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The Impact of Bilingualism on Learning a Third Language: A Case Study of Iraqi Learners of Indonesian

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Abstract The present study aimed to evaluate the effect of knowing a second language (i.e., English) on learning a third language (i.e., Indonesian). In total, 40 Iraqi learners attending a general Indonesian course were selected and divided into two groups. The first group included 20 students who had different levels of English language proficiency in addition to their mother tongue (i.e., Arabic). The second group encompassed 20 students who only knew their mother tongue. Their final exam scores were the criteria for determining their third language achievement. According to the results, bilingualism of the participants (familiarity with English as a second/foreign language) positively affected their level of achievement in the third language (Indonesian). Therefore, English language proficiency was a key factor for these students' success in learning a third language. Overall, familiarity with a second language seems to influence the level of competence in a third language.

Keywords: *Bilingualism, Multilingualism, Third language learning, Foreign language, Language education*

1. Introduction

Language is the most complex and, at the same time, the simplest human communication tool. No communicative behavior is as wide and impressive as verbal communication in human life (Sutiyatno, 2018). Language, which is a mechanism consisting of symbols and rules, enables us to communicate with each other. In fact, the primary purpose of language is to facilitate communication.

Behaviorists have argued that the language we produce consists of conditioned responses that have been rewarded. Over the past two decades, research conducted in the field of multilingualism has changed people's understanding of the consequences of learning and using two or more languages in relation to cognitive characteristics, success, and human well-being. In addition, learning a second language has been proven to enhance brain function, simulate individuals' creativity, and prevent cognitive decline. Cognitive functions are

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also influenced by language. Researchers believe that proficiency in a second language is a way to prevent the loss of cognitive functions. In a study, scholars reported the significant effect of multiple language learning on the prevention of Alzheimer's in old age (Caruso et al., 2022). Today, many people across the world speak more than one language due to many cultural and social issues and the needs of society (Saddhono et al., 2022).

The mother tongue is the first language learned by a person. With this language, the person can talk, grow, understand the surrounding social and cultural elements, and be identified by them. Today, we can rarely find a country where at least a small part of the population does not speak two or more languages. Currently, it is estimated that there are four thousand languages spoken in the world. However, language distribution is not uniform; some regions are practically monolingual, while other areas might even have more than two languages. While numbers indicate that languages coexist, they show the extreme need for and complexity of bilingual education. Interlanguage factors such as difference or similarity from the point of view of taxonomy, vocabulary, and phonetics can also affect third language learning. For instance, language learners tend to borrow words from languages that are similar to the target language when producing speech sounds.

Many groups of people leave their place of residence and settle in other places due to various reasons such as the expansion of science and technology, the increase in the possibility of rapid displacement of the population, the continuous change of economic and political conditions, the change of cultural horizons and the needs and hopes of people, and disasters such as war, unemployment, and famine. This requires many adaptations, including linguistic adaptation (i.e., learning another language) (Chen et al., 2011). Nonetheless, bilingualism, whether in its novel or conventional shape, has caused issues for education systems, and responding to them requires detailed and comprehensive reviews. In many countries, a local variety is not just related to two dialects of a single language but is related to two completely separate and distinct languages. For instance, Canada is officially a bilingual country, and French and English are the two official languages of the country. Recognition of the position of French speakers in the country, most of whom live in "Quebec", did not occur without political conflicts since, throughout its history, Canada has been primarily an English-speaking country with a French-speaking minority. In this situation, bilingualism that exists at the individual level gradually becomes the characteristic of the minority group. In such a situation, there are only two ways of speaking, based on the person to whom it is addressed. Nonetheless, even in this type of bilingualism, the person shows more tendency towards one language, and the other language becomes secondary.

The present study aimed to evaluate the role of a second language on third language learning based on previous studies conducted in this area. In the present research, however, the first group included Iraqi language learners whose second and third languages are English and Indonesian, respectively. Moreover, in addition to the familiarity of learners with a second language, other variables such as gender and second language proficiency have also been measured in the current research. Notably, data were collected using a field method. In this regard, 40 Iraqi learners of Indonesian were divided into two groups of 20. The first group had different English language proficiency levels in addition to their mother tongue (i.e., Arabic), whereas the second group only knew their native language before learning Indonesian. The criterion for assessing the Indonesian proficiency level of students was their scores on final semester exams. In the end, the obtained data were analyzed, and the results were presented. With this background in mind, this study aimed to investigate if bilingualism in Arabic and English affects the learning outcomes of Iraqi learners of Indonesian as a third language.

