Tosuncuoğlu, İ. & Kırmızı, Ö. (2019). A review on writing metacognitive awareness of Turkish advanced level EFL learners. *International Online Journal of Education and Teaching (IOJET), 6*(1). 136-149. http://www.iojet.org/index.php/IOJET/article/view/562

Received: 11.11.2018
Received in revised form: 12.12.2018
Accepted: 19.12.2018

A REVIEW ON WRITING METACOGNITIVE AWARENESS OF TURKISH ADVANCED LEVEL EFL LEARNERS[i]

Research Article

İrfan Tosuncuoğlu
Karabuk University
irtosun@yahoo.com

Özkan Kırmızı
Karabuk University
ozkankirmizi@gmail.com

Dr. İrfan Tosuncuoğlu received his Bachelor's Degree from Selcuk University, English Language Teaching Department and received his Ph.D. abroad. He works as an Assistant Professor at Karabuk University, English Language and Literature Department. His research areas are linguistics and ELT.

Dr. Özkan Kırmızı works as an Associate Professor at English Language and Literature Department at Karabuk University. He completed his PhD at Hacettepe University, English Language and Teaching Department. His interest areas are L2 teacher education and pedagogical content knowledge.

Copyright by Informascope. Material published and so copyrighted may not be published elsewhere without the written permission of IOJET.

A REVIEW ON WRITING METACOGNITIVE AWARENESS OF TURKISH ADVANCED LEVEL EFL LEARNERS

İrfan Tosuncuoğlu
irtosun@yahoo.com
Özkan Kırmızı
ozkankirmizi@gmail.com

Abstract

The present study was undertaken to measure the metacognitive writing awareness of university-level learners. The participants of the study are 101 students of English Language and Literature, enrolled at a state university in Turkey. The grade level of the students ranges from the first grade to the fourth grade. In order to collect data, a questionnaire, developed by Farahian (2017), was used. This questionnaire measures the awareness of metacognitive writing with regard to *knowledge of cognition* and *knowledge of regulation*. Knowledge of cognition is studied under the following sub-scales: (a) declarative knowledge (person), (b) declarative knowledge (task), and (c) procedural knowledge. Knowledge of regulation was studied in terms of (a) planning and drafting, (b) general online strategies (c) monitoring and revision. Descriptive statistics were used to analyse the data obtained and tentative results showed that students have a moderate level of writing awareness.

Keywords: writing metacognitive awareness, EFL students, writing skill

1. Introduction

The historical background of the term metacognition dates back to James, Piaget, and Vygotsky. However, the concept was only popularised from the 1970s onwards. One of the earliest definitions of metacognition is "the part of one's acquired world knowledge that has to do with cognitive (or perhaps better, psychological) matters" (Flavell, 1987). Metacognition can be viewed as cognition of cognition, or it can be viewed as knowing how to think. It has become an important research area in both cognitive and developmental psychology (Öz, 2005). Thus, the concept of metacognition has a remarkable influence on the learning process. Most people agree that the terms of cognition and metacognition differ from each other. Cognitive abilities are needed to fulfill an assignment and metacognition, is required in order to perceive how the task was fulfilled (Garner, 1987). Research has well established that students who are metacognitively aware can monitor their progress more effectively and exert control over their learning process.

It was after the emergence of the process-oriented approach in writing, that the term metacognition began to be regarded as highly significant (Farahian, 2017). There had been a movement towards a process-oriented approach of writing that, as Hairston (1982) has mentioned, resulted in a paradigm shift in writing a composition. Nowadays, writing is considered as the activity of coining meaning; the learner in writing processes is required to include activities that prepare, revise and check the draft (Majid, 2015). With the rise of process-oriented approaches, the roles of self-regulation and decision-making activities

became more important. In this new conceptualization, writing skills are thought to include creating meaning in the circular processes of drafting, revising, and checking.

Writing skills are studied extensively. Over the years, many researchers have focussed on analysing students' writing processes and strategies, for the purpose of providing solutions to problems pertaining to writing skills (Crossley, Kyle & McNamara, 2016; Ho & Usaha, 2011). Metacognitive knowledge was found to be among the most important factors that influence writing skills (Farahian, 2017). Metacognition enables students to be aware of the demands and structures of different kinds and types (Harris, et al., 2010). In addition, since metacognition provides students with better planning, monitoring, and evaluating skills, they can regulate their cognitive skills in the writing processes.

