

The Age Factor in Second Language Learning

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Abstract—In recent years, age has been considered as the major factor in determining language learners' successful foreign language acquisition, which is correlated to the assumption stated by Critical Period Hypothesis and Neurological Hypothesis. Most importantly, these assumptions might be concluded that that language learner can acquire foreign language better than adults do at their early age. Additionally, there is still a widespread belief held by many scholars, stating that young children are better at second language acquisition (SLA) than the later starters, such as the adolescents or adults. Therefore, whether young learners learn second language better than the older will be discussed in this article.

Index Terms—age factor, second language acquisition, adults, young learners

I. INTRODUCTION

Some adolescents or adults who start to learn second language would fail to achieve language fluency, while children who were exposed to second language at their early age seem to be proficient like native speaker (cf. Lenneberg 1967). In addition, language environments play an important role when language learners start foreign language acquisition. This hypothesis can be supported by saying that children seem to be involved in an efficient way to acquire the new language when set in the foreign language (cf. Singleton and Ryan 2004, p. 61). On the other hand, the adolescents or adults would experience some great difficulties in acquiring a new language and maintaining the trace of foreignness (ibid). Accordingly, by given the discussion from the theory, it is accepted that young learners probably have great potential to acquire second languages rapidly, efficiently and proficiently, whereas adults or adolescents are at an inferior position in second language acquisition because of the age factor proposed by many linguists showed above.

However, there are many researchers that hold different perspectives and question whether young learners are better in second language learning than older learners. In particular, based on the proposed argument, Krashen et al. (1979) draw from the research literature and indicate that the older is faster, but the young is better. In contrast, Coppieters (1987), Scovel (1988), Johnson and Newport (1989) held the view that the earlier the children learn second language, the easier it seems to be. According to these arguments, several questions can be proposed and then described as follows: is it true that the young will learn better than the older in process of second language acquisition? Beside the age factor, are there any other factors that would play determinant roles in influencing the success achievement of second language acquisition? When having discussed the roles of age factors, are there some pedagogical considerations should be accounted for foreign language teaching?

Based on the introduction above, the purpose of this essay is to discuss whether young learners learn second language better than the older. Thus, I am going to inquire into if there should be any other factors influencing language acquisition. Firstly, this essay will present a view of some theoretical background to account for the notion of the critical period in second language acquisition. Secondly, I will observe some age-related differences between young and old learners in second language acquisition, aiming to identify the other factors and draw some conclusions related to this widespread belief. Then, based on the discussion related to the educational changes of Chinese foreign language policy and my own learning experience, I will present some pedagogical implications for conducting foreign language teaching programmes to enhance young learners' learning ability and fulfill their foreign language learning experience. Finally, for conclusion, I will give my personal reflections in the end.

II. LITERATURE REVIEW OF SECOND LANGUAGE ACQUISITION STUDIES

A. Critical Period Hypothesis

There is a critical period for first as well as second language acquisition shows children have great advantage over adults or adolescents. This critical period is used to refer to the general phenomenon of declining competence over increasing age of exposure. This hypothesis was first introduced by Penfield and Roberts (1959, p. 5).

As well, Ellis observes that there is the period when language acquisition can take place naturally and efficiently, but after a certain age the brain is no longer able to process language in this way (1986, p. 107). This critical period is defined by Scovel (1988, p. 2) in the following manner:

In brief, the critical period hypothesis is the notion that language is the best learned during the early years of the childhood, and that after about the first dozen years of life, everyone faces certain constraints in the ability to pick up a new language.

Then, Lenneberg (1967, p. 176) used the term “lateralization” to express that puberty means a period of time when the localization of language-processing ability in the human’s left hemisphere was connected with human’s biological change/development. That means: in language learning, children’s brains are more flexible than that of adults. Also, Krashen proposed that human’s brain lateralization can be finished in the age of five (1973, p. 65). However, Lamendella (1977, p. 175) argued that period was too much exaggerated and he used the term “sensitive period” for “lateralization”, which states that the possibility of learning a language well may also occur after 5 years old.

According to this assumption, the hypothesis states that childhood is the superior period to acquire second language. Young learners will acquire language naturally and effectively in this period, but beyond this period, they are seemed to be not easy to acquire and yield the second language. Therefore, the CPH assumes that children will be the superior learner to language acquisition.