2. Theoretical Framework

Interest in the cognitive and linguistic variation in bilinguals has a long, multidisciplinary history. Since the 1960s, bilingualism has been positively associated with a variety of cognitive functions (Peal & Lambert, 1962). Research has repeatedly shown that bilinguals score higher than monolinguals in tests of cognitive flexibility and processing functions (Adesope et al., 2010; Barac et al., 2014). Bialystok (2010) proposed that bilinguals develop higher levels of executive functions – the interrelated processes of inhibition, working memory, and attentional control – as they need to switch between two language systems with different interlocutors and in diverse contexts. These cognitive consequences are obser-

vable in non-verbal tasks (such as the Simon Task) that require controlled attention and inhibition of routine responses. In these tasks, bilingual individuals typically surpass monolingual individuals (Bialystok et al., 2004).

In addition to advantages in non-verbal cognitive functions, bilinguals seem to have heightened levels in some aspects of metalinguistic awareness (Thomas, 1988), defined as '[…] the ability to focus attention on language as an object in itself or to think abstractly about language […]' (Jessner, 2006, p. 42). Some studies found bilingual advantages in metalinguistic tasks, especially on tasks that require individuals to apply morphological rules to unfamiliar forms (Barac & Bialystok, 2012; Davidson et al., 2010) or noticed implicitly learning grammatical rules explicitly (Reder et al., 2013). As meta-linguistic abilities enable an individual to '[…] see through the meaning of a language to its underlying structure' (Barac et al., 2014, p. 704), bilinguals can reflect about language in a more abstract way (Jessner, 2006; Ransdell et al., 2006). The theoretical assumption is that bilinguals, especially bilinguals with high proficiencies in both languages, can draw from two language systems and thus have a broader linguistic repertoire and can think more abstractly about language than monolinguals (Cenoz, 2013; De Angelis, 2007). However, these advantages have not been found in all metalinguistic tasks. For example, there is little evidence that bilingual children have lasting advantages in phonological awareness past the first grade (Bruck & Genesee, 1995; Yelland et al., 1993). In older children, some studies found heightened levels of phonological awareness (Campbell & Sais, 1995), while others found no differences between the monolingual and bilingual groups. This linguistic repertoire can be used when encountering a new linguistic system and thus should support L3 learning. Indeed, research showed metalinguistic skills to be a significant predictor of foreign language outcomes in both L2 and L3 learners. However, this relation may depend on several factors, namely how both languages are acquired and developed, as well as how often they are used. For this reason, it is important to investigate bilinguals not as a homogeneous group but to take into account specific aspects of bilingualism to understand the effects (Tsimprea Maluch & Kempert, 2019).

The cognitive advantages of bilinguals extend beyond metalinguistic skills to academic performance. In a research study, Thomas (1988) conducted a comparison between monolingual English speakers and 16 bilingual English-Spanish speakers learning French as a second and third language, respectively. The bilingual participants were further categorized into two groups based on their method of acquiring the second language: those who acquired it naturally by living in bilingual families and those who formally learned the foreign language in classrooms. The findings revealed that irrespective of the method of second language acquisition; bilinguals significantly varied from monolinguals in terms of attaining higher grades. Moreover, Thomas noted that bilinguals who underwent formal second language education held a relative advantage over those who acquired the language informally.

Keshavarz and Astaneh (2004) evaluated the effect of bilingualism on learning English vocabulary as a third language. The study encompassed a statistical population consisting of two groups: 30 bilingual participants proficient in both Turkish and Farsi and another 30 bilingual individuals proficient in Armenian and Farsi, along with a control group comprising 30 monolingual language learners. The outcomes indicated that both bilingual groups outperformed the monolingual students in the English vocabulary test. Consequently, it appears that the bilingualism of the participants positively influenced their development of vocabulary skills. Moreover, Armenian-Farsi bilinguals, who had learned their first and second language both practically and orally, were more successful in vocabulary development and generation compared to Turkish-Farsi bilinguals who had learned their first language orally.