1.1. Metacognition

Concerning metacognition, a detailed review of research in educational psychology shows that the term ‘metacognition’ originated from human cognitive development research. Under the teaching term metacognitive, metacognition was included in cognitive psychology about thirty years ago (Goh, 2008). Metacognition reveals a person’s awareness and regulation of cognition in performing an assignment (Baker & Brown, 1984; Crossley, Kyle & McNamara, 2016; Flavell, 1979). Many studies have been done in order to investigate the function and place of metacognition in English Language Teaching. In this respect, Wenden (1998) describes metacognition as a learning process which is a part of the acquisition of a student’s knowledge and a system of related ideas. According to Birjandi et al., (2006), they are both a kind of cognition, and high-level thinking activity requires control over the cognitive processes in the mind. It is counted, as the *seventh sense* and it is also one of the mental abilities that very successful students use.

Students’ performance in reading and listening was investigated in many studies, (Baker & Brown, 1984; Schneider & Pressley, 1997; Kragler & Martin 2009; Zheng, 2018). On the other hand, not much research has been done to investigate the place of metacognitive knowledge in the performance of English learners (Devine, 1993; Reiff & Bawarshi, 2011; Scott & Levy, 2013).

Flavell (1979) argues that metacognitive knowledge is knowledge related to someone's own cognitive activities and output, such as learning-relevant properties of input. Some other scholars have also tried to describe the characteristics of good language students and the strategies they use in language assignments. Mahmoudi et al., (2010) says it was noticed that metacognitive knowledge about the features of any assignment and the use of appropriate methods in order to find a remedy to the problem, is the main cornerstone of language learning activities. So, metacognitive strategies allow students to play a dominant role in language learning activities and manage learning activities positively to find the best way/s to practice the processes of learning (Chari et al., 2010). In addition to this, metacognition includes two components; the first one is metacognitive knowledge and the second is metacognitive control. Metacognitive knowledge is located in long-term memory. As for metacognitive control, this functions in the learners' working memory, for using metacognitive knowledge in order to reach targets by means of different cognitive activities such as making sense, taking decisions, and monitoring (Batha & Carroll, 2007; Roebers, & Feurer, 2016). Paris and Winograd (1990), say that metacognition can make a great contribution to academic learning and motivation. To this end, metacognition comprises of skills in knowledge and regulation which are utilised to control learners' cognition. Metacognition can help individuals grasp a wide range of aims.

1.2. Metacognitive awareness in writing

It was observed that learners who lacked ability in a language level may not function well either in language classroom activities or in other academic fields (Küçükler, 2018). It can be inferred from this that proficiency in a language level enables learners to be proficient in other majors too. At university, for the students who study in English Language departments, good writing skills carry higher importance when compared with students of other departments. It can be stated that some factors influence writing skills and abilities.

In the research of writing activity strategies, scholars have tried to demonstrate effective writing activities, for example in 1981, Flower and Hayes presented the Cognitive Processes of Writing. Subsequently, there has been a move from written materials to some of the ways that learners compose written work with the help of cognitive activities and the manner in which they reflect their ideas and thoughts onto a piece of paper (Dyson, 1990; McGee & Richgels, 2000). Hayes (2000), Zimmermann (2000) looked again through cognitive processes in foreign language writing. Since the time when writing began to be viewed as a process rather than merely a product, close attention has been given to the role of writing strategies in improving L2/EFL writing abilities in the field of second language education (Byrnes and Manchón 2014; Cohen 2011; Cumming 2001; Grabe and Kaplan 1996; Hinkel 2011; Hyland 2015).

Metacognitive awareness is considered an important factor that distinguishes low-level writers from high-level writers (Wei, Shang & Briody, 2012). Most studies found a positive link between writing proficiency and metacognitive awareness (Yanyan, 2010; Gupta & Woldemariam, 2011). Some studies on English teaching and writing in this vein can be seen (as in Flavell, 2016; Schoonen et al.,2009; You & Joe, 1999), and they were among the few scholars to research the ties between writing and metacognitive knowledge. You & Joe (2001) investigated how talented writers use metacognitive techniques through introspective interviews. In the research, You & Joe touched upon five types of declarative and procedural knowledge.

