ISSN 2959-6122

# Age Factor in Language Acquisition: Cultural and Cognitive Distinctions between Chinese Children and Adults in Second Language Acquisition

#### **Luchen Zeng**

Department of Foreign Language, Hanjiang Normal University, Shiyan, China \*Corresponding author: zengluchen@hjnu.edu.cn

#### **Abstract:**

There are increasing number of people learning a second language in current society. Given its importance, linguists are intrigued by effective methods of second language acquisition. They have put forward some opinions about the impact on the impact on both first language (L1) and second language (L2) acquisition. To have a further exploration of the impact on L2 acquisition, this research focuses on the age-related factors in L2 learning in Chinese children and adults. The author picks out three representatives from different age groups to interview about their experiences of L2 learning. Through their answers, the authors found that self-cognition plays an important role in learning L2. Furthermore, adults' L2 learning is more significantly influenced by various limitations. To develop suitable methods for learners of different ages, it is essential that learners proactively engage with L2 learning. Additionally, high school teachers should ensure students have ample opportunities to practice.

**Keywords:** L2 acquisition; Age factor; Cognitive differences.

#### 1. Introduction

In the process of social development, to adjust to the human resources market, an increasing number of people acquiring a second language will be an inevitable tendency. Besides, this trend encompasses a diverse range of age groups, with each language learner pursuing unique objectives. In addition, students have access to more choices for their second language acquisition from school. Opportunities and platforms for language learning are rapidly increasing. However, many learners are unsure about the best methods for second language acquisition and often emulate others' success to achieve their own goals.

As the number of second language learners continues to grow, some linguists have become interested in second language acquisition and aim to uncover how humans acquire a new language. Till now, the arguments on the impact of universal grammar on second language acquisition are still in progress. Additionally, the role of grit in second language acquisition has garnered significant interest recently, particularly its strong association with background factors. An overview of the field of second language acquisition shows that most research is grounded in fundamental background factors. These factors are crucial to linguistics and must be thoroughly investigated to enhance the validity of research.

The research in language acquisition has been significantly influenced by Noam Chomsky, an American professor of linguistics. His concept of "Universal Grammar" was first introduced in his 1968 book, Chomsky's Universal Grammar: An Introduction[1]. This concept emerged to explain how children achieve first language acquisition. For the great explanation on first language acquisition, part of linguists generate thought whether universal grammar can also fully apply to second language acquisition. According to Lydia White's perspective, she suggested that the process of second language learning is not the same as first language acquisition, on the contrary, it is limited by universal grammar [2]. In essence, the process by which children acquire a second language differs from their first language acquisition. This limitation leads the learners to the ineffective way to second language acquisition and neglect the age-related distinctions. Other experts acknowledge this limitation and propose that L2 acquisition is not strongly governed by Universal Grammar but is also influenced by factors such as age and diverse goals[3]. Moreover, those factors affecting the learning process can be distinguished by different age groups. To better study the differences between first and second language acquisition, linguists tend to research the relationship between background factors and other personalities or pay more attention to individual background factors,

such as age or gender.

The influence of age plays a significant role in learning a new language. This paper assists learners from various age groups in identifying the most effective methods for L2 acquisition. Besides, the essay provides its unique approach to consider the age factor. However, to review the development of the research on second language acquisition, most studies mention the age factor. There is no more specific information about why age can influence L2 acquisition, and also the further exploration on it. This paper aims to explore the underlying reasons behind age-related variations in L2 acquisition.

This research builds upon previous findings, concentrating on the differences that age introduces in second language (L2) acquisition between children and adults, with a specific focus on cultural and cognitive distinctions. Specifically, it focuses on the cultural and cognition distinctions that age factor makes between children and adults. In addition, to collect learners' perspectives on issues related to L2 acquisition, the author interviews learners from different age groups. There are three age groups --- teenagers in middle and high school, young adults in university, and adults having work experience. The author selected one representative from each group to answer three questions addressing different aspects of L2 acquisition. The questions focused on the difficulties encountered in L2 acquisition, motivations for learning a second language, and strategies for language learning.

In terms of practice, this research studies the differences between children and adults in second language acquisition. Apart from analyzing the existing research on second language acquisition, the study addresses real-world challenges faced during the language learning process by interviewing learners from various age groups. This approach allows the research to directly capture the learners' authentic difficulties. Moreover, the findings are intended to apply to a broad audience.

Overall, the background of the study in L2 acquisition has been mentioned above, the author finds that the method of L2 acquisition still needs to fill the blanks of different methods for different ages. Through this essay, the review of the factors influencing second language learning concludes what age factor brings to second language acquisition to help learners be clearer about their goals of learning a second language.

# 2. Age-Related Distinctions in Second Language Acquisition: Children vs. Adults

In examining numerous prior studies, the factor of age has frequently been highlighted due to the correlation between increasing age and the accumulation of human experience. This experience can influence the results of second language acquisition, affecting distinctions in the way to realize oneself and the way to face adversities. According to Erickson's theory of psychosocial development, the human lifespan is divided into eight stages. From his theory, age-related distinctions, like cognitive distinctions can be clearly explained. There is a mutually reinforcing relationship between the growth of humans and the development of self-cognition. Earlier experiences are believed to influence the resolution of subsequent cognitive development issues [4]. The relationship contributes to the development and the disappearance of different abilities. Under the circumstances of major Chinese education, the cognitive distinction is also caused by the teaching mode. Classes with limited practical activities do not support children's self-exploration effectively. The style of education leads the ambiguous self-cognition.