Bardel and Falk (2007) assessed the role of the second language in third language learning. They realized that two groups of learners with different first and second languages who learned Swedish and Dutch as a third language, in the early stages of learning the third language, more easily transferred syntactic structures from the second language much more easily than from the second language. In addition, the two groups acted significantly differently in the use of negative structure, which might be due to their second language knowledge and related to the typological relationship between the second and third languages. According to Jessner (2008), paralanguage knowledge is a person's ability to focus on linguistic structure and the ability to shift focus between the structure and the meaning of language. According to him, this knowledge comprises a set of skills that can be grown by a multilingual user

through the use of their paralanguage and language knowledge. Tajeddin and Fereydoonfar (2022) introduced paralanguage knowledge as understanding that language is a system of communication and a set of rules and meanings. Moreover, they regarded linguistic knowledge as a reference to a person's ability to consciously analyze language and its different parts. The results obtained by Park and Starr (2015) revealed that bilinguals who had learned a second language formally had a significantly better performance compared to advanced bilinguals. In addition, bilinguals who have benefited from formal education in learning their second language have more advantages over advanced bilinguals when learning a third language. In fact, formal learning allows language learners to effectively learn structures that are different from the existing linguistic treasure (Tajeddin & Fereydoonfar, 2022).

In an ethnographic study by Hopf et al. (2016) entitled "Fiji School Students' Multilingual Language Choices When Talking with Friends", which had a mixed (qualitative-quantitative) design and was performed using surveying and observation, students' inter-ethnic friendships predominantly relied on English language use. It was observed that most friendships were established according to the main language used at home. However, inter-ethnic peer interaction in English was observed to be friendly and respectful. These language use patterns and friendship behaviors were potentially reinforced by individual and societal multilingualism, in addition to the school environment. Assessing multilingual news. Ling et al. (2020) investigated consumption, querying, and search result selection behaviors. According to their results, search engines and social media were the most popular choice for people to monitor news and information. In addition, multilingual people preferred to use more than one language on their favorite platforms in digital media. Furthermore, the most popular topics followed by the subjects were government, science, sports and entertainment, business, and health. Notably, more than one language was used to receive this information. In this regard, the most use of multilingualism was reported in the subjects of science and entertainment. In addition, multilingual users used multiple languages in search of news information. Furthermore, multilingual users used their second language for more extensive topics in case of access to a system that supports multiple languages. In a study titled "Effects of Bilingualism on Reading Fluency: An Analysis of Pausing Patterns of Iranian Learners of English as a Third Language", Banitalebi et al. (2021) explored the reading fluency of monolingual English language learners (Farsi speakers) and bilingual individuals (Iranian Turkish speakers; L1: Turkish and L2: Farsi). Ultimately, the findings indicated a significant distinction between monolingual and bilingual language learners concerning the frequency, duration, and placement of pauses they employed while reading the English text.

The studies conducted in the Basque Country and Catalonia investigated the acquisition of English as a third language by learners who are bilingual in Spanish and Basque or Spanish and Catalan. Despite significant differences in the knowledge and use of the majority language between the Basque Country and Catalonia, both communities share a similar socio-educational background. Spanish and the minority language (Basque or Catalan) are the official languages used in education in both regions. These studies aimed to compare the proficiency in English between monolinguals and bilinguals. Cenoz (2003) conducted a study involving 321 bilingual (Basque-Spanish) and monolingual (Spanish) secondary school students acquiring English as a third language. The research revealed that bilingualism significantly influenced various measures of English language proficiency once controlling for factors like intelligence, motivation, and exposure to the language. Lasagabaster (1997) extended this study, comparing the English proficiency levels of 252 bilingual and monolingual children in the Basque Country. The selected schools were located in an area where Basque was not the predominant language, and the subjects were in the fifth year of elementary school and the second year of middle school. The findings indicated a robust connection between the level of bilingualism (Basque-Spanish) and proficiency in English, assessed through diverse tests of both oral and written skills. In a separate study, Sanz (2000) presented findings from a comparison involving 124 Catalan-speaking bilinguals proficient in Spanish and 77 monolingual Spanish-speaking participants from a distinct area in Spain outside Catalonia. All the subjects completed tests of grammar and vocabulary in English. The results confirmed those obtained in the previous studies, as bilinguals obtained higher scores on the English tests. The study presented by Sagasta (2001) examined the acquisition of English as a third language in the Basque Country but compared bilingual learners who presented a different level of bilingual proficiency. The findings of this research were in line with other studies, showing that a greater degree

