

THE RELATIONSHIP BETWEEN METACOGNITIVE AWARENESS AND RECEPTIVE SKILLS OF UNIVERSITY STUDENTS

Ayu Marsela Erda*

Applied Linguistics Department, State University of Yogyakarta
Jl. Colombo Yogyakarta No.1, Caturtunggal, Sleman, D. I. Yogyakarta 55281, Indonesia
ayumarsela23@gmail.com

Received: 23rd April 2020/Revised: 26th June 2020/Accepted: 03rd August 2020

How to Cite: Erda, A. M. (2020). The relationship between metacognitive awareness and receptive skills of university students. *Lingua Cultura*, 14(1), 121-127. <https://doi.org/10.21512/lc.v14i1.6403>

ABSTRACT

The research investigated the influence of metacognitive awareness on receptive skills in higher education students. Moreover, participants' level of metacognitive awareness was also taken into account. The research utilized a survey in the form of Metacognitive Awareness Listening Questionnaire (MALQ) and Metacognitive Awareness Reading Strategy Inventory (MARS) and test of listening and reading comprehension to collect the data and multiple regression to analyze it. The participants were 59 English educational students in the first semester of a public university in Yogyakarta. The finding shows there is a significant influence of metacognitive awareness on receptive skills. However, there is the only significant influence of metacognitive awareness on reading skills. In contrast, there is no significant influence of metacognitive awareness on listening skills. Most of the students are categorized at a high level of metacognitive awareness in listening and reading. However, they have relatively poor scores in the D and E categories for both listening and reading comprehension tests. The only skill which has a significant influence on metacognitive awareness is reading skills. Therefore, the findings show that there is no significant influence of metacognitive awareness on listening skills. However, there is a significant influence of metacognitive awareness on reading skills. Further research needs to be conducted to reveal the different influences between reading and listening skills related to metacognitive awareness, as found in the research.

Keywords: metacognitive awareness, receptive skills, MALQ, MARS, higher education

INTRODUCTION

English has a significant role as a global and international language, worldwide as well as in Indonesia (Nelson, Proshina, & Davis, 2020). It means that most Indonesian depends on English as a language to run their business and develop themselves, such as academic and professional (Renandya, Hamied, & Joko, 2018). There are numerous educational institutions and companies which require the students and employees to have a particular score or level of English proficiency skill. They need to fulfill the requirement related to English mastery to be accepted to the institution. This is a strong motive in learning English (Jurado & Garcia, 2018). Moreover, Indonesian's social aspect is also influenced by the use of English, as could be seen on social media participation; therefore, the need to master English is inevitable.

English proficiency skills consist of listening, reading, speaking, and writing. According to Slabakova (2016), those skills are separated into two domains of

receptive skill and productive skills. Receptive skills are listening and reading, while productive skills are speaking and writing. Both domains need to be mastered in the process of second language learning. However, receptive skills are highly used since they are widely administered in various language proficiency tests. Learning English or any other language involves many factors, which could be simplified as factors of linguistics and non-linguistic, metalinguistic (Roehr-Brackin, 2018), and metacognitive awareness (Kallio, Virta, & Kallio, 2018). However, the research is more focused on investigating the impact and role of metacognitive awareness in English mastery, particularly for listening and reading comprehension in higher education, which will be explained in section.

The research aims to find out and describe the effect of metacognitive awareness in listening and reading comprehension in higher education. Therefore, the present research aims to figure out the effect of metacognitive awareness on students' English proficiency in listening and reading comprehension in higher education. It also aims to figure out the level

of English as a Foreign Language (EFL) students' metacognitive awareness in listening and reading skills.

Metalinguistic and metacognitive awareness are the essential aspect of second language acquisition, as well as overall mental processing. Those awareness have an artificial role, particularly the process of completing the tasks and reflect the result for improvement. The term metacognition refers to people's consciousness of how to react to events or situations, which involve their internal cognitive competence after periods of experience in the same situations (Roehr-Brackin, 2018). Furthermore, metacognitive awareness is the capacity that allows people to decide, plan, organize, and monitor their learning in order to perform better either for their activities, tasks, or tests.

