The Effective Age of Second Language Acquisition: A Literature Review

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Abstract

The presence of language suggests that the human mind can handle a bunch of codes in an exceptional manner, which is then transformed into a bunch of significance for communication. It is important for a person to initially get familiar with the language to have the option to utilize it really for correspondence purposes. The peculiarity of language obtaining has drawn in light of a legitimate concern for linguists to lead research in this field to decide the tremendous limit that human minds give on how language is procured, both first and second language. The capacity to get and comprehend language isn’t hereditarily acquired yet the specific language that children speak is given to them socially and naturally. The outcome in language procurement can be accomplished by zeroing in on the inside factors that additionally influence it, such as maturing in language capacity and the so-called critical period. This study employed Literature Review as the research method, in which this research endeavored to investigate a portion of the current examination articles on the Critical Period Hypothesis and the impact toward Second Language Acquisition (SLA). Moreover, the consequence of the investigation was subsequently proposed to distinguish how much the SLA is dependent upon the impact of a critical period.

**Keywords:** Second Language Acquisition, Critical Period, Language Capacity

**The significant finding:** Literature review as the research method was proposed to distinguish how much the Second Language Acquisition (SLA) is dependent upon the impact of a critical period.

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## REVIEW

### I. Introduction

The engagement of languages in human daily life defines how unique the human brain is since it can process a set of codes which is transformed to become a set of meaning as a medium to communicate with each other (Chomsky in Fromkin. et al, 2003). However, the use of a language by an individual must be initialized by the acquisition process of the target language until the one master it hence they could use it well for communicative purposes. This thought is upheld by Varshney (2003) who recommends that language procurement is the interaction by which an individual accomplishes a familiar command over the target language. Moreover, it should be noticed that language acquisition can be partitioned into two primary parts which are well known as First Language Acquisition which is later shortened as FLA and Second Language Acquisition which is later stated as SLA.

FLA can be characterized as a child endeavor in learning one’s mother tongue or one’s first language. Then again, SLA is someone process of acquiring or learning a language which is identified other than one’s mother tongue. For quite a long time, the language acquisition peculiarity has drawn linguists’ interest to direct research on this field to recognize the extraordinary capacity of human brains of how a language is acquired, either first or second language. The capacity to acquire and comprehend a language isn’t hereditarily passed down, however the specific language that children speak is passed down socially and naturally to them. Children acquisition of their first language can be acquired without direction or artificial instruction. Based on Chomsky (2009), he expresses that “Language acquisition is a matter of growth and maturation of relatively fixed capacities, under appropriate external conditions”. According to this statement, it
implies that the outcome in language acquisition can be accomplished by all people, however there are inside factors that additionally enormously affect it, such as maturation in language capacity and furthermore what have become debatable issues for a really long time known as critical period which likewise will become the essence of discussion in this study.

Critical period can be characterized as the development period in which some urgent experience will impact the development or learning process. As during the process of language acquisition, the critical period is a condition where the children’s brain has unique ability to oblige and handle language obtained through the interaction of the environment and discourse in everyday life (Penfield & Roberts, 1959 as cited in Nelson, 2012). In this condition the children has unique ability to have the option to learn and try and utilize the language that has been acquired. In a similar understanding, Fromkin, Rodman and Hyams (2003) likewise expresses that the critical period is the individual’s capacity to learn and foster language, particularly the native language, with a crucial time at the age from the individual’s birth to the puberty. By referring to these prominent experts' ideas, it can be said that language acquisition is becoming complicated, difficult and even impossible after the critical period.

**The Reigns of the Critical Period Hypothesis**

Critical Period Hypothesis was firstly introduced by Penfield and Roberts in 1959 when they composed writing with title “The Learning of Languages.” However, the debuts of their ideas which talk about the connection between language and its relation to the critical age become widely known in 1953 (Montrul, 2008). They believe that the younger the child learn the language, the easier, and flawless one presentation would be. This was enunciated in the accompanying logic: “Remember that for the purposes of learning languages, the human brain becomes progressively stiff and rigid after the age of nine” (Penfield and Roberts, 1959, as referred to in Nelson, 2012).

**Language Acquisition**

The acquisition of language is based on neurological and psychological processes (Maslo, 2007). The process of acquiring a language will be supported by the function of the individual's brain. Another related theory stated by Kramina (2000) about language acquisition is a process that is opposed to learning, and it is similar to the way children learn their first language. The language acquisition process that occurs in childhood and is internally motivated which includes verbal behavior and communication. The language data obtained were not programmed because there were no formal teachers or instructors in this process. Language acquisition is the process by which humans learn to perceive and comprehend a language as well as they could produce and use the words and sentences to communicate for life.