Researchers examined the meta-awareness of students when they were between writing assignments and texts. Rounsaville, Goldberg, & Bawarshi (2008) noted that metacognitive knowledge is able to make learners "reorient their relationship to what they knew," and they prepared a learner survey to denote the demands of writing processes. That said, to improve students' writing ability, the researchers highlighted the requirement in order to improve learners' awareness of metacognitive knowledge. Learners should be aware of their writing aims and activities and they should know how to regulate their cognitive objectives to become proficient writers (Kasper, 1997; Schraw, 2001). The investigations underline the need to have a relevant instructional technique that would improve students' metacognitive perception and make them intelligent writers in English (Xinghua, 2010). Graham and Harris (2009) also hold the idea that teachers need to know the approaches that include learners in writing activities and enable them to work with each other to learn such abilities as planning and revising.

So, in this vein, with regard to the importance of the topic, we decided to define the awareness of metacognition of students in writing. In this respect, the present study aims to answer the following research questions:

1) What are the opinions of the students in the English Language Department toward metacognitive writing knowledge?

2) What is the awareness level of the students in the English Language Department toward metacognitive writing knowledge?

2. Methodology

2.1. Research design

The study comprises quantitative research, for which a survey model was used. A survey model is a research approach that describes a past or present state of affairs. The survey in the research has quantitative characteristics, and that said, a cross-sectional survey design was used in order to get the relevant feedback. The reason for using the cross-sectional design was to be able to measure ideas perceptions and attitudes over a period of time (Liu, 2011; Steedle, 2012). In addition to this, the survey model was also made use of, in order to find whether there is a connection among variables of two or more (Büyüköztürk et al., 2009; Kaptan, 1998; Karasar, 1995; Tabachnick et al., 2013). The survey related to the metacognitive awareness of the students consisted of thirty-six items applied to the education in the Language and Literature Department of a state university received by the students, and the results were evaluated.

2.2. Instrumentation

As learners had relevant devices, an online survey was prepared to obtain the required data to answer the research. In order to collect the data, a questionnaire developed by Farahian (2017) was used. It comprised of thirty-six closed-ended statements designed on a 5-point Likert scale. The elements of the questionnaire were devised in order to understand the level of Metacognitive Awareness of Turkish Advanced Level Learners in Writing.

The questionnaire in the survey included both Flavel's (1979) and the two-dimensional dilemma of knowledge and regulation of cognition. The survey was open for two weeks. As soon as the time was up for responding to the questionnaire, the collected data was entered into a Statistical Package for Social Sciences (SSPS.17.0). For analyses, means, percentages, frequencies and standard deviations were calculated. The T-test was used for the comparison of mean agreement levels of two different genders, independent samples, and for the comparison of mean agreement levels of four different grades, ANOVA (Analysis of Variance) was used.

2.3. Setting and participants

The subjects consisted of 101 students (75 females and 26 males), which is approximately 75% of the students were female and 25% of the participants were male. The participants of the study were students of English Language and Literature, enrolled at a state university in Turkey. The so-called department had 780 enrolled students in total. There were daytime education (I) and evening education programs (II). The grade level of the students ranged from the first grade to the fourth grade, and they studied in both programs I and II. The study was conducted in September, Fall term of 2018-2019 education year. The students gave consent for data collection and voluntarily completed an online survey by responding to the questionnaire. The age of the subjects was between 18 and 24 years old.

2.4. Measures

There are two sub-themes of the metacognition framework for metacognitive awareness in writing, knowledge of cognition and regulation of knowledge. This was adapted from Maftoon, Birjandi, and Farahian (2014). There are three sub-dimensions of Knowledge of Cognition; Declarative knowledge (person), Declarative knowledge (task knowledge) and Procedural knowledge, and there are three sub-dimensions of the Regulation of cognition; Planning and drafting, General online strategies and Monitoring revision. There is a total of thirty-six questions in the questionnaire. Evaluation of the scale was as follows: "I totally disagree (1), I disagree (2), I have no idea (3), I agree(4), I totally agree (5)".

Table 1. *The percentages of regarding knowledge of cognition and regulation of cognition*

	Sub-dimensions	No Idea	Agree	St. Agree
Knowledge of cognition	Declarative knowledge-person	11,3%	60,8%	27,9%
	Declarative knowledge-task knowledge	12,7%	64,0%	23,3%
	Procedural knowledge	19,7%	61,1%	19,2%
Regulation of cognition	Planning and drafting	19,0%	66,2%	14,8%
	General online strategies	16,6%	68,5%	14,9%
	Monitoring revision	20,1%	70,4%	9,5%

The percentages of agreement levels are calculated under six different sub-scales. For the Declarative knowledge-person sub-scale, 28%of interviewees "strongly agreed" with the statements, 61% of interviewees "agreed" with the statements and 11% of the interviewees had "no idea" about the statements.