of bilingualism correlates with improved scores across various metrics of English writing as a third language. Additionally, Muñoz (2000) discovered significant correlations between assessments of Catalan, Spanish, and English. That is, those learners with a high level of proficiency in the L1 and the L2 also presented a high level of proficiency in English. Outside the Basque Country and Catalonia, Brohy (2001) conducted a study on the acquisition of French as a third language by Romansch-German bilinguals and German-speaking monolinguals in Switzerland. Brohy (2001) measured general ability in French and found that bilinguals obtained significantly higher scores in the acquisition of French than monolinguals.

Besides the robust correlation that exists between higher levels of proficiency in bilingualism compared to those with lower or imbalanced proficiencies (Bialystok, 1988; Bialystok & Majumder, 1998; Dillon, 2009; Ricciardelli, 1992), some studies have focused on specific areas of language proficiency such as the phonetics, lexis, syntax, or pragmatics. Studies on phonetic discrimination (Werker, 1986) present mixed results. In a preliminary investigation, Davine et al. (1971) examined the phonetic discrimination skills of bilinguals (French-English) and monolinguals (English) in an additional language, discovering no distinctions between the two groups. Likewise, Werker (1986) observed no variations between multilingual and monolinguals in discerning Hindi sounds absent in the languages they were proficient in. On the other hand, Cohen et al. (1967) reported the superiority of bilinguals (English-French) when discriminating sounds not included in the French and English phonetic systems. In a more recent study, Enomoto (1994) compared the discrimination of mora sounds in Japanese by five bilingual and five monolingual subjects and observed that bilinguals had advantages over monolinguals.

3. Methodology

3.1. Participants

In this research, 40 Iraqi men and women with no previous background in the Indonesian language were selected as a sample. They had an average age of 25 years and participated in the general Indonesian language course. They were divided into two groups of 20 based on the criterion of knowing English, besides their mother tongue, and lack of familiarity with the Indonesian language.

3.2. Procedure

3.2.1. Data Collection

The first group consisted of 20 Iraqi-English bilinguals learning Indonesian as their third language. The second group consisted of 20 monolingual Iraqi students learning Indonesian. The criterion for evaluating the level of Indonesian language proficiency of the participants of both groups was the end-of-course exams of the Indonesian Language Education Center. The process of teaching Indonesian to the Iraqi students began with gathering the learners in a classroom setting. The teacher then prepared teaching materials in order to effectively present the language to the learners. In the classroom, the teacher used a variety of teaching methods, including visual aids, practice drills, and classroom discussions. He used technology like online resources in order to keep the learners engaged and motivated. Finally, assessment tools and tests were designed to measure the learners' language progress.

3.2.2. Data Analysis

Data analysis was performed in SPSS. A t-test was run to investigate any possible difference in the language (Indonesian) achievement of the learners of both groups.

4. Results

According to Table 1, the academic achievement scores of the students of the first group (bilinguals) in all four skills were higher than the other group. Moreover, the t-test results demonstrated the significance of this difference for all skills at a 1% level ($p < 0.01$). Therefore, familiarity with a second language had a positive effect on learners' achievement in learning a new (third) language.

Table 1
Comparison of Language Achievement between the Two Groups

Language Achievement (skills)	Familiarity with a Second Language				T-test for equality of means	
	No		Yes			
	Mean*	Standard deviation	Mean*	Standard deviation	T value	Level of significance
Reading	50.60	4.34	78.55	2.13	-3.966	0.001
Listening	56.25	2.78	78.45	2.19	-4.611	0.000
Writing	53.75	6.45	84.55	2.70	-3.136	0.003
Speaking	66.25	3.25	84.10	1.78	-3.521	0.004
Total Grade	56.70	4.20	81.40	2.2	-3.808	0.000

Note. The scores are out of 100.

5. Discussion

Language is one of the most important human communication tools used in interactions. Bilingualism means that a person or a set of people in a community use more than one language in their communications. In fact, a community in which more than one language is used for communication is called a multilingual society. Today, multilingualism is common in most countries in the world. Asian countries such as Iraq, China, India, and Central Asian republics are significant examples of multilingual nations. In general, there are contradictory opinions about the effect of bilingualism on third language learning. For instance, Darcy (1953) believed that bilingual children often fall behind in education compared to monolingual people. Therefore, they thought that familiarity with a second language negatively affected third language learning. In contrast, scholars such as Thomas (1988) and Jessner (2008) claimed that not only did bilingualism have no negative effect on third language learning, but it also facilitated third language learning.

