

A Study of Similarities and Differences Between Children and Adults in Second Language Acquisition

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I Critical Period Hypothesis

1. Definition of “Critical Period Hypothesis”

In the 1960s, related field explored the relationship between human brain development and language acquisition from a biological perspective. In 1959, neuropsychologists Penfield and Robert published their book *Speech and Brain Mechanisms*, which explained the differences in language acquisition effect caused by differences in brain nervous system from the perspective of scientific evidence and the term of The Optimum Age was first proposed (Penfield & Robert, 1959). In 1967, American psychologist Eric Lenneberg first proposed the Critical Period Hypothesis (CPH) of language in his dissertation *Biological Foundations of Language* (Lenneberg, 1967). This hypothesis still explains from the biological perspective that the advantage of children's language learning comes from the advantage of the development of children's brain nerves. Lenneberg is generally regarded by later scholars as the founder of language acquisition CPH.

According to this hypothesis, once the critical period of language acquisition from age 2 to adolescence is missed, with the unilateral brain, learners will no longer have the ability to acquire naturally and efficiently. Foreign language learning will become less effective and difficult to achieve native-like proficiency (Qiufang, 2010).

2. Proposal of CPH in SLA

At the beginning, the CPH was mainly used in the study of first language acquisition. Later, it aroused great interest and discussion among second language acquisition researchers. The academic circle gradually used the CPH to study the

process of second language acquisition, and gradually proposed the CPH of second language acquisition. In 1996, the International Association of Applied Languages held a symposium on *New Perspectives on the Critical Period of second Language Acquisition*, which brought about many views on the critical period of SLA. The CPH of SLA holds that the principle of second language acquisition is consistent with that of first language acquisition. There is a linear relationship between the age of second language acquisition and its effect, and there is also an age turning point, after which the final effect of second language acquisition is difficult to reach the native language level.

3. Development of CPH in SLA

Experimentalist Long(1990) gave several reasons for the existence of the critical period: first, children from different regions, nationalities and cultures in the world acquire their mother tongue at almost the same age; The second is that the ability to acquire language gradually declines with physiological maturity, especially in the aspect of phonological acquisition. Asher (1969) and Snow (1978) respectively found from an empirical perspective that the younger the age, the closer the pronunciation is to the second language itself in the process of second language acquisition, while adults often carry existing accents when learning second language, so the effect of second language acquisition is negatively correlated with age in terms of pronunciation.

On the basis of experiments, the researchers respectively verified the relationship between SLA and age in terms of pronunciation, syntax, semantics and other aspects of second language understanding and output. It was found that generally before adolescence, there is a critical period in different aspects of language acquisition. On the whole, compared to the adolescence and before, the rate and effect of adult second language acquisition is much lower. Moreover, from the perspective of physiological discipline, the principle of young age being superior to old age in the process of second language acquisition is analyzed.

4. Controversy about CPH in SLA

The CPH has often been used as a theoretical basis in second language acquisition or foreign language teaching since its emergence, but it has also been controversial for a long time. At present, the academic research conclusions are basically divided into support and opposition. The controversy not only exists between the proponents and opponents, but also exists within the two groups. The opposition voices mainly deny the existence of "critical period of SLA"; Among the voices in support, there are some controversies as follows: First, why does the critical period of SLA exist? Second, at what age does the critical period of SLA exist?

II Comparison of L2 children and L2 adults

1. Similarities

First of all, they are in an environment that lacks a second language for long-term, immersive communication. The context mentioned here needs to emphasize the concept of the long term. For example, most immersive classes may be limited to a single class on campus. It is difficult for learners to get into the habit of communicating with friends, classmates, or family members in a second language after class, even though all learners may make a brief effort to maintain communication with others in the second language. There is no way for a learner to ensure that everyone around him or her can speak a second language in order to provide him or her with a perfect natural environment for the language. It is obvious that most people choose to speak their native language, while speaking a second language is "deliberate".

Secondly, the influence of mother tongue on second language acquisition is inevitable. Here, of course, there are both positive and negative effects. Both for children and for adults. For example, for children and adults whose mother tongue is

German, when English becomes their second language, even if they have not mastered the complete language structure of German, the difficulty of learning English must be less than that of learners whose mother tongue is Chinese. Because German and English belong to the Germanic language family. Even, on the basis of not fully mastering Chinese grammar structure, Chinese will interfere with learners' English learning. The opposite may be true for native German speakers. Chinese is quite different from English in many ways. Therefore, children and adults whose native language is Chinese will be greatly disturbed in the process of learning English. This linguistic phenomenon is called language transfer.

