

An In-depth Discussion on Age Effects in Second Language Learning

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Abstract: People believe learning a new language is better to start from a very early age in many countries. This belief is also why many countries lower the age of starting a second language programme in school. The theoretical basis for this belief is the critical period hypothesis and learning mechanism. However, some research shows older learners can learn faster and better than early learners. This research studied if starting young in a second language is better than later. By reviewing amounts of literature, this research discussed this question from four situations: the inside and outside of the classroom in the non-target language countries; the inside and outside of the classroom in the target language countries. Besides the situation of the learners, the learning time and the expectation for early starters and older starters are also different and these two factors also should be considered when thinking about the outcome of learning a second language for early and old learners. The conclusion is that if there is a condition that could provide amounts of target language input for early learners, children are better to start early. Otherwise, it is not important if children start to learn a second language early.

Keywords: Critical period hypothesis, Learning mechanisms, Age factor, Early learners, Old learners

1. Introduction

Most countries have foreign language education programmes in the world. Parents usually value the foreign language education of their children in these countries. Most people believe that the starting age is very important for second language learning. They believe that the earlier a child starts to learn a second language, the more possible that a child is to reach a high achievement in a second language. Due to this belief, more and more parents send their children to education institutes from a very young age, most of which are English education institutes. The policy of some countries changed too. The age of having foreign language programmes has been lowered from middle school to primary school in many countries in the past years (Enever, 2011^[1]; Nunan, 2003^[2]). For example, Children are expected to begin learning a foreign language before nine years old in Europe (Enever, 2011)^[1]. The view that learning a foreign language from a young age is better is supported by some researchers, such as Singleton & Ryan (Singleton & Ryan, 2004)^[3]. And also there are scientific explanations to support parents' and governments' behaviors, which are critical period hypotheses and advantages of implicit learning. Some researchers even give the best beginning age for learning a foreign language. For example, Johnson and Newport (1989)^[4] claimed if a child is exposed to a second language before age 7, he/she will have a chance to attain the same proficiency as native speakers. There is some empirical evidence to show that earlier starters perform better than older learners in second language learning. Young learners usually have better pronunciation and they are more fluent in a foreign language than older learners who have studied same time as young learners do (Lightbrown & Spada, 1999)^[5].

On the contrary, Some researchers claim that starting to learn a second language will not give you a long-term advantage compared to starting later, which means age is not a necessary factor for language learners (Pfenninger & Singleton, 2018)^[6]. Gallardo del Puerto (2007)^[7] checked the results of a European empirical study for early foreign language learning and found no advantages for foreign language early starters. Pfenninger (2014)^[8] found that if older learners experienced a large amount of foreign language input, they perform a similar language performance to those early starters. Some researchers even find a negative influence on the early study of foreign languages. For example, Hsieh (2011)^[9] found that children will show resistant emotions to foreign language learning. Nikolov and Djigunovic (2006)^[10] found that even though there is no evidence showing that second language development could influence children's first language development when they are developed at the same time, some second language programme does not allow children's first language to appear in the

classroom, which reduces the input of first language and may impede the development of children's first language. Therefore, the effect of the age factor on second language learning is still unclear.

2. Theoretical basis

2.1 The Critical Period Hypothesis

The critical period hypothesis supports parents' and government's decision to adjust the age to start to learn a foreign language. The critical period is an ideal time window to learn a foreign language. If children start to learn a foreign language from the critical period, they are more likely to fully acquire the foreign language in the future. Lennerberg (1967)^[11] claimed that learning a foreign language is better before puberty, otherwise, the human brain will lose plasticity when humans reach puberty. It is impossible to fully acquire a foreign language once humans reach this age period. In a nutshell, children have to begin learning a foreign language in the critical period, otherwise, they will never fully acquire a new language.

The classic critical period theory believes this period is fixed for everyone (Huang, 2015)^[12], which means there is a definite time point for everyone to learn a foreign language. However, more and more research shows that the beginning time and the closure time are different from person to person and some old beginners acquire a foreign language very well (Birdsong, 1999; Werker & Tees, 2005, as cited in Huang, 2015)^[12]. Therefore, some researchers call this golden period the sensitive period and the optimal period instead of the critical period (Knudsen, 2004; Werker & Tees, 2005, as cited in Huang, 2015)^[12]. The sensitive period and optimal period do not have definite time points and they also do not claim that once children miss their language learning golden time, they will never reach the native speaker level (Huang, 2015)^[12].