This study was performed on 40 Iraqi students to evaluate the effect of bilingualism on third language learning. The participants were divided into two groups. The first group included 20 subjects who had familiarity with English as a foreign language in addition to their mother tongue, and the second group encompassed 20 individuals who only knew their native language. The main aim of the study focused on the effect of familiarity of Iraqi students with English as a foreign language on the amount of learning Indonesian as a third language. The results of this study echo the ideas put forward by previous research in the field of language acquisition, highlighting the positive effects of bilingualism on third language learning. This is in line with the findings of Jessner (2008), Abtahi and Khodadadian (2016), and Bardel and Falk (2007), which demonstrated a significant advantage for bilingual participants when learning a new language. On the whole, bilingualism is widely considered to be an advantage for third language learners, and the results of this study confirm this viewpoint. It remains important to acknowledge that different individuals and contexts can have a significant impact on the effects of bilingualism, and additional research is needed to fully understand the dynamics of bilingualism and third language acquisition.

It is also important to note the limitations of the study, such as the small sample size, which may restrict the generalizability of the results. Additionally, the use of questionnaire-based measures may have introduced bias into the study, as participants may interpret the questions differently. Future research should include larger sample size and a variety of tasks, such as written and spoken tasks, to gain a more nuanced understanding of the effects of bilingualism on third language learning. Furthermore, additional perspectives, such as those of the tutors or teachers, can also provide valuable insights into the dynamics of bilingualism and third language acquisition. Additional research on the effect of a second language on learning a third language could shine a light on the interaction between prior language knowledge and language learning. Further studies in this area could help determine the most efficient way to teach L2 and L3 and identify areas of improvement in current language education practices. Research on the effect of L2 on L3 has the potential to provide valuable information to language instructors, education professionals, and policymakers, who could use it to develop more effective methods for language learning. Further studies could shed more light on the challenges and

benefits faced by learners as they acquire and use multiple languages and provide valuable insights for professionals working in the field of language education.

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References

Abtahi, M., & Khodadadian, M. (2016). The effect of bilingualism on third language learning, a field study on monolingual and bilingual Chinese Persian learners. *Linguistic Research Journal, 8*(1), 71-88. https://doi.org/10.22108/jrl.2017.21262

Adesope, O. O., Lavin, T., Thompson, T., & Ungerleider, C. (2010). A systematic review and meta-analysis of the cognitive correlates of bilingualism. *Review of Educational Research*, *80*(2), 207–245. https://doi.org/10.3102/0034654310368803

Banitalebi, Z., Jabbari, A. A., Tilwani, S. A., & Razmi, M. H. (2021). Effects of bilingualism on reading fluency: An analysis of pausing patterns of Iranian learners of English as a third language. *Education Research International*, *2021*, Article 9200025. https://doi.org/10.1155/2021/9200025

Barac, R., & Bialystok, E. (2012). Bilingual effects on cognitive and linguistic development: Role of language, cultural background, and education. *Child Development*, *83*(2), 413–422. https://doi.org/10.1111/j.1467-8624.2011.01707.x

Barac, R., Bialystok, E., Castro, D. C., & Sanchez, M. (2014). The cognitive development of young dual language learners: A critical review. *Early Childhood Research Quarterly, 29*(4), 699–714. https://doi.org/10.1016/j.ecresq.2014.02.003

Bardel, C. & Falk, Y. (2007). The role of the second language in third language acquisition: The case of Germanic syntax. *Second Language Research, 23*, 459-484. https://doi.org/10.1177/0267658307080557

Bialystok, E. (1988). Levels of bilingualism and levels of linguistic awareness. *Developmental Psychology*, *24*(4), 560–567.

Bialystok, E. (2010). Bilingualism. *Wiley Interdisciplinary Reviews: Cognitive Science, 1*(4), 559-572. https://doi.org/10.1002/wcs.43

Bialystok, E., Craik, F. I., Klein, R., & Viswanathan, M. (2004). Bilingualism, aging, and cognitive control: Evidence from the Simon task. *Psychology and Aging*, *19*(2), 290–303.