B. *Is It True That “the Younger the Better”?*

Morford and Mayberry (2000, p. 111) note “individuals exposed to language at earlier ages consistently outperform individuals exposed to language at earlier ages for first and second languages of both signed and spoken languages”. This assumption agrees that people will perform well in language learning at their early age. This is the hypothesis for “the younger the better” position.

Another opposite view is ‘the older the better’. It illustrates that older language learners are more successful and efficient than young learners. Some studies have been done to support this view. Ekstrand reveals that L2 learning ability ‘improves with age’ (Ekstrand 1976, p. 130). In Harley’s research, he favors the faster acquisition rate among later beginners (1986, p. 112). Therefore, we can get the point that older learners are the efficient language learner.

However, another evidence from Snow and Hoefnagel-Hohle (1978) supports the view that most children were ultimately more successful than adults in SLA but they were not always faster. Adults appear to progress faster than children in the early stage of processing, while children surpass adults and adolescents in eventual attainment (Dulay & Burt, pp. 94-95). Based on this view, it can be observed that it is the supportive view for “the younger the better in the long run”.

Based on these researches and argument, it can be concluded that older learners will learn language faster and more efficient than young learners, whereas young learners will win the achievement in the long period of language learning. It convinces us that the young learner stands the superior stage in the second language acquisition and they will perform better than older learners in ultimate language learning.

C. *Age-related Differences between Young Learner and Old Learner*

There are successful second language learners who started SLA after puberty and have been able to achieve native proficiency. Johnson and Newport (1989) states that the age of arrival was the significant predictor of success in their case study test about the Chinese and Korean who had been first exposed to second language either before or after puberty. They found there was a strong relationship between early start to language learning and performance in the second language. They state that there are few differences in their second language ability before age of 10 and older learners will not have native-like language skills and are more likely to differ greatly from one another in ultimate attainment. Therefore, it is true that most scholars would agree that there are differences between children and adults in final outcome of second language acquisition. Singleton and Ryan (1989, p. 85) addressed greater success for young learners on phonetic/ phonological performance. It can be concluded that there is the critical period hypothesis for attaining full native-mastery of a second language. Young learner will get the native accent when they are exposed to the foreign or second language at the early age.

Herschensohn (2007, p. 141) presents evidences from late LIA and L2A researches that 1) learners have deficient phonology and grammar, and that early and late L2 learners are represented differently in the brain; 3) Older learners will make use of their first language learning strategies to learn the grammar and achieve good performance than young learners. They also point to the view that children are better than adults only in some areas of SLA (e.g. at acquiring accent and basic interpersonal communication skills (ibid.)). In addition, there is another evidence which can be cited that the importance of memory in young learners and of analytic abilities in older learners has been observed as the different (Harley & Hart 1997, p. 391). To summarize, there are age-related differences between young and old in their second language learning. They all show their superiority in processing second language learning.

Therefore, it can be concluded that young learners are not really better but they will achieve excellent language outcome in the ultimate second language learning. Children will do some better performance than adults in some areas such as the native accent, but adults will be the fast language learner. Nevertheless, based on the Critical Period Hypothesis, it should be admitted that if young learners would be exposed to the second language learning earlier at their early stage, they will have the superior position in second language learning than adults and reach achievement in second language learning in ultimate attainment. Childhood is considered as the superior period for second language learning.

D. *Age-related Factors in Relation to Second Language Acquisition*

Views of the Critical Period Hypothesis range from Lenneberg’s statement, children succeed in completely learning their native language with no conscious effort and mere exposure, while adults failed by incompletely learning L2 with

instruction, negative evidence and enforced motivation (cf. Lenneberg, 1967). He claims that learners gain native-like ability from mere exposure to the idea that young learners outperform older ones either in eventual outcome or in learning ability. It is not obvious that child in L2 acquisition does as well, but adults' L2 acquisition doesn't clearly be confirmed since it entails conscious effort, more than just mere exposure and an inevitably incomplete final state (Herschensohn, 2000, p. 140).

There is another view denies the critical period hypothesis and states that "the learning situation in combination with age-related affective and cognitive factors could account for some of the variation in success between child and adult L2 learning" (Moon & Nikolov, 2000, p.23).