Most empirical research about the critical period hypothesis is carried out in a target language environment. There are two types of studies in this field: short-term research and long-term research (Huang, 2015)^[12]. The difference between these two types is the living time in the target language country (Krashen et al., 1979, as cited in Huang, 2015)^[12]. Most researchers use five years and some use ten years as the criterion for long-term research (Birdsong, 2009^[13]; DeKeyser, 2000^[14]). The short-term research participants are those who spend one year or two years after arrival in the target language countries (Snow & Hoefnagel-Hohle, 1978)^[15]. The results of these studies show that older arrivals have a higher proficiency than those younger arrivals in the first few years, but younger learners outperform older arrivals in the results of long-term research. The research also found that the critical period has different effects on different domains of language. Some researchers found that early starters show better pronunciation than those older beginners, but older learners can acquire grammar rules just like young learners, even faster. (Flege et al., 1999^[16]; Huang, 2013^[17]). Multiple critical periods hypothesis is proposed to explain this phenomenon by some researchers (Singleton & Ryan, 2004, as cited in Huang, 2015)^[12]. These researchers believe the critical period is different for various aspects of languages. Phonetics is usually believed to close earliest and syntax is believed to close last, but the definite ages terminating these critical periods are still unclear.

2.2 Learning Mechanisms

Children learn a foreign language using different learning mechanisms from adults. Children are believed to learn a foreign language by using their implicit mechanisms extensively (DeKeyser, 2003; DeKeyser & Larson-Hall, 2005; Montrul, 2008, as cited in LICHTMAN, 2016^[18]). Adults are widely thought to learn foreign languages mostly by using their explicit mechanisms (Spada & Tomita, 2010)^[19]. Some researchers even said children can only acquire language by implicit language learning and adults can only acquire language by explicit language learning (DeKeyser & Larson-Hall, 2005)^[20]. The extent of cognitive maturation is possibly to be the reason for this difference.

Implicit language learning means learners learn language through implicit mechanisms without intention and awareness when the learner encounters the language (Ellis, 2009)^[21]. Knowledge learning through implicit mechanisms can be accessed quickly and spontaneously. "It is not under learner control" (Bley-Vroman, 1990, as cited in LICHTMAN, 2016, p. 708)^[18]. This is a great advantage for language learning, especially for listening and speaking because using language usually is a situation with time pressure (Ellis, 2005)^[22]. On the contrary, explicit language learning means the learner learns language through explicit mechanisms with consciousness and intention (Ellis, 2009)^[21]. Knowledge from explicit language learning is a range of rules. Accessing this knowledge is a controlled process

with consciousness (Ellis, 2005)^[22]. Thus, when learners want to use explicit knowledge, they need time and attention to think about the knowledge they learned and remembered in the past, which could be frustrating if learners fail to recall knowledge. And also, time is often not enough for learners to recall explicit knowledge. Therefore, implicit language learning is better than explicit language learning since implicit knowledge can be accessed quickly and is more suitable for learners' daily life. Moreover, implicit memory lasts the whole lifespan, but explicit memory is short and unreliable (Paradis, 2004)^[23]. However, implicit language learning needs a lot of language input, which is very hard to achieve if the learner is in a country that does not use English. Even though the learner can create an English environment, it is still a method that takes longer time than explicit language learning (DeKeyser, 2003)^[24]. The ideal language learning is to combine implicit language learning with explicit language learning. For students of different ages, the teacher could use different instructional strategies.

Teachers use differentiated instruction strategies to teach children and adults. Teachers tend to teach children much more implicitly than teach adults since children learn language through implicit mechanisms (Harley, Howard & Hart, 1998)^[25]. Bialystok (1994)^[26] said rules have their work on adults but make little difference to children. Curtain and Dahlberg (2010)^[27] said that children learn language best from contexts and use them frequently rather than analyze the grammar in the language. Learning grammar is not the goal of teaching a new language, making learners use a new language is the goal of instruction. Teachers tend to use various activities, such as songs, games, and stories, to immerse children in the language without explicit knowledge instruction (LICHTMAN, 2016)^[18]. On the contrary, instruction for learners above twelve mainly involves explicit language knowledge and form-focused activities, which typically include grammar rules instruction, amounts of practice in writing, and mistakes correction (Torrás et, al., 2006, as cited in LICHTMAN, 2016^[18]).