For the Declarative knowledge-task knowledge sub-scale, 23% of interviewees "strongly agreed" with the statements, 64% of interviewees "agreed" with the statements, and 20% of interviewees had "no idea" about the statements. For the Procedural knowledge sub-scale, 19% of interviewees "strongly agreed" with the statements, 61% of interviewees "agreed" with the statements and 20% of interviewees had "no idea" about the statements. For the Planning and drafting sub-scale, 15% of interviewees "strongly agreed" with the statements, 66% of interviewees "agreed" with the statements and 19% of interviewers had "no idea" about the statements.

For the General online strategies sub-scale, 15% of interviewees "strongly agreed" with the statements, 69% of interviewees "agreed" with the statements, and 17% of interviewees had "no idea" about the statements. For the Monitoring revision sub-scale, 10% of interviewees "strongly agreed" with the statements, 70% of interviewees "agreed" with the statements and 20% of interviewees had "no idea" about the statements. None of the participants disagreed or strongly disagreed with the related statements.

Table 2. *The mean scores regarding knowledge of cognition and regulation of cognition*

Sub-dimensions	Mean	St. Dev.	Median	Min	Max

Knowledge of cognition	Declarative knowledge-person	4,1662	0,3098	4,2000	3,60	4,80
	Declarative knowledge-task knowledge	4,1064	0,2639	4,1111	3,44	4,67
	Procedural knowledge	3,9944	0,3023	4,0000	3,20	4,80
Regulation of cognition	Planning and drafting	3,9577	0,2472	3,8750	3,25	4,75
	General online strategies	3,9831	0,3112	4,0000	3,00	4,80
	Monitoring revision	3,8944	0,3124	4,0000	3,00	4,50

For all of the six sub-scales, the level of mean agreement was approximately 4. When we compare the three sub-scales of the "Knowledge of cognition", it can be said that the agreement level of "Procedural knowledge" is weaker than that of "Declarative knowledge". Similarly, when we compare the three sub-scales of "Regulation of cognition", it can be said that the agreement level of "Monitoring revision" is weaker than that of "Planning and drafting" and "General online strategies".

Table 3. *T-test results regarding gender and sub-dimensions of writing cognition*

	Sub-dimensions	**Female (n=75) Mean**	**Male (n=26) Mean**	**t**	**p value**
Knowledge of cognition	Declarative knowledge-person	4,1547	4,2000	-0,533	0,596
	Declarative knowledge-task knowledge	4,1027	4,1173	-0,201	0,841
	Procedural knowledge	3,9925	4,0000	-0,091	0,928
Regulation of cognition	Planning and drafting	3,9434	4,0000	-0,837	0,405
	General online strategies	3,9849	3,9779	0,066	0,948
	Monitoring revision	3,9104	3,8472	0,739	0,463

Subject to the descriptive analysis results of the survey data, three-quarters of the participants were female (75%) and a quarter of participants were male (25%). For the comparison of mean agreement levels of the two different genders, an independent sample T-test was used. Subject to the results of independent sample T-test, there were no statistically significant differences between females and males in the point of mean agreement levels of six sub-scales ($p>0,05$). For instance, the mean agreement level of the "Monitoring revision" sub-

scale was 3,9104 for females and 3,8473 for males. The mean difference of 0,0631 was statistically non-significant.

Table 4. *ANOVA results regarding grade level and sub-dimensions of writing cognition*

	Sub-dimensions	Grade 1 (n=43) Mean	Grade 2 (n=18) Mean	Grade 3 (n=17) Mean	Grade 4 (n=23) Mean	F	p value
Knowledge of cognition	Declarative knowledge-person	4,1628	4,1889	4,2000	4,1250	0,086	0,968
	Declarative knowledge-task knowledge	4,1034	4,1235	4,2778	4,0417	0,458	0,713
	Procedural knowledge	4,0233	4,0111	3,6000	3,9000	1,582	0,202
Regulation of cognition	Planning and drafting	3,9564	3,9792	3,8750	3,9375	0,133	0,940
	General online strategies	3,9721	4,0111	4,200	3,9250	0,472	0,703
	Monitoring revision	3,8953	3,9306	4,1250	3,7500	1,014	0,392

For the comparison of mean agreement levels of four different grades, ANOVA (Analysis of Variance) was used. Depending on the results of the F test, there were no statistically significant differences between the four grades (courses) at the point of mean agreement levels of the six sub-scales ($p>0,05$).