In addition, Slabakova (2016) has defined metacognitive awareness as the ability to view the entire experience in learning as a process. It involves the ability to determine the strengths and weaknesses during learning and how to face future learning activities and monitor the whole learning process. Therefore, metacognitive awareness is the term to point out an individual's perceived understanding or consciousness. As in the learning context, it is the understanding of the reason to learn the learning objective, the way to achieve the objective, and the suitable strategy after the reflection process for improvement in future tasks, courses, and any other performances.

Metacognitive awareness is an inevitable aspect in learning and improvement for a better learning result after the end of the learning process (Al-Azzemy & Al-Jamal, 2019; Azmuddin, Mohdnor, & Hamat, 2017; Balıkcıoğlu & Efe, 2016; Feiz, 2016; Freeman, Karayanidis, & Chalmers, 2017; Oz, 2016; Zhussupova & Kazbekova, 2016). This ability is compatible to support the learners in higher education since the need for independent learning, problem-solving, monitoring, and self-evaluating are important at that level (Devika & Singh, 2019). Moreover, those mentioned capacities also significantly contribute to primary education (Connor et al., 2019).

Moreover, metacognitive awareness is related to the capacity to correct the error and evaluate the learning process that has been done. This is outstanding, but not every learner owns it. Besides, linguistic knowledge will be well-supported by knowledge and cognition regulation, which predict the self-evaluating ability as an autonomous strategy. It is a significant impact since the best learners could decide what the prospective and suitable strategies, and they could combine those strategies to achieve their goals (Öztürk, 2019). In other words, metacognitive awareness will be beneficial for the learners' learning achievement, and it applies to a higher educational level as well.

There is the other benefit of metacognitive awareness related to writing ability. According to Wang & Han (2017), extensive reading contributes to enhancing writing ability; writers will get the benefit from dedicating time for reading. The better writers

are, the more reading learners. The learners who have metacognitive awareness realize what should be done to perform well in their activities. Therefore, they understand through the evaluation of their previous performances. The learners will be well-adapted to write if they read a large number of writing products.

Furthermore, the writers who have limited knowledge regarding language features and how to use it will be stuck during their writing process. It shows that the writing source could be provided by the writing, which they have to read in preparing writing the product. This is predictable since both skills are under the term of literacy skills as the ability to navigate semiotically through the world. It means that every encountered object is all read and understood (Roehr-Brackin, 2018; Slabakova, 2016). Besides, comprehension or competence provides knowledge and capacity for performance; in this case, receptive skills support productive skills. Therefore, reading writing products promotes linguistic features on those pieces for comprehension. Furthermore, it is also beneficial for producing writing. Reading skills, as well as listening skills, are not only beneficial to enrich information through comprehending text but also support improvement in writing and speaking skills.

However, the research trend is more focused on studying which methods, strategies, or even designs for improving learners' abilities without considering their capacities to synchronize the entire words and the thinking quality. They have kept on their minds to make a product base on their understanding of language. It is an insufficient path to produce better language learners or even learners in any field since all expertise needs to enlarge the information to support their field of work through either listening or reading as receptive skills. It is well-said that the ability to make meaning and understand appropriately is a must for any study discipline so that the need to master it is an urgency.

Despite that, the ability to understand the strengths and weaknesses of learners is a crucial capability in order to determine suitable strategies in learning (Öztürk, 2019) that is well-supported by metacognitive awareness (Al-Azzemy & Al-Jamal, 2019; Oz, 2016; Zhussupova & Kazbekova, 2016). Moreover, metalinguistic awareness provides learners with how to objectify and reflect on language. Knowledge accessing, parsing, decoding, and mental processing (cognitive) are included in the process of comprehension of listening and reading. As both skills determine and support the build of prior knowledge and understanding, those are positioned as prerequisites for productive skills. Therefore, awareness in language learning facilitates learners to be more effective in processing input and enrich their knowledge to produce language.