3. Literature review

3.1 *The Age Factor*

"Age is usually viewed as an individual difference", just like motivation, cognitive ability, learning strategies, and learning experience (Pfenninger & Singleton, 2018, p. 209)^[6]. Ellis (2006, as cited in Pfenninger & Singleton, 2018^[6]) does not agree with this view. He believes age is a factor that warrants different groups of people to have different characteristics, which means age is a reason that causes people's differences. The age factor is also seen as a macrovariable by some researchers (Flege et al., 1999)^[16]. Montrul (2008)^[28] claimed that the notion of the age factor can not be isolated from other co-occurring factors. Pfenninger and Singleton (2018)^[6] claim that age factors should combine with other age-related factors to analyze. Fenyvesi et al. (2017, as cited in Cadierno & Eskildsen, 2018^[29]) did research to study the influence of individual factors related to age. They found that early starters show a lower level of anxiety in the foreign language learning classroom and their motivation depends more on external authorities. The older starters show a higher level of anxiety toward second language learning and their motivation depends less on external authorities. In the aspect of learner mindsets, the early starters had less incremental mindsets than older starters. Besides, early starters had a more positive English competence belief than older starters. Thus, the age factor should be seen as a macrovariable, which represents the differences between different age groups.

It is hard to get a definite and general conclusion between age and second language acquisition because the age factor interacts with a lot of other factors, which makes the result of the age effect not accurate. DeKeyser (2013, as cited in Pfenninger & Singleton, 2018^[6]) said that the bias in sampling could change the effect of age in immigrant settings. If the convenience sample contains too many good educated participants or takes too many participants from the community with many native speakers of the target language, this absolutely will influence the outcome of the age effect. Pfenninger (2017)^[30] claimed a similar view in the classroom setting. In the classroom setting, the students are comprised of different groups of people who have different learning experiences, beliefs, first languages, and so on. When a student becomes one of a group, he or she needs to behave like one of these group members. This will maximize or minimize the effect of age in the research of age effects in the classroom setting. Therefore, the researchers cannot just consider the age factor, but they also need to consider all the other possible factors that may influence the results of their research, if they want to get a more accurate conclusion about age effects. Of all the factors that may influence the results of age effects research, family environment is an extremely important one, but the influence of family is always been neglected.

3.2 *Effects of Family*

Although many age effects researchers neglect the influence of home contexts on foreign language learning, the study about parental influence on children's general performance is rich. Goodall et al. (2011)^[31] hold the view that if parents could have a positive reaction to children's learning activities, children can learn better. Wigfield et al. (2006, as cited in Pfenninger & Singleton, 2018^[6]) pointed out "four influential parental factors: (a) parental, familial, and neighborhood characteristics; (b) parental general beliefs and behaviors; (c) parents' child-specific beliefs; (d) parent-specific behavior" (p. 210). Parents could influence students' performance in many aspects at both primary and secondary levels (Fan & Chen, 2001^[32]; Feinstein & Symons, 1999^[33]). Goldenberg et al. (2008)^[34] found that if children have access to academically oriented vocabulary and books, they are more likely to attain a higher achievement in school.

The effects of parents on language learning align with parents' effects on the general education of children. Csizer and Kormos (2009, as cited in Pfenninger & Singleton, 2018^[6]) claimed that parents' encouragement is very important for children to increase their interest in second language learning. Similarly, Morris et al. (2013)^[35] found that South Korean students' motivation is influenced by parents' attitudes. If parents encourage their children, the children will have positive motivation to learn a second language. If parents lack interest in children's second language learning, children will have a negative attitude toward second language learning. Castillo and Camelo Gamez (2013)^[36] found that after giving parents instructions to support their children's second language learning, their children show positive results in second language learning.

As for parental input, parents of multilingual children usually have some common characteristics. These common characteristics are talking in detail and fully to the children, asking a lot of questions, teaching new vocabulary in context, and sharing books in many ways (McCabe et al., 2013)^[37]. Dunnrsma et al. (2007)^[38] found the interaction between children and their siblings has a larger effect on improving the proficiency of the respective language children chose to use with their siblings than interaction with their parents.

4. Discussion

To figure out if age is important for second language learning, we need to discuss age-related factors that affect foreign language learning and then we can predict age effects in different situations.

We are about to discuss these age-related factors in four types of environments for foreign language learners: the inside of the classroom and the outside of the classroom in the non-target language countries, the inside of the classroom, and the outside of the classroom in the target language countries. Some age-related factors have different effects in different environments and others have the same effects in different environments.