Thirdly, second language acquisition for both children and adults goes from easy to difficult. When learning a second language, if the learner is discouraged from the beginning, he or she is less likely to remain motivated to continue learning unless he or she has to. That must be a terrible learning outcome. For example, students in China start learning English with letters that closely resemble Chinese pinyin. No one, adult or child, can learn a language from complex grammar as its first lesson. Usually after learning the letters, the learner will learn simple words, simple greetings, simple tenses, and so on to further learning.

2. Differences

Children have an advantage over adults when it comes to learning language, and their language behavior gets more attention. The language imitation ability of children is stronger than that of adults, and it is easier for children to imitate the pronunciation position when learning a language. Children are more imaginative than adults. And it's also easier for children to speak up and communicate verbally. Older learners tend

to rely on "learning," while children are willing to "acquire" at will. Since many factors determine the differences between children and adults in language learning, we cannot assume that children learn faster or better than adults. In fact, they both have their own strengths and weaknesses. This paper will focus on the advantages and disadvantages of adults in SLA.

2.1 Disadvantages of adult SLA

a. Critical Period Hypothesis

When it comes to the age of SLA, the CPH is one of the core concepts. Linguists have proved the correctness of this hypothesis through various studies on the SLA of immigrants. Many studies have shown that immigrants who arrive before puberty are often close to native speakers in their second language skills, while immigrants who arrive as adults struggle to reach that level. Other studies have shown that an immigrant's second language proficiency is not directly related to the length of time he or she has lived in the country, but to his or her age when he or she immigrated. Although the validity of the CPH is constantly disputed in the academic circle, and some scholars even put forward the "sensitive period hypothesis" to replace the CPH, there is no doubt that young learners have physiological advantages over adults in second language acquisition.

b. Social Emotional Barrier

Krashen pointed out in his *Second Language Acquisition and Second Language Learning* that only understanding a L2 is a necessary but not the most effective condition in the process of SLA. Learners need not only to understand the second language but also to be "open" to it. Dulay and Burt hypothesized the existence of a "social-emotional barrier" in this connection (Dulay & Burt 1977) . Learners with a

stronger barrier tend to acquire less because less input is allowed into their language acquisition mechanism. According to Krashen's emotional barrier hypothesis, certain negative emotions such as nervousness, self-doubt, or mere boredom can hinder the second language acquisition process. They act as a barrier between speaker and listener to reduce the amount of verbal input the listener can understand. These negative emotions can prevent effective verbal input processes. Compared with children, adults pay more attention to face and worry about many things. Anxiety and stress are more common in adults. Anxiety can lead to higher emotional difficulties in learning a second language in adults. These barriers prevent learners from acquiring a large amount of comprehensible language input, leading to a decrease in the effectiveness of SLA in adults.

c. Input Condition

Diary studies of children's SLA almost consistently show that children are more likely to become successful language learners than adults. Hatch explains it this way: Children can do what they need to do, but the range of topics is different from adults. Children may succeed in acquiring language because they have a narrow range of the types of communication they need. Adults do the opposite. They have to understand a second language in a wide range of communication, so it is difficult to make full use of language input to learn phonetics and grammar. When children are in a natural second language environment, because most of them communicate with their peers, their language grammar is relatively simple, the content is not complicated, there are few topics, and they use a lot of body language, so that children can easily understand each other's language in this state and acquire it naturally. However, in the natural second language environment, adults come into contact with a wide range of topics,

complex grammar, fast speaking speed and so on, causing great difficulties in understanding adults, so that the acquisition effect is poor.

d. Cultural Value Orientation

In her discussion on the advantages and disadvantages of adult SLA, Yao Fenghua also mentioned that adult second language acquisition is also affected by cultural value orientation (Fenghua, 2011). A common understanding in the foreign language community is that the greater the gap between the mother language and the target language culture, the more difficult the target language is to learn. Some scholars compare the acquisition of second language belonging to Western culture among three national subjects: the "close group" whose mother tongue and second language belong to Western culture has the best achievement; Middle-distance group learners from the Middle East and Africa who are exposed to Western culture perform second; And "distance groups" from Asia had the worst learning performance. As children are young and do not have a deep understanding of culture, they are less affected by cultural value orientation. Adults have basically formed a fixed cultural value orientation, so it is greatly affected by cultural value orientation.