In reference to these statements, the researcher is interested in studying the contribution of metacognitive awareness on students' English language proficiency in higher education, particularly for listening and reading skills. Metacognitive awareness promotes

the ability to reflect on the language and the learning process. Those support the individuals' independence in deciding the direction of learning to achieve the objective by releasing their own strengths and weaknesses to choose the suitable learning strategies. Besides, the pre-TOEFL result of students shows low scores in receptive skills; on that matter, metacognitive awareness helps students expand their capacity in both factors of linguistics and non-linguistics.

Besides, receptive skills are considered as the highest priority activities in academic competence. In response to that, the researcher decides that English proficiency skills, which will be assessed in the research, are the receptive skills. The research's novelty is related to the involvement of non-linguistic factors in English proficiency skills (receptive skills). Therefore, the research will focus on the role and how metacognitive awareness influences the level of English receptive skills in higher education.

Higher education setting is involved with superior reading level and interpretation of spoken language (listening). Superior reading level infers to the ability to comprehend the content and social relation in a text by involving the higher mental process to access existing knowledge (Slabakova, 2016). Moreover, critical reading or resisting is a term to explain the backlash or question on readers' minds related to the text, which differs from people's assumptions (Roehr-Brackin, 2018). In other words, the background assumptions are used to identify what assumptions that the speakers or writers tend to express in utterances or texts. It provides the reason to accept or reject those assumptions.

The mental process is essential for higher education students if they are intended to have great literacy competence. Kallio, Virta, and Kallio (2018) have defined mental processes as the activity of probing mental reactions from the text, such as thoughts, feelings, and perceptions, while the readers are less focused on the actions of the materials in the text. As for Roehr-Brackin (2018), it is in line with reading as a process of decision-making, problem-solving, analysis, and evaluating (cognition process), which involves the quality of thinking. The quality of thinking could be supported by metacognitive awareness. For further results, it will impact the learning autonomy since learners are comfortable to decide the suitable strategies for learning. In this case, learner autonomy creates autonomous individuals who can think independently and act responsibly. In a narrow view, autonomy enables learners to learn how they should learn by providing them with tools for better learning on their own and training them to use appropriate strategies for realizing their learning objectives.

As for Öztürk (2019), the most successful students are the one who learns through a greater variety of strategies and uses those appropriately for the language learning task. Therefore, metacognitive use will create autonomous learners who could reflect upon their learning independently, which supports

the improvement of thinking quality as the required capacity in higher education. Thinking quality is not only beneficial for reading but also for listening as those are part of receptive skills. Therefore, the best aim of higher education is to prepare the students to have their independent capacity to decide what a suitable way of learning and how they could handle any tasks given. If the students are well-prepared in these ways, they will have the ability to face society, and it will not be hard to filter information in this era of technology and out-spoken public.

Receptive skills are not only crucial in broadening students' capacities for aptitude objective; beyond that, it is also a process of learning and education (Slabakova, 2016). Moreover, developing receptive skills is not easy since the process of thinking and prior knowledge is involved in it. It requires prior knowledge of vocabulary, phonology, morphology, syntax, semantic, pragmatic, and discourse structure (Al-Azzemy & Al-Jamal, 2019; Zhussupova & Kazbekova, 2016). It means that receptive skills involve a complex process involving mastery of grammar, rhetorical device, concept, and judgemental element. People must have a certain level of knowledge to be able to comprehend appropriately. Therefore, it is no wonder if the English learners, English as a Second Language (ESL) or EFL students, find it hard to comprehend and achieve high scores in receptive skills.

The explanation shows that higher education students require the ability to think independently about the learning process and reflect on the result. Furthermore, every student of various fields in higher education also needs to pass the test of receptive skills (listening and reading) for the study's entrance and completion. Those could be achieved by having metalinguistic and metacognitive awareness that promotes thinking quality and reflects learning improvement.