Additionally, Snow (2002) argues that Lenneberg's claim that adult\child differences in acquisition are due entirely to non-biological factors (e.g. intensity of exposure, affective emotional process, motivation and instruction). The reason is "No one denies the existence or importance of extra-linguistic factors, although different theoretical view concerned with the role of biology differently. L2A is affected by non-linguistic factors that vary by age" (cf. Singleton and Ryan 2004, p.132). Martohardjono and Flynn see acquisition as a similar challenge for all age groups, but they think that L2A is determined by social psychological, experiential whose function could differ greatly for children or adults (cf. Singleton and Ryan, 2004, p.135).

And Scovel (1988, p. 214) states changes in the brain related to maturation may be exactly as Lenneberg proposed, but nevertheless can be summoned as factors. However, in Lenneberg's argument, it states that children and adults do not follow the same path of language acquisition, which is because of the non-biological cognitive, educational and social factors (ibid.).

To sum up, there are the age-related factors affecting children and adults' second language learning besides age. It can be concluded that the age-related factors are cognitive factors, educational factors and social-psychological factors, neurological factors. We can admit that age will influence language learning based on CPH, while it is also associated with cognitive, social-psychological and other factors which will definitely affect language learners' second language learning. They are seemed as the determining factors to learners' second language learning. Therefore, learners' age is one of the factors which can determine the way he approach the second language learning. But learners' motivation, opportunity to learn language and some other factors are also the important determining factors in learners' eventual success language learning.

III. PEDAGOGICAL IMPLICATIONS FOR SECOND LANGUAGE TEACHING PROGRAMMES TO YOUNG LEARNERS

According to the literature review about the Critical Period Hypothesis and age-related factors, we can observe that young learners stand the superior stage to acquire second language than adults or adolescents. Although the older learners seem to be faster and efficient learner in second language learning, young learner can learn language better than adults or adolescent in some areas of language and achieve good performance in the ultimate language learning.

However, there are age-related factors relating to learner's second language acquisition such as the cognitive, psychological and social factors which will affect learners' second language learning. They can be summarized as individual capacity, language aptitude, second language instruction, teaching method, teaching material, self-conscious, personality, attitude, and motivation and so on. Eventually, all these assumptions would provide some pedagogical considerations to the second language programmes for young learners' foreign language learning.

A. *Early Foreign Language Instruction*

Based on the CPH, age-related differences and factors, the assumption is that when young learners are exposed to the second language earlier, they will achieve better performance and proficiency in second language acquisition. This assumption is widely believed that early acquisition of foreign language will facilitate their learning later in the life. They will learn second language better and win the ultimate achievement in the long run. Childhood is considered to be the golden age to second language learning. Therefore, it is good idea to conduct the foreign language instruction earlier in the school to make children expose to the foreign language learning earlier at their early stage.

According to Singleton and Ryan, people who begin learning a second language in childhood in the long run may generally achieve a higher level of proficiency than those who begin later (cf. Singleton and Ryan, 2004). Obviously, this statement contributes to the hypothesis for starting foreign language instruction earlier. It seems as a good start for young learners holding the chances to acquire foreign language with early immersion to the foreign language instruction.

In the past years, Chinese government policy put little emphasis and investment for the foreign language programme to education reform. English as our foreign language curriculum was initially designed in the secondary school almost in every part of China. According to my learning experience, I began learning English at 12 years old when entered into junior high school. That is my first time to be exposed to the foreign language without any chances to know English before because of the education policy on the foreign language teaching. Foreign language instruction began very late in China about 20 years ago.

However, with hypothesis on children's early starting foreign language learning which is about the earlier children are exposed to foreign language, the faster they will acquire, Chinese educational policy on foreign language programmes has been changed. Additionally, there is an enormous boom of interest in early foreign language

instruction all over the world in 1990s (cf. Moon and Nikolo, 2000). This trend also draws Chinese educational policy attention to foreign language programmes on meeting the globalization and internationalization.