In acquiring language, an individual acquires the way to use the language consisting of information in language they hear around. At the same time, the brain processes linguistic information received and processed by the language acquisition system in the brain. The linguistic information received is then processed and used later. In the case of children, language is obtained by hearing the sound of speech in passing, then recognizing the semantics of the language heard. After that they hear the way of delivering language related to the sequence or arrangement of words when delivered. At this point, what is not realized is that when children acquire language and use it to interact there is no learning of grammar. Learning grammar is a natural process when children acquire their first language.
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. Most scholars would agree that there are differences between children and adults in the final outcome of second language acquisition. A study conducted by Hu (2016) implies that young learners stand the superior stage to acquire a second language than adults or adolescents. The study claims that the older learners seem to be faster and more efficient learners of a second language, but young learners can learn language more effectively than adults or adolescents in some areas. This leads to good performance in the ultimate goal of language learning. Most people think that children are better at learning a second language than adults. This statement is supported by a common observation that young second-language learners seem to be able to learn another language quickly by exposure without teaching. Some factors involved in second language learning are: (1) having a good teacher, (2) being motivated, and (3) having a good study environment. Based on the theory stated by Steinberg’s theory which is cited in Suryantari (2018), it is commonly believed that children are better learners than adults which considers some factors.

The process of learning a foreign language for children will typically involve going through some stages. In most cases, a general sequence of events will be followed when processing a file. First, a child will hear the spoken words of an adult. Later on, the child who was not born with the language skills of an adult will eventually learn how to produce the language in the same way as an adult. There are two processes involved in this learning: comprehension of speech and production. The classification of age development studied by Piaget and Vygotsky (2002) include 6 stages which are 0–5 months, 6–12 months, 8–12 months, 1–2 years, 2–3 years, and 3–4 years.

a. 0-5 months age old
   This is a child's early stage in the functioning of their articulator system. Children use their cry or babble to communicate. This stage is the foundation of all speech processes. Children will use their ears to repeatedly copy the environment input.

b. 6-12 months age old
   In this stage, the child will learn to produce words with two letters that consist of one vowel and one consonant.

c. 8-12 months age old
   Children will attempt to form words through two processes at this time. They are initially attempting to produce phoneme fragments. Children try to form entire words with the correct letters in the second step.

d. 1-2 years old
   The stage for children to produce a word and learn articles exists here.

e. 2-3 years old
   As an advanced stage of producing one word, in the next stage children are able to produce two words

f. 3-4 years old
   At this stage the child begins to be able to pronounce simple expressions with more complex language structures.

Krashen, Long, Scarcella (1979) and Singleton (1995) suggest a "consensus view": older learners are more efficient in the early stages of L2 learning, but younger learners outperform them in the long term in natural environments. This theory becomes a neutral view in the case of second language acquisition, according to the expert who expressed their view that there are different cases and contexts in language acquisition. This theory is focused on the idea that learners at an
early age will acquire language better but in context through the environment. The acquisition process experienced by children at an early age takes longer and is more natural.

II. Research Method

This study uses a literature review method. For a number of studies, literature review may be the best methodological tool to provide answers. According to Mother et al. (2009) for research in general, the value of knowledge in a study will depend on what was done, what was found in some of the existing studies, and the clarity in reviewing the reporting of the study. The use of literature review is useful when the aim is to provide an overview of a certain issue or research problem. Reviews are useful when researchers want to evaluate theory or evidence in a particular area of study or to test the accuracy of a particular theory or competing theories and investigate the effect or relationship between two particular variables (Tranfield et al., 2003).

Specifically, this study will attempt to examine the existing research on language acquisition which focuses on the critical period of acquiring language, precisely those research which support or reject the theory of critical period. These are studies which concentrate on that help it or attempt to misrepresent it, which is expected could gain insight on intriguing issues which investigate the connection between critical period and its effect on the second language acquisition. Moreover, the result of analysis can subsequently proposed to distinguish how much the SLA is dependent upon the impact of a critical period.

III. Results and Discussion

The studies that are selected in the present research work are divided into two groups depending on whether they deal with supporting critical period in second language acquisition or rejecting critical in period in second language acquisition.