Rabia (2019) has studied metacognitive in bilinguals that investigates differences between balanced, dominant, limited bilinguals, and monolinguals in metacognitive linguistic skills for English reading comprehension. It is found out how the degree or level of bilingual contributes to metacognitive linguistic skills. The research has studied three domains of planning, monitoring, and evaluating in four groups of participants (30 seventh-grade students in each group) complete a metacognitive reading strategies questionnaire. It aims at measuring their metacognitive awareness in each domain after fulfilling a reading comprehension task in English. Data is analyzed using a Multivariate Analysis of Variance (MANOVA) to test the differences within and between groups. Findings show that students' level of metacognitive reading awareness is affected by the degree of bilingualism.

In addition, the previous study by Yeganeh (2013) has used the Metacognitive Awareness Listening Questionnaire (MALQ) to collect the data. The result indicates that the overall level of metacognitive

listening awareness among both monolingual and bilingual students is satisfactory. It is in line with the other studies showing that Iranian students have high metacognitive awareness in general; in listening strategies, vocabulary, and reading skills. Moreover, students are more aware of problem-solving strategies than other strategies types. Furthermore, bilingual students show higher awareness in planning and evaluation and mental translation components, but higher planning and evaluation instead of personal knowledge. This also reveals that bilingual Iranian students are more aware of strategies that should be avoided to become skilled listeners. Besides, they know how to prepare themselves for listening and evaluating the results of their listening efforts.

METHODS

The participants of the research are approximately 59 university students of English Education major in Yogyakarta. Surveys and tests are used to study the variables comprehensively. The survey is divided into the Metacognitive Awareness Listening Questionnaire (MALQ) and Metacognitive Awareness Reading Strategy Inventory (MARSIS). Meanwhile, the test is in the form of listening and reading comprehension. The research procedures are; first, the participants are asked to fill the questionnaire and inventory (survey). Second, the participants are asked to complete the listening and reading comprehension tests.

The instruments applied are surveys and tests (quantitative) in order to study the problem thoroughly. Test in the form of listening and reading comprehension is applied to collect participants' scores. Moreover, MALQ and MARSIS are used to survey to determine participants' level of metacognitive awareness both in each listening and reading skills. The research uses multiple regression as the technique of analyzing quantitative data. It is used to measure the differences between two or more independent variables and a dependent variable (Creswell & Creswell, 2017). Those steps will be used to analyze the qualitative data collection. Therefore, multiple regression is a technique to analyze quantitative data.

RESULTS AND DISCUSSIONS

Table 1 shows the significant effect of metacognitive awareness is only occurred on reading skills, as indicated by the significance value of 0,005, which is lower than 0,05. Meanwhile, the significance value of metacognitive awareness in the listening level is 0,074, which is higher than 0,05, so that there is no significant effect of metacognitive awareness on listening skills. This indicates a strong correlation between learners' metacognitive awareness level and their performances in academic activities. Besides, as shown in Table 2, most of the participants are categorized at a high level of metacognitive awareness

in listening. However, it is not matched with their listening scores, as shown in Table 1. Nevertheless, their reading scores are in line with their level of metacognitive awareness, as shown in Table 1 and Table 2. Therefore, it is found that there is no influence of metacognitive awareness on listening skills; however, it shows a significant influence on reading skills.

Table 1 Regression Analysis Result

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
Constant	85,011	15,475	5,493	0,000
MA Listening Level	-6,515	3,582	-1,819	0,074
Constant	17,183	13,724	1,252	0,216
MA Reading Level	11,424	3,867	2,954	0,005

Table 2 Frequency of Scores in Listening and Reading and Levels of Metacognitive Awareness in Listening and Reading

Component		Frequency	Percentage (%)
MA in Listening	High	42	71,2
	Middle	16	27,1
	Low	1	1,7
Listening Score	A	4	6,8
	A-	2	3,4
	B+	2	3,4
	B	6	10,2
	B-	10	16,9
	C+	5	8,5
	C	8	13,6
	D	11	18,6
	E	11	18,6
MA in Reading	High	32	54,2
	Middle	23	39,0
	Low	4	6,8
Reading Score	A	1	1,7
	A-	3	5,1
	B+	5	8,5
	B	4	6,8
	B-	10	16,9
	C+	2	3,4
	C	12	20,3
	D	15	25,4
	E	7	11,9