4.1 *Living in non-target language countries*

In non-target language countries, children and older learners are very hard to be exposed to a foreign language environment. They learn foreign languages mostly through the teacher's instruction inside the classroom. Teachers usually take different instructional strategies for students in different age periods. They use implicit instruction strategies for young children, but it is hard to have a significant effect on children's foreign language learning. There are two reasons to cause this result. First, implicit instruction gives very limited foreign language input due to the school teaching schedule. Second, children learn a foreign language by implicit mechanism, which needs a large amount of foreign language input. Because the instruction time is very limited and the rule of implicit mechanism, the language input is not enough to promote children's foreign language proficiency. On the contrary, the teacher takes explicit instruction strategies to teach older learners because they have a certain cognitive ability and thus learn faster than children. Teachers can teach more vocabulary and instruct grammar rules to the older learners directly in the older learner's classroom, so older learners could acquire the same knowledge in a very short time that children need to learn through implicit instruction in a few years. This is the reason why in non-target language countries, the older learners usually can catch up and surpass the language performance of students who have started to learn foreign languages from a very young age. However, in some special conditions in the non-target language countries, the young starters perform better than the older learners because they were exposed to amounts of foreign language input when they were young and thus they could bring the advantages of implicit learning

into play. For example, some parents send their children to an international school in which teachers and students use English to communicate with each other. This has a similar effect to moving to the target language countries.

When it comes to the outside of the classroom in the non-target language countries, the children and older learners are basically in the same situation. They usually get access to the foreign language through music, games, the internet, and so on. The most important influence is from their parents. If their parents are open to foreign cultures and encourage children to learn foreign languages, the children are more likely to achieve a high achievement in foreign language learning. If their parents can speak that foreign language and would like to use it to communicate with their children in their daily life, the children would become bilingual at a very young age.

4.2 Living in the target language countries

In the target language countries, the young immigrants and the older immigrants face different environments to learn a new foreign language. It will be much easier to learn a new language for young immigrants than older immigrants because children are easier and quicker to adapt to a new environment than adults. Young immigrants are open to accepting new cultures and trying new stuff, so they are more likely to live like local people, such as going to the local church, joining school clubs, and so on. They could make many new friends speaking the target language in the new country and thus they have more chances to learn and practice the foreign language with native speakers. In contrast, older learners have stronger emotions and a deeper impression of their homeland and culture, so it is hard for them to accept the new culture and change their past habits and customs immediately. Due to the cultural difference, they tend to make friends with people who come from their homeland and use their first language because this stuff makes them feel familiar and kind. Last but not at least, if people immigrate to the target language country too late, they may lose the chance to go to school to receive the systematic foreign language education as young immigrants do. Therefore, the researchers usually find that young immigrants have better foreign language proficiency than older immigrants, even though they live in the target language country for the same years.

4.3 Some age-related factors irrelevant to the location

Some environmental factors have the same effect wherever the foreign language learners live, it is only related to age. Firstly, the expectations for learning a foreign language from learners themselves and other people are different. No one expects children can speak or write new words or sentences immediately after children learn them. Children could choose to speak or not when hearing information from outside, they could keep silent if they do not feel comfortable speaking yet. Children do not expect themselves can do that too and they do not have pressure from exams. Thus, children are in a pressure-free environment to learn a foreign language. According to the affective filter hypothesis, the attitude of children towards foreign languages is favorable to their second language acquisition. But for older learners, the situation is very different. Older learners face expectations from teachers, parents, and themselves. Teachers expect older learners can use the language knowledge in a short time after they teach the students. Parents expect older learners can get good grades on language tests. Older learners expect to see the payback when they work hard to learn a foreign language, otherwise, they will feel frustrated and want to give up learning.

Secondly, the time learning a foreign language is very different for young learners and older learners. Children have a few years more to accept foreign language input compared to older learners. In these years, they do not have a burden from school work and life. Older learners have to coordinate the time for foreign language learning and the time for other subjects and social life, which means they have less time to learn a foreign language in their daily life. And also they have already lost a few years to learning a foreign language than earlier starters.

5. Conclusion

As we can see, many factors can influence the results of foreign language learning. It is hard to give a general and definite answer to the question: Is it better to start to learn a foreign language at a younger age? But this question has the answer if there are specific conditions. Firstly, if learners are in a non-target language country and learners cannot create a foreign language environment around them, which means learners do not have a chance to get enough foreign language input at a young age, then

learners do not need to regret they did not start to learn a foreign language from a young age because they can catch up and surpass those earlier starters once they begin to study. Those early starters who only have very little foreign language input cannot produce the ideal effects of implicit learning in such conditions. The quantity of foreign language input in non-target language countries is scarce and the quality of foreign language input is hard to control. Even though children start very early in such conditions, they will not get a significant advantage over older starters.