Studies Supporting Critical Period Hypothesis in SLA

The ultimate attainment in second language acquisition according to the critical period hypotheses have reigns many studies which have provided numerous evidence as justification on the failure of those who start to learn a language after the critical age of language acquisition.

More recent study was proposed by Dirix and Duyck (2017). Their study investigated the effects of word-level age of acquisition (AoA) toward the natural reading. In their research, it is found clearly that critical age affects the eye tracking patterns of monolinguals while reading an entire novel, independent of and above the influences of other lexical variables. The results of their study support the body of evidence issued by the critical period supporters. It has shown that the earlier the words are learned, it help to faster the process to the domain of natural reading of running text which also believed to be relevant to the second language learning and acquisition especially in reading skill.

In the same vein, Ma (2012) conduct survey and interviews toward students in ethnic minority areas in China which aimed at investigating their ages of starting English learning, their College English Test achievements and their attitudes towards learning second language at a younger age. Their findings reveal that the students with a younger English age of acquisition tended to perform better in the CET 4, suggesting that the age of acquisition also influence students’ second language performance. Meanwhile, those students of ethnic minorities (the Tibetan nationality and the Uighur nationality)
themselves felt that early exposure to English not only propose the benefits of the English learning in the future, but also could refrain from disturbing the acquisition of Chinese.

Additionally, Abrahamson and Hylenstam (2009) who conducted a large-scale study toward 195 Spanish/Swedish bilinguals who started to learn their second language ranging from 1 to 47 years old. All of those participants identify themselves as potentially native like in their second language. Their experimental findings suggest that in terms of listening skills, only a few of those who started to learn language after 12 could achieve the native like level, while majority of those beginning to learn the second language before 12 can nailed it. Therefore, in their study, they conclude that it was almost impossible for people who start to learn their second language to attain the native like proficiency.

Studies Rejecting Critical Period Hypothesis in SLA

Eventhough the studies of critical period supporters proposed relatively strong evidences from different perspectives toward the acquisition of the second language, nevertheless other empirical studies against the ideas of the existence of the critical period. Furthermore, their findings are also proved as valid.

To begin with, Chai (2013) research was much more all-sided. He conduct a research toward 209 students which aimed at investigating the correlation between acquisition age of second language Chinese and the performance in Chinese phonetics, grammar, vocabulary and Chinese character writing in Hanyu Shuiping Kaoshi (HSK) exam. The results showed that the impact of the second language age of acquisition on the second language acquisition presented a modular feature. That is to say, the second language age of acquisition influence on second language acquisition tempo varied according to the language aspects. A monotone decreasing trend of Chinese phonetic acquisition tempo was observed as the starting age increased in a negative correlative linear manner, but a “W”-shaped curve trend was found in other three aspects. Thus, no salient critical period effect appeared in all aspects. As for those pre-puberty beginners, the starting age more dominantly affected the Chinese vocabulary acquisition, while as for those post-puberty beginners, the younger the age at which they started second language acquisition, the more evident their phonological learning advantages. Moreover, the second language age of acquisition did significantly affect the possibility to reach the Chinese native-like proficiency. Chai’s empirical study thus lent strong support to the rationality of Multiple Sensitive Period Hypothesis views about the relationship between the second language and the second language acquisition which confirms that Different modules possess their own distinctive critical periods.

In the same agreement of Chai’s study findings, Birdsong and Molis (2001) replicated Johnson and Newport’s (1989) study with the Spanish native speakers learning English as participants. It was testified possible that even though beyond the critical period, the ultimate attainment of second language was still negatively related to the age of acquisition of second language and that the similarity degree between the mother language and the second language played crucial role in determining the second language acquisition level. Besides, they also proved that many bilingual participants whose began second language learning after their puberty were still able to reach the native like level in terms of syntax.
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IV. Conclusion

Despite of the lack of the agreement whether there is a critical period in second language acquisition, some meaningful pedagogical implications still deserve mentioning. For example, the starting age actually influences the second language acquisition especially in phonetics. It is more helpful for second language learners to develop a native-like or more standard accent if they start learning second language much earlier. Besides, according to the results opposing the existence of the critical period, the years to learn second language, the second language proficiency, the similarity degree between first language and second language, the effects of the mother language can also function interactively to facilitate or hinder the second language acquisition.

All in all, there is still a long way to go to conduct the sufficient and scientifically reasonable theoretical analysis and empirical research on the laws and patterns of people’s second language acquisition, especially in exploring the age effect on it.

Conflict of Interest

The author declare that we have no any conflicts of interest with another scientists both financially grants and ideas.

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