In Figure 1 and 2, most of the students are categorized in a high level of metacognitive awareness in listening (71%), and only 27% and 2% of the participants are in low and middle levels. However, it is not indicated by their listening scores, whereas categories D and E are both present at 19% as the highest percentage among other categories of scores in listening comprehension. Despite that, as shown in Figure 3 and 4, the metacognitive awareness level in the reading of the participants are in high level (54%), although its percentage was lower than MA level in listening (71%). Moreover, although categories D and E as two higher score categories of reading have a higher percentage (25% and 12%) among other categories as the same as the listening score result, it is found that metacognitive awareness level in reading has a significant influence on reading scores. Therefore, the findings show there is no significant influence of metacognitive awareness on listening skills. However, there is a significant influence of metacognitive awareness on reading skills.

Consequently, with the previous research related to the topic, metacognitive awareness holds an important contribution to learners' performance. However, the current research only shows a significant influence on reading skills, as studied by Zhussupova and Kazbekova (2016); meanwhile, listening skills are not influenced by such a degree as studied by (Al-Azzemy & Al-Jamal, 2019), instead of linguistic aspect has more contribution on it. The explanation of that could be related to the position of English as a foreign language in Indonesia, where its usage is limited. Although some Indonesians are aware of the importance of English as demand for them to apply for a job and continue their academic career as well as participate in social networking; unfortunately, some of them are only focused on passive skills such as reading but sidelined the requirement of mastering active skill as such listening.

Moreover, the participants' lack of exposure to reading products and other forms of information could have been led to the incorrect assumption in the mind of the topics during the listening test. People who could not share the same idea as the others who have experienced events and situations cannot imagine and react correctly to those events and situations, as suggested by Roehr-Brackin (2018). Although the information to support people's knowledge is not complicated to find, either through products containing information or real life, the participants are still struggling to acquire it. The participants have the problem of performing well and hold a high score since they have limited exposure to the topics. It is fair to say that the participants' mental processes are not run properly and efficiently due to the failure of thinking back to decide the sufficient reaction on the topics during listening. It is because they have no existing knowledge related to the topics, which is in line with Kallio, Virta, & Kallio (2018). Therefore, the result could be figured out by considering such conditions.