Secondly, if parents can create a foreign language environment or parents can take their children to the target language countries to live for some years, which means their children could have amounts of foreign language input to activate the advantages of implicit learning, it will be better to let their children start to learn a foreign language from a young age. Otherwise, they will have to learn a foreign language through explicit learning mechanisms once they miss their golden time. The suggestion I can give parents is to encourage their children to learn a foreign language and show openness to a foreign culture.

References

- [1] Enever, J. (Ed.). (2011). *ELLiE: Early language learning in Europe*. London: The British Council.
- [2] Nunan, D. (2003). *The impact of English as a global language on educational policies and practices in the Asia-Pacific region*. *TESOL Quarterly*, 37(4), 589–613.
- [3] Singleton, D. M., & Ryan, L. (2004). *Language acquisition: The age factor*. Clevedon: Multilingual Matters.
- [4] Johnson, J. & Newport, E. (1989). *Critical period effects in second language learning: the influence of maturational state on the acquisition of English as a second language*. *Cognitive Psychology* 21, 60-99. □
- [5] Lightbrown, P. M. & N. Spada. (1999). *How languages are learned*. 2nd ed. Oxford: Oxford University Press
- [6] Pfenninger, S., & Singleton, D. (2018). *Starting Age Overshadowed: The Primacy of Differential Environmental and Family Support Effects on Second Language Attainment in an Instructional Context*. *Language Learning*, 69, 207-234. <https://doi.org/10.1111/lang.12318>
- [7] Gallardo del Puerto, F. (2007). *On the effectiveness of early foreign language instruction in school contexts*. In D. Elsner, L. Küster, & B. Viebrock (Eds.), *Fremdsprachenkompetenzen für ein wachsendes Europa. Das Leitziel 'Multiliteralität'* (pp. 215–229). Frankfurt/Main: Peter Lang.
- [8] Pfenninger, S. E. (2014). *The misunderstood variable: Age effects as a function of type of instruction*. *Studies in Second Language Learning and Teaching*, 4(3), 415-453.
- [9] Hsieh, M. F. (2011). *Learning English as a foreign language in Taiwan: Students' experiences and beyond*. *Language Awareness*, 20(3), 255–270.
- [10] Nikolov, M., & Djigunovic, J. M. (2006). *Recent research on age, second language acquisition, and early foreign language learning*. *Annual Review of Applied Linguistics*, 26, 234–260.
- [11] Lenneberg, E. H. (1967). *Biological foundations of language*. New York, NY: Wiley and Sons.
- [12] Huang, B. (2015). *A synthesis of empirical research on the linguistic outcomes of early foreign language instruction*. *International Journal of Multilingualism*, 13(3), 257-273. <https://doi.org/10.1080/14790718.2015.1066792>
- [13] Birdsong, D. (2009). *Age and the end state of second language acquisition*. In W. C. Ritchie & T. K. Bhatia (Eds.), *The new handbook of second language acquisition* (pp. 401–424). Amsterdam: Elsevier.
- [14] DeKeyser, R. M. (2000). *The robustness of critical period effects in second language acquisition*. *Studies in Second Language Acquisition*, 22, 499–533.
- [15] Snow, C. E., & Hoefnagel-Hohle, M. (1978). *The critical period for language acquisition: Evidence from second language learning*. *Child Development*, 49, 1114–1128.
- [16] Flege, J. E., Yeni-Komshian, G. H., & Liu, S. (1999). *Age constraints on second-language acquisition*. *Journal of Memory and Language*, 41, 78–104.
- [17] Huang, B. H. (2013). *The effects of age on second language grammar and speech production*. *Journal of Psycholinguistic Research*, 43(4), 397–420.
- [18] Lichtman, K. (2016). *Age and learning environment: Are children implicit second language learners?* *Journal of Child Language*, 43(3), 707-730. <https://doi.org/10.1017/s0305000915000598>
- [19] Spada, N. & Tomita, Y. (2010). *Interactions between type of instruction and type of language feature: a meta-analysis*. *Language Learning* 60(2), 263-308.
- [20] DeKeyser, R. & Larson-Hall, J. (2005). *What does the critical period really mean?* In J. F. Kroll & A. M. D. De Groot (eds.), *Handbook of bilingualism: Psycholinguistic approaches* (pp. 88–108).

Oxford: Oxford University Press.

