing strategies to nearly the same amount.

4.2.2. The Effect of Meta-Cognitive Awareness of Writing Strategy Uses on Iranian EFL Learners' Writing Performance

To answer this research question, two statistical techniques were used. First,



to determine whether there is any relationship between participants writing score and each of the four components of meta-cognitive writing strategy use, Pearson Product Moment correlation was run. Table 4 shows the results of this statistical technique.

Table 4: Pearson Correlation between Meta-Cognitive Strategies and Writing Performance

Statistics Variables	Pearson Correlation	Sig.	N
Writing performance & Planning	0.963	0.000	30
Writing performance & Evaluation	0.966	0.000	30
Writing performance & Monitoring	0.848	0.000	30
Writing performance & Self awareness	0.937	0.000	30
Writing performance & Meta-cognitive	0.971	0.000	30

Results of the Pearson correlation test show that there was a significant relationship between writing performance and different strategies ($p < 0.05$). The Pearson correlation coefficients were very strong and positive which means that increasing the strategies corresponds to increasing writing performance.

Second, to determine the extent to which each of the independent variables (main meta-cognitive writing strategies, namely planning, evaluation, monitoring and self-awareness) would predict the dependent variable (writing performance), Multiple Regression was used as an appropriate statistical technique. The regression analysis can be used to show that writing performance as a dependent variable can be predicted by different strategies. The regression is useful to determine which strategy has the strongest correlation to predict the writing performance.

Although the whole statistical techniques had been done, using SPSS, it might be useful to provide the readers with the regression equation to make the whole process of data analysis more tangible.

Table 5. Regression Analysis for Relation between Writing Performance and Meta-Cognitive Strategies

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5228.523	4	1307.131	104.456	0.001
Residual	312.844	25	12.514		
Total	5541.367	29			

Table 5 indicates that there is a significant linear relationship between the writing performance and meta-cognitive strategies. Therefore the regression is valid and significant.

Table 6. Regression Estimation for Predicting Writing Performance

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0.971	0.944	0.935	3.537	1.510

In the above table, adjusted R^2 shows how much the regression can predict the writing performance in terms of independent variables. In other words, 93.5 percent of the variance of writing performance can be estimated by the variance of meta-cognitive strategies. Moreover the Durbin-Watson coefficient was 1.510 which is in the proper range 1.5-2.5 and indicated that the normal distribution condition of errors was satisfied as a necessary condition for the regression to be valid.

Table 7. Regression Coefficients for Dependent Variable Writing Performance

Independent variables	B	Beta	T	Sig.
(Constant)	37.857		18.540	0.000
Planning	4.742	0.391	1.731	0.096
Evaluation	6.037	0.510	2.252	0.033
Monitoring	0.399	0.035	0.364	0.719
Self-awareness	0.570	0.048	0.276	0.785

Table 7 shows that the p -value is significant ($p = 0.003 < 0.05$) only for evaluation strategy. This means that for predicting the writing performance in terms of meta-cognitive strategies, only evaluation significantly contributed. Notice that B coefficient was positive for evaluation which means that increasing the evaluation leads to increasing the writing performance. Beta coefficients indicated the strength of relationship between the writing performance and each of the strategies. It showed that the strongest relation was for the evaluation.

4.3 Summary of the Findings

The objectives of the current study were twofold. First, it aims at investigating meta-cognitive awareness of writing strategy use among a total of 30 Iranian EFL learners. Drawing on Razi's (2012) meta-cognitive writing strategy questionnaire to collect the needed data, the researcher of the current study found that among the four main components of the questionnaire, "monitoring" had the highest mean. However, the lowest mean belonged to the "self-awareness". Using a Friedman test to check if there was any significant difference among the participants in their use of writing strategies, it was found that the differences among the strategies were not significant. Thus, it can be inferred from this finding that each of the main four meta-cognitive writing strategy categories (monitoring, evaluation, planning, and self-awareness) were used equivalently among the participants.

The second objective of the study was to examine the impact of the

participants' meta- cognitive awareness of writing strategy use on their L2 writing performance. This question was answered using two statistical techniques, namely Pearson correlation and Multiple Regression. Using Pearson Correlation, it was found that there was a significant relationship between writing performance and different strategy categories. Moreover, using Multiple Regression, it was found that the p –value was significant only for evaluation strategy category, but not for the rest.

5. Conclusion

Based on the findings mentioned above, three main conclusions can be obtained from the study. Firstly, the Iranian EFL students lacked meta-cognitive writing strategy awareness compared to that of Turkish students in Razi's (2012) study. This indicates the fact that Iranian EFL learners lack the awareness of strategies while approaching writing, compared to Turkish students. Secondly, it can be concluded that successful students used meta-cognitive learning strategies more than others. Last but not least, it can be claimed that there was a positive relationship between students' writing performance and their meta-cognitive writing strategy use.

Appendix: Metacognitive Learning Strategies Awareness Questionnaire

✓ Response to Strategy Statements which best describes your choice	Strongly Agree	Agree	Disagree	Strongly Disagree
1. As I write my essay/composition I often stop to check if my grammar and spelling are correct.				
2. I always read my essay after I finish writing and evaluate if my essay matches with my essay question. If it is not relevant then I rephrase the paragraphs before I hand it in.				
3. I reflect upon the written paragraphs and revise accordingly throughout the writing process.				
4. I will not begin to write until I do brainstorming and figure out the topic sentences of each paragraph.				
5. I know about my strength and weaknesses in writing.				
6. If I am given a list of topics to choose from, I always choose the topic that I know the most about.				
7. I always use words whose meaning I am sure of.				
8. I am careful about the organization of the paragraphs.				
9. I consciously try to make my essay interesting and easier to read for the reader.				
10. I list my ideas and use examples etc. to make the essay more meaningful.				
11. I stop periodically to check if I am diverting from the topic or if I stick to it reasonably.				
12. If I have given a few essay topics to choose from, I always do a quick brainstorming for all to see how much I know about each topic before I start writing the essay.				
13. After I choose my essay topic, I try to divide it into two or more subtopics to include different viewpoints/aspects in the essay.				
14. I often can guess the type of evaluation I would receive from my teacher.				
15. I am good at organizing my ideas.				
16. I create my own examples to make the essay more interesting and my ideas more clear.				
17. I am a good judge of how well I have written the essay.				
18. I am aware of what strategies, like brainstorming, planning, editing etc. I use when I write an essay.				
19. I find myself analyzing the usefulness of strategies I use when I write essays.				
20. I find myself using helpful strategies automatically.				
21. I am aware of the effectiveness of the strategies I use.				
22. I draw diagrams while I am brainstorming.				
23. I ask myself if I have considered each idea/aspect possible after I finish the essay.				
24. If I am in an exam I read the instructions carefully before I start my essay.				
25. If I am given a list of topics to choose from, I ask myself if I can relate them to my own experience.				
26. If I am in an exam I organize my time before I start writing and try to use it carefully.				
27. I usually produce first and subsequent drafts before the final essay.				
28. I usually confer with my classmates and/ or teacher after the first draft.				
29. I usually revise the draft for content and clarity of the meaning.				
30. I usually edit the draft individually.				
31. I usually edit the draft collaboratively.				
32. I monitor myself throughout the writing process and I am aware of what I am doing.				

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