Bialystok, E., & Majumder, S. (1998). The relationship between bilingualism and the development of cognitive processes in problem solving. *Applied Psycholinguistics, 19*(1), 69–85.

Brohye, Y. C. (2001). Generic and/or specific advantages of bilingualism in a dynamic plurilingual situation: The case of French as official L3 in the school of Samedan (Switzerland). *International Journal of Bilingual Education and Bilingualism, 4*(1), 38–49.

Bruck, M., & Genesee, F. (1995). Phonological awareness in young second language learners. *Journal of Child Language*, *22*(2), 307–324.

Campbell, R., & Sais, E. (1995). Accelerated metalinguistic (phonological) awareness in bilingual children. *British Journal of Developmental Psychology*, *13*(1), 61–68. https://doi.org/10.1111/j.2044-835X.1995.tb00664.x

Carlson, S. M., & Meltzoff, A. N. (2008). Bilingual experience and executive functioning in young children. *Developmental Science*, *11*(2), 282–298. https://doi.org/10.1111/j.14677687.2008.00675.x

Caruso, G., Godos, J., Privitera, A., Lanza, G., Castellano, S., Chillemi, A., Bruni, O., Ferri, R., Caraci, F., & Grosso, G. (2022). Phenolic acids and prevention of cognitive decline: Polyphenols with a neuroprotective role in cognitive disorders and Alzheimer's disease. *Nutrients, 14*(4), 819-822. https://doi.org/10.3390/nu14040819

Cenoz, J. (2003). The additive effect of bilingualism on third language acquisition: A review. *International Journal of Bilingualism*, *7*(1), 71-87. https://doi.org/10.1177/13670069030070010501.

Cenoz, J. (2013). The influence of bilingualism on third language acquisition: Focus on multilingualism. *Language Teaching*, *46*(1), 71–86. https://doi.org/10.1017/S0261444811000218

Chen, H., Zhou, L., & Han, B. (2011). On compatibility of uncertain additive linguistic preference relations and its application in the group decision making. *Knowledge-Based Systems, 24*(6), 816-823. https://doi.org/10.1016/j.knosys.2011.03.003

Cohen, S. P., Tucker, R., & Lambert, W. E. (1967). The comparative skills of monolinguals and bilinguals in perceiving phoneme sequences. *Language and Speech*, *10*, 159–168.

Darcy, T. (1953). A review of literature on the effect of bilingualism upon the measurement of intelligence. *Journal of Genetic Psychology, 82*, 21-57. https://doi.org/10.1080/08856559.1953.10533654

Davidson, D., Raschke, V. R., & Pervez, J. (2010). Syntactic awareness in young monolingual and bilingual (Urdu–English) children. *Cognitive Development*, *25*(2), 166–182. https://doi.org/10.1016/j.cogdev.2009.07.003

Davine, M., Tucker, R., & Lambert, W. E. (1971). The perception of phoneme sequences by monolingual and bilingual elementary school children. *Canadian Journal of Behavioral Science*, *3*, 72–76.

De Angelis, G. (2007). *Third or additional language acquisition*. Multilingual Matters Limited.

Dillon, A. M. (2009). Metalinguistic awareness and evidence of cross-linguistic influence among bilingual learners in Irish primary schools. *Language Awareness, 18*(2), 182–197.

Enomoto, K. (1994). L2 perceptual acquisition: The effect of multilingual linguistic experience on the perception of a less novel contrast. *Edinburgh Working Papers in Applied Linguistics*, *5*, 15-29.

Hopf, S. C., McLeod, S., & McDonagh, S. H. (2016). Fiji school students' multilingual language choices when talking with friends. In *Friendship and peer culture in multilingual settings* (Vol. 21, pp. 55-88). Emerald Group Publishing Limited. https://doi.org/10.1108/S1537-466120160000021005.

Jessner, U. (2006). *Linguistic awareness in multilinguals: English as a third language.* Edinburgh University Press.