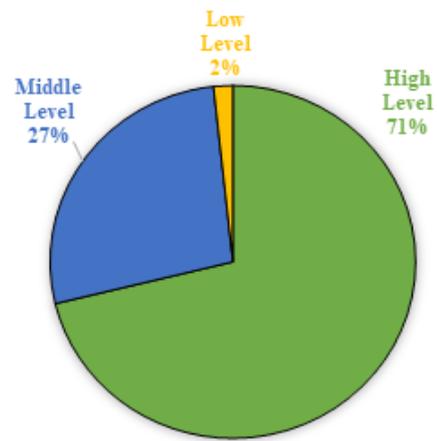


Figure 1 Metacognitive Awareness Level in Listening

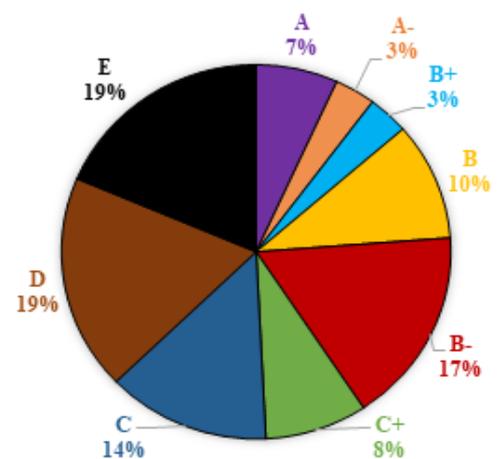


Figure 2 Listening Score in Categories

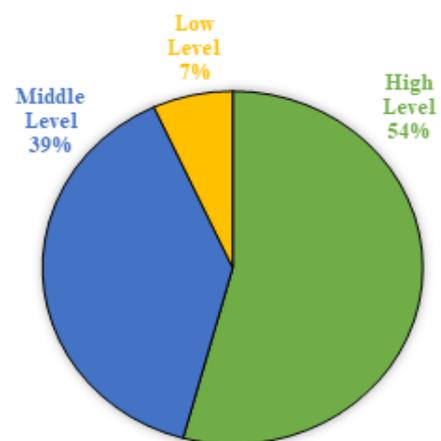


Figure 3 Metacognitive Awareness Level in Reading

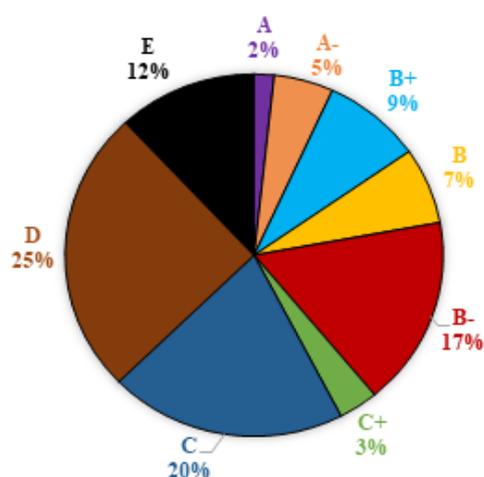


Figure 4 Reading Score in Categories

CONCLUSIONS

The research aims to investigate the influence of metacognitive awareness on receptive skills (listening and reading) of the EFL freshman university students in Yogyakarta. Learner's perceptions towards the use of meta-cognitive processes while listening to a spoken text in English and how these learners listen to English texts in the classroom and also their way of facing reading activities and tasks are all considered for the result as those were formulated in the survey (MALQ and MARS). The researcher also uses the test of listening and reading comprehension to collect the data in order to find the influence of metacognitive awareness on each of the skills.

It is concluded that there is a significant influence of metacognitive awareness on receptive skills. However, there is only a significant influence of metacognitive awareness on reading skills. In contrast, there is no significant influence of metacognitive awareness on listening skills. Most of the students are categorized at a high level of metacognitive awareness in listening and reading. Furthermore, they have relatively poor scores in D and E categories for both listening and reading comprehension tests. However, the only skill which has a significant influence on metacognitive awareness is reading skills. Therefore, the findings show that there is no significant influence of metacognitive awareness on listening skills. However, there is a significant influence of metacognitive awareness on reading skills.

This difference could indicate that listening skill is more complex than reading skill since it needs the ability to concentrate and synchronize the senses to recognize elements such as stress, intonation, phone, accent, and vice versa. Reading relies more on knowledge and mental interpretation, which highlight its simplicity in comparison to listening skills. Although knowledge of topics and information is useful for listening and reading skills, listening is relatively

more complex than reading. Many Indonesians are not accustomed to the audible exposure of English in their daily and academic life. However, only some people are interested in English who will pursue and give their effort to have more English exposure.