3. Discussion

The percentages of agreement levels of the students were evaluated under were six different sub-scales: (1) declarative knowledge (person), (2) declarative knowledge (task and knowledge), (3) procedural knowledge, (4) planning and drafting, (5) general online strategies, and (6) monitoring revision. None of the participants disagreed or strongly disagreed with the related items.

For all of the six sub-scales, the level of mean agreement was approximately 4. When we compared the three sub-scales of "Knowledge of cognition", it can be said that the agreement level of "Procedural knowledge" was weaker than that of "Declarative knowledge". Similarly, when we compare the three sub-scales of "Regulation of cognition", it can be said that the agreement level of "Monitoring revision" is weaker than that of "Planning and drafting" and "General online strategies". Some precautions should be taken in order to improve the weaker aspects of the students.

According to the descriptive analysis results, at the end of the obtained data, three-quarters of the participants were female (75%) and a quarter of the participants were male (25%). The mean difference between male and female participants was 0,0631. That is, statistically, there are no remarkable differences between the two genders. For the comparison of mean agreement levels of four different courses (from the first course to the last course), ANOVA (Analysis of Variance) was used. Contingent to the results of the F test, there were no statistically significant differences between the four grades at the point of mean agreement levels of six sub-scales ($p>0,05$). What can be inferred from this value is that there is no differences statistically among grades.

4. Conclusion

Writing requires specific integrative skills and is extremely important as a constructive and complex activity. It is a very essential skill that gives students an opportunity in preparing personal letters, essays, research papers, journals, and so on and requires a level of proficiency. Based on reviews of the research, they (Gagne, 1985; Wei et al., 2012; Farahian, 2015) suggest that it is metacognitive awareness that allows learners to obtain knowledge about the strategies they are using. The learners' ability to discuss the writing strategies they use may provide additional evidence of their metacognition. Therefore, in order to improve students' writing talents and abilities, the scientists underline developing students' awareness of metacognitive knowledge. Kasper (1997) maintains that students are required to be aware of writing objectives and activities and conceive of arranging and regulating their own cognitive objectives with regard to writing, in order to be talented writers.

Metacognition helps students with language acquisition, especially in the field of writing processes. It is vital for successful language learning as it allows learners to better manage cognitive skills. It is also very important for successful learning activities, especially in writing, as it gives an opportunity for learners to find their weaknesses which can then be improved by applying new strategies. It can be said that almost everyone is capable of metacognition, that is to say, thinking about how they fulfill a certain skill or ability. Almost everybody who is able to manage a skill in any subject is capable of metacognition, namely, thinking about how they are successful in that skill. In order to develop metacognition it is necessary to begin to construct an awareness among learners, however, metacognition differs from cognition to some extent and increases success on the whole. Although many studies have been carried out in order to investigate effective teaching-learning strategies in such skills as writing, reading, and speaking, not many studies have been conducted in order to conduct research about the place of metacognitive knowledge in the performance of English learners on writing at university level. The present study tries to shed light on the metacognition of effective writing.

There is a bulk of research indicating that working memory plays a crucial role in the management of metacognitive control; that is to say, if input or output is processed in an efficient manner the cognitive load of the working memory can be room can be spared for recalling metacognitive knowledge (Han, 2013; Han & Stevenson, 2008; Phakiti, 2007). Working memory can be facilitated through topic familiarity (Manchon et al. 2007). Through the use of familiar topics, better strategy use can also be ensured. Therefore, writing topics can be selected from students' everyday life experiences.

Regarding the role of writing within the context of World Englishes paradigm, Matsuda & Matsuda (2010) suggested the following guidelines:

- teach the dominant language forms and functions

- teach the boundary between what works and what does not
- teach the principles and strategies of discourse negotiation
- teach the risks involved in using deviational features

Therefore, future studies can focus on participant views on the use of World Englishes paradigm. In addition, more experimentation may be needed to measure the role of lexico-grammatical approach to writing.