In the 1990s, English as a required course began at children's fifth grade in the elementary school. Thereafter, the English teaching programmes changed again to require English courses to be stated at children's third grade in the elementary school around 2000. As the time goes on, the new policy emphasizes the importance of the early starting foreign language teaching programmes at children's early age. The government of China has been actively emphasizing the English as a foreign language as an essential and compulsory curriculum in the school in recent years. Therefore, English is actually required at first grade in the elementary school. The another necessary thing need to be mentioned that more and more nursery school in almost affluent cities begin to teach children English at their 3-4 years old in China. All these changes about the foreign language teaching policy in China shows that foreign language instruction is attracted attention to implementing foreign language instruction in the school earlier.

To sum up, I want to mention that the early foreign language instruction will motivate children to learn foreign language based on children's personality. General speaking, they often show their curiosity to some new things except learning the L1. Based on my own learning experience, I expected to learn English and wandered to know what English is like when I studied in the elementary school. Therefore, to some extent, if foreign English instruction will be implemented in the school earlier, it will contribute to developing children's favorable attitude on second language learning. They will show their self-conscious and aware the cultural differences when being immersed into the target language context. Consequently, foreign language instruction should be introduced to the school as early as possible since it is good for children being exposed to the second language context and facilitating their foreign language learning in the long run.

B. Foreign Language Teaching Materials

As pointed out in previous researches, most teaching materials are international publications, except for a few countries, for example, Sweden, Croatia; moreover, there have been few researches into how whole-language, task-based, learner-centered, activities-based materials are applied for young learners (cf. Moon and Nikolo, 2000, p. 40). According to this, teaching materials for foreign language teaching should focus on language learners' linguistic competence as well as their communicative competence. Language learners' holistic language skills should be developed attributing to the foreign language teaching material, including listening, speaking, writing and reading skills. Therefore, teaching materials play an important role in the language teaching and language learning.

Since the age-related factors are regarded as the determining factor to young learner as well as the older learner's foreign language learning, it arouses some controversies to question how to attract language learners' attention to learn foreign language with interest and favorable attitude. Teaching materials also stand the leading in the foreign language programmes because of their effects on teachers' teaching method and teaching aims.

In Hungary's research on negotiation as part of the syllabus with young learners has found that it is crucial for innovation to fit the educational context (ibid.). Therefore, teaching materials should be designed depending on the educational context so as to meet the young learners' needs. The objective is to arouse young learners' interest to learn English, nurturing their linguistic skills and communicative skill in order accelerates young learners' foreign language learning in the long run.

The Chinese foreign language teaching which is called traditional English language teaching in the past few years focuses on the teacher-centered and puts much more emphasis on the grammar teaching involved in the sentence structures because of the school or college entrance exams. It shows less emphasis on the oral speaking because it is neglected in the exams. The grammar translation teaching method severs language learners to be more efficient in taking exams. Therefore, it leads to the books designing are full of the grammar, vocabulary and reading practice. However, teaching outcome is concerned that young learners feel very boring with the foreign language learning and some peers wander to give up learning English because of the comprehensive input about the grammar in the classroom. In my learning English experience in the junior and middle high school, I have processed this kind of English teaching because of the Chinese national education policy.

However, in 2001, there was a movement about the English course books in china aimed at reforming the English book by the new education policy. New English teaching curriculum and books have been changed then. New English coursebooks are instead of the traditional one with colorful grammar books for young learners, including more authentic materials and more activities together with the authentic dialogues and scripted dialogues. To some extent, new teaching materials put much more emphasis on young learners' language ability in order to immerse them into foreign language learning with great fun and interest. It will influence the teachers' teaching method for young learners in the classroom.

IV. CONCLUSION

According to the Critical Period Hypothesis, age is proved to be the myth that young learners stand the advantage stage in second language learning. They will learn foreign language better than older learners in the ultimate attainment, though older learner is regarded as fast and efficient language learner. Immersing young learners into foreign language learning earlier will help them hold the favorable attitude on language learning in the long run. Therefore, we should

teach learners' foreign language as early as possible, especially at their early age. When they first enter to the school, the foreign language courses should be introduced for them in the class. It would help them form the foreign language belief like their mother tongue. Because of their personality, they will show their interest to learn the foreign language. They can memorize words quickly because of their brain and can be easy to achieve the native accent. It is widely believed that young learners show their superior learning quality to acquire second language than older learners based on CPH.