- [21] Ellis, R. (2009). *Implicit and explicit learning, knowledge and instruction*. In R. Ellis, S. Loewen, C. Elder, H. Reinders, R. Erlam, & J. Philp (Eds.), *Implicit and explicit knowledge in second language learning, testing and teaching* (pp. 3–25). <https://doi.org/10.21832/9781847691767>.
- [22] Ellis, R. (2005). *Measuring implicit and explicit knowledge of a second language: a psychometric study*. *Studies in Second Language Acquisition* 27, 141-172.
- [23] Paradis, M. (2004). *A neurolinguistic theory of bilingualism*. Amsterdam: John Benjamins.
- [24] DeKeyser, R. (2003). *Implicit and explicit learning*. In C. Doughty & M. Long (eds), *Handbook of second language acquisition* (pp. 313-348). Oxford: Blackwell. □
- [25] Harley, B., Howard, J. & Hart, D. (1998). *Grammar in grade 2: an instructional experiment in primary French immersion*. In S. Lapkin (ed.), *French second language education in Canada: empirical studies* (pp.177-193). Toronto: University of Toronto Press. □
- [26] Bialystok, E. (1994). *Representation and ways of knowing: three issues in second language acquisition*. In N. C. Ellis (ed.), *Implicit and explicit learning of languages* (pp. 549-569). San Diego, CA: Academic Press.
- [27] Curtain, H. & Dahlberg, C. A. (2010). *Languages and children: making the match. New languages for young learners, grades K-8*. New York: Pearson.
- [28] Montrul, S. (2008). *Incomplete acquisition in bilingualism: Re-examining the age factor*. Amsterdam, Netherlands: John Benjamins.
- [29] Cadierno, T., & Eskildsen, S. (2018). *The younger, the better? A usage-based approach to learning and teaching of English in Danish primary schools*. *European Journal Of Applied Linguistics*, 6(1), 171-182. <https://doi.org/10.1515/eujal-2017-0018>
- [30] Pfenninger, S. E. (2017). *Not so individual after all: An ecological approach to age as an individual difference variable in a classroom*. *Studies in Second Language Learning and Teaching*, 7, 19–46. Retrieved from <https://eric.ed.gov/?id=EJ1137946>
- [31] Goodall, J., Vorhaus, J., Carpentieri, J., Brooks, G., Akerman, R., & Harris, A. (2011). *Review of best practice in parental engagement*. London, England: Institute of Education.
- [32] Fan, X., & Chen, M. (2001). *Parental involvement and students' academic achievement: A meta-analysis*. *Educational Psychology Review*, 13, 1–22. <https://doi.org/10.1016/j.edurev.2015.01.002>
- [33] Feinstein, L., & Symons, J. (1999). *Attainment in secondary school*. *Oxford Economic Papers*, 51, 300–321.
- [34] Goldenberg, C., Rueda, R. S., & August, D. (2008). *Social and cultural influences on the literacy attainment of language-minority children and youth*. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners: Report of the national literacy panel on language minority children and youth* (pp. 269–318). Mahwah, NJ: Erlbaum.
- [35] Morris, A., Lafontaine, M., Pichette, F., & de Serres, L. (2013). *Affective variables, parental involvement and competence among South Korean high school learners of English*. *Studies in Second Language Learning and Teaching*, 3, 13–45. Retrieved from <https://eric.ed.gov/?id=EJ1135886>
- [36] Castillo, R., & Camelo G'amez, L. C. (2013). *Assisting your child's learning in L2 is like teaching them to ride a bike: A study on parental involvement*. *GIST Education and Learning Research Journal*, 7, 54–73. Retrieved from <https://eric.ed.gov/?q=source%3a%22GIST+Education+and+Learning+Research+Journal%22&pg=5&id=EJ1062584>
- [37] McCabe, A., Tamis-LeMonda, C. S., Bornstein, M. H., Brockmeyer Cates, C., Golinkoff, R., Wishard Guerra, A., Song, L. (2013). *Multilingual children: Beyond myths and towards best practices*. *Social Policy Report*, 27, 3–21. Retrieved from http://www.srcd.org/sites/default/files/documents/E-News/spr_27_4.pdf
- [38] Duursma, E., Romero-Contreras, S., Szuber, A., Proctor, P., Snow, C., August, D., & Caldern, M. (2007). *The role of home literacy and language environment on bilinguals' English and Spanish vocabulary development*. *Applied Psycholinguistics*, 28, 171–190. <https://doi.org/10.1017/S0142716406070093>.