Most of the studies conducted on metacognitive awareness are generally on reading skills of foreign language learners in Turkey. Nowadays although there have been some studies about the related issue by Öz (2016) and Farahian, (2015, 2017), these studies do not satisfy the expectations for Turkish context. In that sense, this article seems to fulfill an important gap in writing skills. To this end, as was aforementioned, the study found that in a Turkish state university, the remarkable weak areas of the Turkish student are found as "Procedural knowledge" and "Monitoring revision" sub-dimensions in writing.

On the other hand, it can be said that there are some limitations in this work. The study is limited as not many students participated in the survey, which was realised within a very short period of time. However, despite the limitations, various benefits can be inferred from this research. Accordingly, English language teaching instructors can help students increase their metacognitive awareness in writing classes in order to develop their writing processes. They ought to provide students with relevant opportunities to cooperate actively with the other students in the writing activities. To this end, this study can be considered as a contribution for further studies in metacognitive awareness in writing.

References

Baker, L., & Brown, A.L. (1984). Metacognitive skills and reading. In P. D. Pearson, M. Kamil, R. Barr & P. Mosenthal (Eds.), *Handbook of reading research* (pp. 353-394). White Plains, NY: Longman.

Batha, K., & Carroll, M. (2007). Metacognitive training aids decision making. *Australian Journal of Psychology*, 59(2), 64-69.

Birjandi, P., Mirhassani, A. & Abbasian, G. (2006). Setting-based meta-cognitive strategy use. Journal of Faculty of Letters and Humanities, 49(198), 39-87. Available online: www.sid.ir.

Byrnes, H., and R. M. Manchon, eds. (2014). *Task-Based Language Learning: Insights from and for L2 Writing*, Vol. 7. Philadelphia: Benjamins.

Büyüköztürk, Ş., Çakmak, E.K., Akgün, Ö.E., Karadeniz, Ş. And Demirel, F. (2009). *Bilimsel araştırma yöntemleri*, (3rd ed.) Ankara: Pegem Akademi.

Chari, M., Samavi, A. & Kordestani, D. (2010). Investigating psychometric characteristics of metacognitive reading strategies scale among Iranian high-school students. *Psychiatry Studies*, 6, 1-22.

Cohen, A. (2011). *Strategies in Learning and Using a Second Language*. 2nd ed. New York: Longman.

Crossley, S. A., Kyle, K., & McNamara, D. S. (2016). The development and use of cohesive devices in L2 writing and their relations to judgments of essay quality. *Journal of Second Language Writing*, *32*, 1-16.

Cumming, A. (2001). "Learning to Write in a Second Language: Two Decades of Research." *International Journal of English Studies,*1 (2): 1–23.

Devine, J. (1993). The role of metacognition in second language reading and writing. In J. G. Carson, and Ilona Leki (Eds.) (1993). *Reading in the composition classroom: Second language perspectives* (pp. 105-127). Boston: Heinle and Heinle.

Dyson, A. (1990). Effective learning consultancy: a future role for special needs coordinators? *Support for Learning (SfL)*. Vol. 5, issue 3, pp.116-127

Farahian, M. (2015). Assessing EFL learners' writing meta-cognitive awareness. *Journal of Language and Linguistic Studies*, 11 (2), 39-51.

Farahian, M. (2017). Developing and validating a metacognitive writing questionnaire for EFL learners, *Issues in Educational Research*, 27(4), 736.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive developmental inquiry. *American Psychologist*, 34(10), 906-911. http://dx.doi.org/10.1037/0003-066X.34.10.906

Flavell, J. H. (1987). Speculation about the nature and development of metacognition. In F. Weinert & R. Kluwe (Eds.), *Metacognition, motivation, and understanding* (pp. 21-29). Hillsdale, NJ: Lawrence Erlbaum.

Flavell, J. H. (2016). Development of children's knowledge about the mind. In. R. J. Sternberg, S. T. Fiske, & D. J. Foss (Eds.), *Scientists making a difference: One hundred eminent behavioral and brain scientists talk about their most important contributions* (pp. 198-201). Cambridge: Cambridge University Press.

Gagne, E. (1985). *The cognitive psychology of school learning*. Boston: Little, Brown and Co.

Garner, R. (1987). *Metacognition and Reading Comprehension*. Norwood, NJ: Ablex Publishing.