When education institute proposes new the foreign language learning programmes for foreign language teaching, the government should support and invest money so as to put it into effect. When course director plans the course, they should consult the teachers as well as the students to get more information about the foreign language course, such as the time, the books. When course director chooses the teaching materials for foreign language teaching, they should ascertain the teaching content and teaching structure to some extent. The education institute needs to introduce the international publishers' books or materials from the English speaking countries. Authentic materials and task-based contents need to be taken into account when our educators choose the teaching materials. The teaching materials including more authentic materials and activities will serve teachers' teaching methodology and techniques. When our teachers teach young learners' foreign language, we should pay more attention to their personality, learning style, learning strategy, interest, motivation, etc. All these factors would affect their language learning and need to be considered. We should make sense of the way to attract young learners' attention from the sensitivity of grammar practice to the communicative classroom environment. The important thing for our foreign language teacher to make sense is that their teaching goal is to arouse young learners' interest and enthusiasm to learn a foreign language so that they can achieve the linguistic competence and communicative competence in the ultimate foreign language learning. Therefore, it is urgent for our educator to consider stimulations to young learners' foreign language teaching and learning the reason why is that they will perform better in the ultimate foreign language learning.

REFERENCES

- [1] Coppeters, R. (1987). Competence differences between native and near-native speakers. *Language*, 63(3), 544-573.
- [2] Dulay, H. Burt, M. (1982). *Language Two*. New York: Oxford University Press.
- [3] Ellis, R. (1986). *Understanding of Second Language Acquisition*. Oxford: Oxford University Press.
- [4] Ekstrand, L. (1976). Age and length of residence as variables related to the adjustment of migrant children, with special reference to second language learning. In S. Krashen, R. Scarcella and M. Long (eds.), *Child-Adult Differences in Second Language Acquisition*. Rowley, MA: Newbury House.
- [5] Harley, B. (1986). *Age in Second Language Acquisition*. Clevedon: Multilingual Matters.
- [6] Harley, B. & D. Hart. (1997). Language aptitude and second language proficiency in classroom learners of different starting ages. *Studies in Second Language Acquisition*, 19(3), 379-400.
- [7] Herschensohn, J. (2007). *Language Development and Age*. Cambridge: Cambridge University Press.
- [8] Johnson, J. & E. Newport. (1989). Critical period effects in second language learning: the influence of maturational state on the acquisition of ESL. *Cognitive Psychology*, 21, 60-99.
- [9] Krashen, S. (1973). Lateralization, language learning and the critical period: Some new evidence. *Language Learning*, 23: 63-74.
- [10] Krashen, S, M. Long, and R. Scarcella. (1979). Age, rate and eventual attainment in second language acquisition. *TESOL Quarterly*, 13, 573-82.
- [11] Lamendella, T. (1977). General principles of neuro-functional organization and their manifestation in primary and non-primary language acquisition. *Language Learning*, 27(1), 155-196.
- [12] Lenneberg, E. H. (1967). *Biological Foundations of Language*. New York: Wiley.
- [13] Morford, J. and R. Mayberry. (2000). A reexamination of "early exposure" and its implications for language acquisition by eye. In C. Chamberlain, J. Morford and R. Mayberry (eds), *Language Acquisition by Eye*. Mahwah, NJ: Lawrence Erlbaum.
- [14] Moon, J. and M. Nikolov. (2000). *Research into Teaching English to Young Learners*. Pécs: University Press Pécs.
- [15] Penfield, W. and L. Roberts. (1959). *Speech and brain mechanism*. New York: Atheneum.
- [16] Singleton, D. and L. Ryan. (2004). *Language Acquisition: the age factor*. UK: Multilingual Matters.
- [17] Scovel, T. (1988). A critical review of the critical period research. *Annual Review of Applied Linguistics*, 20, 213-223.
- [18] Scovel, T. (2001). *Learning New Languages: a guide to a second language acquisition*. New York: Newbury House.
- [19] Snow, C. and H. Marian. (1978). The critical age for SLA: evidence from second language learning. *Child Development*, 49: 1114-1128.
- [20] Snow, C. (2002). Second language learners and understanding the brain. In A. M. Galaburda, S. M. Kosslyn, and Y. Christen (eds.), *The Languages of the Brain*. Cambridge, MA: Harvard University Press, 151-165.

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