2.2 Advantages of adult second language acquisition

The above disadvantages for adults in second language acquisition are objective to some extent, so do adults have only disadvantages but no advantages in second language acquisition? Will adults never be able to be native speakers? The answer is no. Krashen points out that adults can learn a second language just as well, and if they spend enough time acquiring and using it, adults improve more quickly than children. Ellis believes that both children and adults have their own advantages in second language acquisition (Ellis, 2000). There are many examples of successful adult

second language learners in life, so what are the key points of their success in second language acquisition? What advantages do they have?

a. Logical Analysis Ability

One of the main advantages of adults is their ability to analyze logically. Adult way of thinking has been basically perfect, strong language awareness. Mature psychological and cognitive abilities enable adults to have a strong ability to analyze and summarize problems, so it is easier for them to deal with complex and deep language forms and contents. Therefore, the focus and strength of adult second language learners are mainly in grammar rules, sentence structure and other expressions. In addition, most adult students have rich life experience, more comprehensive understanding and views of social affairs, and rich knowledge of daily life, which is of great help to them in mastering second language reading and writing. In 1928, Thorndike, an American psychologist, did an experiment. He divided people from eight to 35 years old into groups to teach Esperanto, using the same methods and textbooks. The youngest group spent twice as much time as the adults but learned less general material.

b. Self-monitoring Ability

The second advantage is more obvious. Adults are often better at self-monitoring than children, including the process of second language acquisition. In the process of correcting mistakes, adults are more responsive and willing to get feedback. For example, comparing second language learners in high school with those in college, the former (children) mainly engage in passive learning and lack autonomy, while the later (adults) are purposeful and have the initiative and enthusiasm to realize the necessity of learning a L2 specifically. Especially when encountering difficulties in

learning, adults will carry out psychological adjustment and motivate themselves to persist and so on, which are characteristics that children do not have.

c. Rapid Progress in the Primary Stage of L2 Learning

In Florander's experiment, he tested second language learners of different ages who were native Danish speakers and spoke English as a second language. At the beginning of the term, the older groups were the best performers or got the highest grades, although the gap narrowed over time. The younger subjects began to catch up, perhaps even surpassing the older group. The results show that adults have certain advantages over children in the primary stage of L2 learning.

III Reflections on adult second language teaching methods

After understanding the disadvantages and advantages of adults in second language acquisition, teachers should develop their strengths and circumspect their weaknesses in second language teaching, and create a suitable environment for adult learners to avoid their disadvantages as much as possible, give full play to their advantages, and achieve more efficient learning efficiency. Therefore, according to the disadvantages and advantages mentioned above, the author puts forward the following suggestions.

1. Lower the Emotional Barrier of Students

Teachers should try to create a relaxed classroom atmosphere to reduce students' anxiety and tension. Teachers should encourage students to speak more in the form of encouragement. When students make mistakes, teachers should give full consideration to the face of adults, and try not to take direct error correction, which can be repeated, restatement, clarification request, guidance and other forms of error correction. At the same time, some errors that need to be explained can also be

corrected after class, so that students can correct their mistakes while fully estimating their "face", reducing the sense of shame caused by mistakes, lowering the emotional barrier, and strengthening the efficiency of students' second language learning.

2. Focus on Cultural Education in Target Language Countries

As adults' second language acquisition is also influenced by their cultural value orientation, teachers should also pay attention to the inculcating of the cultural knowledge of the target language country while teaching the knowledge of the second language. Only after fully understanding the customs and cultural values of a country, students will have an understanding of the cultural differences between the native country and the target language country. This kind of fear and rejection caused by the lack of understanding of the culture of the second language country will be alleviated. In the process of learning, students gradually understand and accept the cultural values of the target language country, so the disadvantage of adult second language acquisition difficulties due to the cultural value orientation will be gradually alleviated.

3. Teach in the Mother Tongue

For children, it is most effective to acquire a second language under natural conditions. However, adults "learn" rather than "acquire". If we directly use the "immersion" classroom teaching in second language, the effective absorption of adults is very small due to the limitation of the level. Moreover, once students do not understand it for a long time, they will certainly feel bored in the course, become more skeptical of their second language level, and gradually reduce their confidence

in their success in second language acquisition. All these will lead to the rise of the emotional barrier. This further hinders the efficiency of second language acquisition.

4. Focus on Grammar, Translation and Communication

Although adults are weaker than children in language pronunciation and other aspects due to physiological reasons, they can make their own analysis in grammar, reading, translation and other aspects of learning due to their rich knowledge and life experience, as well as their logical thinking and analysis ability, master relevant content rules and apply them flexibly.

IV Conclusion

Compared with children, adults have many physical and psychological disadvantages in second language learning, but adults also have certain advantages in second language learning by virtue of their rich life knowledge and experience as well as basic and complete logical thinking ability. In the adult second language classroom, teachers need to fully consider the advantages and disadvantages of adult students, appropriate and reasonable arrangement of courses and teaching mode, so that adult students can develop their strengths and avoid their weaknesses, so that more adults can become successful second language learners.

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