Goh, C. C. (1998). How ESL learners with different listening abilities use comprehension strategies and tactics. *Language Teaching Research*, 2(2), 124-147.

Grabe, and Kaplan, R. (1996). *Theory and Practice of Writing: An Applied Linguistic Perspective*. New York: Addison Wesley Longman.

Graham, S., & Harris, K. R. (2009). Evidence-based writing practices: Drawing recommendations from multiple sources. *British Journal of Educational Psychology*, 6, 95-111.

Flower, L., and Hayes, J. R. (1981). A Cognitive Process Theory of Writing. *College Composition and Communication*, Vol. 32, No. 4, pp. 365-387.

Gupta, D., & Woldemariam, G. S. (2011). The influence of motivation and attitude on writing strategy use of undergraduate EFL students: Quantitative and qualitative perspectives. *Asian EFL Journal*, 13(2), 34-89.

Hairston, M. (1982). The winds of change: Thomas Kuhn and the revolution in the teaching of writing. *College Composition and Communication*, 33, 76-88.

Han, F. (2013). The relationship between L1 and FL comprehension monitoring with Chinese EFL readers. *The International Journal of Literacies*, 19, 13-24.

Han, F., & Stevenson, M. (2008). Comprehension monitoring in first and foreign language reading. *University of Sydney Papers in TESOL*, 3, 73-110.

Harris, K., Santangelo, T. & Graham, S. (2010). *Metacognition and strategies instruction in writing.* H S Waters, W Schneider. 226-256. United States of America: Guilford.

Hayes, J. R. (2000). A new framework for understanding cognition and affect in writing. In R. Indrisano & J. R. Squire (Eds.), *Perspectives on writing: Research, theory and practice* (pp. 6-44). Newark, DE: International Reading Association.

Hinkel, E. (2011). What Research on Second Language Writing Tells Us and What It Doesn't? In *Handbook of Research in Second Language Teaching and Learning*. 2nd ed., edited by Eli Hinkel, 523–38. New York: Routledge.

Ho, P. V. P., & Usaha, S. (2011). The Effectiveness of the Blog-based Peer Response for L2 Writing. *Journal of Science*, Ho Chi Minh City Open University, 3(3), 27-44.

Hyland, K. (2015). *Teaching and Researching Writing*. London: Routledge

Kaptan, S. (1998). *Bilimsel araştırma ve istatistik teknikleri, [Research and Statistics Methods]* Ankara: Tekışık Web Ofset Tesisleri.

Karasar, N. (1995). *Bilimssel araştırma yöntemi*, *[Research Techniques]* 7. Basım, Ankara: Alkım Yayınevi.

Kragler, S. & Martin, L. (2009). "I tried to make it not confusing by fixing it": describing six first graders' use of strategies to understand text. *Reading Psychology*, 30, 512-538.

Kasper, L. F. (1997). Assessing the metacognitive growth of ESL student writers. TESLEJ, 3(1), 1-20. http://www.tesl-ej.org/wordpress/issues/volume3/ej09/ej09a1/

Liu, O. L. (2011). Outcomes assessment in higher education: challenges and future research in the context of voluntary system of accountability. *Educational Measurement*: Issues and Practice, 30(3), 2-9.

Küçükler, H. (2018). Graduate students' proficiency strategy attitutes on autonomous learning in foreign language learning. *English Language Teaching*; Vol. 11, No. 6; 2018. doi: 10.5539/elt.v11n6p

Manchón, R. M., Roca de Larios, J., & Murphy, L. (2007). Second and foreign language writing strategies: Focus on conceptualizations and impact of the first language. In A. D. Cohen & E. Macaro (Eds.), *Language learner strategies: Thirty years of research and practice* (pp. 229-250). Oxford: Oxford University Press

Maftoon, P., Birjandi, P. & Farahian, M. (2014). Investigating Iranian EFL learners' writing metacognitive awareness. *International Journal of Research studies in Education*, 3(5), 37-52. https://doi.org/10.5861/ijrse.2014.896

Mahmoudi, E., Khonamri, F. & Rafeie, M. (2010). The relationship between metacognitive awareness of reading strategies and comprehension monitoring in reading ability of EFL learners. Paper presented at *the 8th International TELLSI Conference,* AlZahra University, Tehran, Iran.

Majid, F. (2015). Assessing EFL Learners' Writing Metacognitive Awareness. *Journal of Languages and Linguistic Studies*, 11(2), 39-51.