Jessner, U. (2008). A DST model of multilingualism and the role of metalinguistic awareness. *The Modern Language Journal, 92*, 270-283. https://doi.org/10.1111/j.1540-4781.2008.00718.x

Keshavarz, M. H., & Astaneh, H. (2004). The impact of bilinguality on the learning of English vocabulary as a foreign language. *Bilingual Education and Bilingualism, 7*, 295-302. https://doi.org/10.1080/13670050408667814

Lasagabaster, D. (1997). *Creatividad y conciencia metalingüística: incidencia en el aprendizaje del inglés como L3* [Creativity and metalinguistic awareness: Incidence in the learning of English as an L3] (Unpublished doctoral dissertation). University of the Basque Country, Vitoria-Gasteiz.

Ling, C., Steichen, B., & Figueira, S. (2020). Multilingual news–an investigation of consumption, querying, and search result selection behaviors. *International Journal of Human–Computer Interaction*, *36*(6), 516-535. https://doi.org/10.1080/10447318.2019.1662636

Muñoz, C. (2000). Bilingualism and trilingualism in school students in Catalonia. In J. Cenoz & U. Jessner (Eds.), *English in Europe: The acquisition of a third language* (pp. 157-178). Multilingual Matters.

Park, M., & Starr, R. L. (2015). The role of formal L2 learning experience in L3 acquisition among early bilinguals. *International Journal of Multilingualism, 13*(3), 274-291. https://doi.org/10.1080/14790718.2015.1088544.

Peal, E., & Lambert, W. E. (1962). The Relation of Bilingualism to Intelligence. *Psychological Monographs: General and Applied*, *76*(27), 1–23.

Ransdell, S., Barbier, M. L., & Niit, T. (2006). Metacognitions about language skill and working memory among monolingual and bilingual college students: When does multilingualism matter? *International Journal of Bilingual Education and Bilingualism*, *9*(6), 728–741. https://doi.org/10.2167/beb390.0

Reder, F., Marec-Breton, N., Gombert, J. E., & Demont, E. (2013). Second-language learners' advantage in metalinguistic awareness: A question of languages' characteristics. *British Journal of Educational Psychology*, *83*(4), 686-702. https://doi.org/10.1111/bjep.12003

Ricciardelli, L.A. (1992). Bilingualism and cognitive development in relation to threshold theory. *Journal of Psycholinguistic Research*, *21*(4), 301–316.

Saddhono, K., Rohmadi, M., Setiawan, B., Suhita, R., Rakhmawati, A., Hastuti, S., Islahuddin, I, (2022). Corpus linguistics use in vocabulary teaching principle and technique application: A study of Indonesian language for foreign speakers. *International Journal of Society, Culture & Language*, *11*(1), 231-245. https://doi.org/10.22034/ijscl.2022.1971972.2823.

Sagasta Errasti, M. P. (2001). *La producción escrita en euskara, castellano e inglés en el modelo D y en el modelo de inmersión* [Written production in Basque, Spanish and English in model D and in the immersion model] (Unpublished master's thesis). Universidad del País Vasco-Euskal Herriko Unibertsitatea, Leioa, Spain.

Sanz, C. (2000). Bilingual education enhances third language acquisition: Evidence from Catalonia. *Applied Psycholinguistics*, *21*(1), 23–44.

Sutiyatno, S. (2018). The effect of teacher's verbal communication and non-verbal communication on students' English achievement. *Journal of Language Teaching and Research*, *9*(2), 430-437. http://doi.org/10.17507/jltr.0902.28

Tajeddin, Z., & Fereydoonfar, M. (2022). Construction and validation of an identity scale for English language learners. *International Journal of Society, Culture & Language*, *10*(2), 12-26. https://doi.org/10.22034/ijscl.2022.545507.2506

Thomas, J. (1988). The role played by metalinguistic awareness in second and third language learning. *Journal of Multilingual and Multicultural Development*, *9*(3), 235-246. https://doi.org/10.1080/01434632.1988.9994334

Tsimprea Maluch, J., & Kempert, S. (2019). Bilingual profiles and third language learning: The effects of the manner of learning, sequence of bilingual acquisition, and language use practices, *International Journal of Bilingual Education and Bilingualism*, *22*(7), 870-882. https://doi.org/10.1080/13670050.2017.1322036

Werker, J. (1986). The effect of multilingualism on phonetic perceptual flexibility. *Applied Psycholinguistics*, *7*, 141–156.

Yelland, G. W., Pollard, J., & Mercuri, A. (1993). The metalinguistic benefits of limited contact with a second language. *Applied Psycholinguistics*, *14*(4), 423–444.