REFERENCES

- Al-Azzemy, A. F. T., & Al-Jamal, D. A. H. (2019). Evaluating cognitive, metacognitive and social listening comprehension teaching strategies in Kuwaiti classrooms. *Heliyon*, 5(2), 12-64. <https://doi.org/10.1016/j.heliyon.2019.e01264>.
- Azmuddin, R. A., Mohdnor, N. F., & Hamat, A. (2017). Metacognitive online reading and navigational strategies by science and technology university students. *GEMA Online Journal of Language Studies*, 17(3), 18-36. <https://doi.org/10.17576/gema-2017-1703-02>.
- Balıkcıoğlu, G., & Efe, T. (2016). The role of metacognitive activities on university level preparatory class EFL learners' reading comprehension. *Procedia - Social and Behavioral Sciences*, 232, 294-299. <https://doi.org/10.1016/j.sbspro.2016.10.024>.
- Connor, C. M., Day, S. L., Zargar, E., Wood, T. S., Taylor, K. S., Jones, M. R., & Hwang, J. K. (2019). Building word knowledge, learning strategies, and metacognition with the word-knowledge e-book. *Computers & Education*, 128, 284-311. <https://doi.org/10.1016/j.compedu.2018.09.016>.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: SAGE.
- Devika., & Singh, R. (2019). Influence of metacognitive awareness on engineering students' performance: A study of listening skills. *Procedia Manufacturing*, 31, 136-141. <https://doi.org/10.1016/j.promfg.2019.03.021>.
- Feiz, J. P. (2016). Metacognitive awareness and attitudes toward foreign language learning in the EFL context of Turkey. *Procedia - Social and Behavioral Sciences*, 232, 459-470. <https://doi.org/10.1016/j.sbspro.2016.10.063>.
- Freeman, E. E., Karayanidis, F., & Chalmers, K. A. (2017). Metacognitive monitoring of working memory performance and its relationship to academic achievement in Grade 4 children. *Learning and Individual Differences*, 57, 58-64. <https://doi.org/10.1016/j.lindif.2017.06.003>.
- Jurado, B. C., & Garcia, C. M. (2018). Students' attitude and motivation in bilingual education. *International Journal of Educational Psychology*, 7(3), 317-342. <https://doi.org/10.17583/ijep.2018.3558>.
- Kallio, H., Virta, K., & Kallio, M. (2018). Modelling the components of metacognitive awareness. *International Journal of Educational Psychology*, 7(2), 94-122. <https://doi.org/10.17583/ijep.2018.2789>.
- Nelson, C. L., Proshina, Z. G., & Davis, D. R. (2020). *The*

- handbook of world Englishes*. New Jersey: Wiley-Blackwell.
- Oz, H. (2016). Metacognitive awareness and academic motivation: A Cross-sectional study in teacher education context of Turkey. *Procedia - Social and Behavioral Sciences*, 232, 109-121. <https://doi.org/10.1016/j.sbspro.2016.10.035>.
- Öztürk, G. (2019). Fostering learner autonomy among pre-service EFL teachers: A mixed-method study. *International Journal of Educational Psychology*, 8(3), 298-315. <https://doi.org/10.17583/ijep.2019.4427>.
- Rabia, S. A. (2019). The effect of degrees of bilingualism on metacognitive linguistic skills. *International Journal of Bilingualism*, 23(5), 1064-1086. <https://doi.org/10.1177/1367006918781060>.
- Renandya, W. A., Hamied, F. A., & Joko, N. (2018). English language proficiency in Indonesia: Issues and prospects. *The Journal of AsiaTEFL*, 15(3), 618-629. <https://doi.org/10.18823/asiatefl.2018.15.3.4.618>.
- Roehr-Brackin, K. (2018). *Metalinguistic awareness and second language acquisition*. London: Routledge.
- Slabakova, R. (2016). *Second language acquisition*. Oxford: Oxford University Press.
- Wang, Z., & Han, F. (2017). Metacognitive knowledge and metacognitive control of writing strategy between high- and low-performing Chinese EFL writers. *Theory and Practice in Language Studies*, 7(7), 523-532. <https://doi.org/10.17507/tpls.0707.04>.
- Yeganeh, M. T. (2013). Metacognitive listening strategies awareness in monolingual versus bilingual EFL learners. *Procedia - Social and Behavioral Sciences*, 70, 1787-1793. <https://doi.org/10.1016/j.sbspro.2013.01.254>.
- Zhussupova, R., & Kazbekova, M. (2016). Metacognitive strategies as points in teaching reading comprehension. *Procedia - Social and Behavioral Sciences*, 228, 593-600. <https://doi.org/10.1016/j.sbspro.2016.07.091>.