Matsuda, A., & Matsuda, P. K. (2010). World Englishes and the teaching of writing. *TESOL Quarterly*, 44(2), 369-374.

McGee, L.M., & D.J. Richgels. 2000. *Literacy's beginnings: Supporting young readers and writers*. 3d ed. Needham, MA: Allyn & Bacon

Öz, H. (2005). Metacognition in foreign / second language learning and teaching. *Hacettepe University Journal of Education,* 29,147-156.

Öz, H. (2016). Metacognitive awareness and academic motivation: a cross sectional study in teacher education context of turkey. *Procedia - Social and Behavioral Sciences* 232 (2016) 109-121

Paris, S. G., & Winograd, P. (1990). How metacognition can promote academic learning and instruction. In B. F. Jones & L. Idol (Eds.), *Dimensions of thinking and cognitive instruction* (pp. 15-51). Hillsdale, NJ: Erlbaum.

Phakiti, A. (2007). *Strategic competence and EFL reading test performance: A structural equation modelling approach*. Peter Lang: International Verlag der Wissenschaften.

Reiff, M. J. & Bawarshi, A. (2011). Tracing discursive resources: How students use prior genre knowledge to negotiate new writing contexts in first-year composition. *Written Communication*, 28(3), 312–337.

Roebers, C. M., & Feurer, E. (2016). Linking executive functions and procedural metacognition. *Child Development Perspectives*, 10(1), 39-44.

Rounsaville, A., Goldberg, R. & Bawarshi, A. (2008). *From incomes to outcomes: FYW students' prior genre knowledge, meta-cognition, and the question of transfer*. WPA: Writing Program Administration, 32(1–2), 97–112.

Schneider, W. & Pressley, M. (1997). *Memory development between 2 and 20*. Hillsdale, NJ: Erl baum.

Schoonen, R., Snellings, P., Stevenson, M., & van Gelderen. A. (2009). Towards a blueprint of the foreign language writer: The linguistic and cognitive demands of foreign language writing. In R. M. Manchón (Ed., *Learning, teaching, and researching writing in foreign language contexts.* Bristol: Multilingual Matters.

Schraw, G. (2001). Promoting general metacognitive awareness. In H. J. Hartman (Ed.), *Metacognition learning and instruction*. The Netherlands: Kluwer Academic publisher.

Scott, B. M. & Levy, M. G. (2013). Metacognition: Examining the components of a fuzzy concept. *Educational Research*, 2(2), 120–131.

Steedle, J. T. (2012). Selecting value-added models for postsecondary institutional assessment. *Assessment & Evaluation in Higher Education*, 37(6), 637-652.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. 6.th ed. Boston: Pearson.

Wei, Z., Shang, H., & Briody, P. (2012). The Relationship between English writing ability levels and EFL learners' metacognitive behaviour in the writing process. *International Journal of Academic Research in Progressive Education and Development, 1*(4), 154-180.

Wenden, A. L. (1998). Metacognitive knowledge and language learning. *Applied Linguistics*, 19(4), 515-537. https://doi.org/10.1093/applin/19.4.515.

Xinghua, L. (2010). An investigation of Chinese university EFL learners' knowledge about writing. *Language Studies Working Papers*, 2, 51-63.

Yanyan, Z. (2010). Investigating the role of metacognitive knowledge. *Papers in Applied Linguistics, 14*, 25-46.

You, Y. L., & Joe, S. G. (1999). *The role of metacognitive theory in L2 writing: Speculations and suggestions.* In the selected papers of the Eighth International Symposium on English Teaching (pp.181-192). Taipei: Crane.

You, Y. L., & Joe, S. G. (2001). Investigating the metacognitive awareness and strategies of English-majored university student writers. In Proceedings of the *Tenth International Symposium on English Teaching* (pp.106-119). Taipei: Crane.

Zheng, J. (2018). The Metacognitive Strategy in English Listening Comprehension. *Theory and Practice in Language Studies,* Vol. 8, No. 2, pp. 226-231. DOI: http://dx.doi.org/10.17507/tpls.0802.07

Zimmermann, R. (2000). L2 writing: Subprocesses, a model of formulating and empirical findings. *Learning and Instruction*, 10(1), 73-99

[i] A preliminary version of this article was presented orally at the International Conference on Language DUICOL / Writing, on 18-20 October, 2018, at Düzce University, Düzce/Turkey.