Besides, age can also create cultural distinction. Under the background of the Chinese Educational System, students are traditionally more accustomed to receiving knowledge passively from teachers, a practice stemming from the examination-oriented education prevalent in China. As mentioned above, this kind of education system produces cultural distinctions. Henze and Zhu's essay includes a table comparing educational systems in the UK and China across various dimensions [5]. The details of the differences explain the characteristics of Chinese students. The table suggests that a lack of practical engagement is a common issue. However, compared with students in school, adults in the workplace exhibit a shift in learning patterns and problem-solving approaches. They try to discuss their ideas with others and address ideas by critical thinking. Critical thinking facilitates the acquisition of divergent viewpoints and enriches global perspectives. Due to the different ages in different environments, the differences in the way of thinking and the pattern of learning reflect cultural distinctions. Additionally, experience significantly influences cultural distinctions beyond environmental factors. In China, a school is a place merely for studying. Different from children, adults have access to accumulate more experience. Therefore, from the aspect of experience, the cultural distinction exists between Chinese children and adults.

The relationship between cultural distinction and cognitive distinction is inseparable. The development of self-cognition is shaped by culture and individual experience [6]. Conversely, the depth of self-cognition affects the ability to learn and the performance of adversities.

### 3. Challenges in L2 Learning: The Role of Cultural and Cognitive Differences

To explore the influence of cultural and cognitive distinctions between children and adults, interviews were conducted focusing on L2 acquisition. Based on Erickson's

psychosocial theory, the interviewer selected three representatives from different age groups --- one interviewee is 16 and in high school, one is 20 studying in university and another one is about 40 working in university. Considering the background of education, the interviewer divided the group of adults into two parts to increase the accuracy. Initially, the interviewer put forward a question about challenges in L2 learning. Teenagers reported that their greatest challenge was the lack of opportunities to apply what they had learned. That means teenagers mostly learn the language in theory, lack of practice. Additionally, differences in family background among peers indicated that those not exposed to second language learning in early childhood were more likely to experience interference from their first language (L1) [7]. The college student considered that there are uncountable difficulties in L2 learning, especially pragmatics and communication. The teacher suggested that the greatest difficulty in her L2 learning is a lack of time and the ability to accept new things. Different from teenagers and young adults, adults have been in their careers for a long time. In China, most employees require stability in their position. Once employees have sought out their comfort zones, it is hard for them to challenge themselves.

Responses from the interviewees revealed that high school students often lack clear goals, leading to misconceptions about their learning challenges. In other words, teenagers tend to attribute difficulties to their surroundings due to the confusion of self-role cognition, but not their English ability [8]. Most teenagers are in a state of confusion in high school, especially under great pressure. Owing to their confusion, they usually try to imitate other successful experiences. Mostly, following teachers is the most convenient path to learn. However, adults in the middle stage of adulthood are more inclined to be influenced by self-condition [8]. Different challenges in L2 learning demonstrate the role of cognitive difference, which contributes to different ways of thinking between teenagers and adults largely.

Unexpectedly, the perspective of the university student diverged from anticipated patterns. Compared with adults in middle age, young adults like college students are confused about their self-cognition as teenagers. As Erickson's theory illustrates university students are in the early stage of adulthood. Commonly, they have established preliminary cognition of themselves in this period. This means young adults should have clear self-cognition. The deviation comes from the abrupt changes in the way of learning. High school learning is often passive, whereas college demands the development of critical thinking, leading to disparities in cognitive and thought processes [10]. The lack of correspondent self-cognition makes for a cultural distinction. It causes a decrease in the efficiency

of learning. However, college students have their advantages in L2 learning. The changes in the way of learning provide young adults with more professional opinions. Besides, college students have the competence to accept new things. Adaptability provides great chances to accept new teaching and learning methods. The professional opinions offer new angles to consider their challenges specifically. Another interviewee provided a contrasting response, highlighting difficulties in pragmatics and communication. The detailed expression of these challenges illustrates how cultural differences influence learners' recognition of true challenges in L2 learning. By comparison, adults' difficulties come from the limitations of the self-conditions.

## 4. Motivations for L2 Learning: Influences of Cultural and Cognitive Variations

When talking about the motivation for L2 learning, the answers of high school students and college students are nearly the same. They indicated that their learning is driven by the desire to achieve good grades, further their education, and enhance job prospects. In Chinese education, L2 learning is a compulsory curriculum. Moreover, proficiency in a second language has become essential for job hunting. Thus, the objective of learning L2 is often to serve as a "bridge" to other goals, not solely to master the language itself. This approach treats L2 learning as merely completing a task. Furthermore, this rigid teaching method often leads to students forgetting the material after learning it. However, another interviewee, the teacher, provided a contrasting viewpoint. She views learning a second language as a form of self-realization. Learning a second language to her is more like a hobby to improve her horizon and seek the essence of language. The teacher expects to acquire a different cultural background through language learning. The perspective of learning L2 indicates her strong willingness to learn L2 learning. A positive attitude towards L2 learning fosters greater motivation and deeper engagement.

Both groups are motivated by subjective reasons to learn a second language. However, forced by subjective reasons does not mean they all keep positive emotions in L2 learning. Compared with adults in their careers, students are more likely to form negative motivation for L2 learning under the relatively compulsive Chinese educational system. If not considering students majoring in the subjects associated with language or linguistics, most students learn a second language because of parents or teachers. Under this circumstance, the pressure from school increases the students' confusion. By contrast, adults can learn L2 more flexibly. They can dominate their lifetime and decide what is useful to them. With a positive attitude, learning

L2 will be in a relaxed environment. In Gardner's model from Gardner's Comprehensive Motivation, attitude is the most important factor in motivation. Gardner classified attitudes into two categories: positive and negative emotions [10]. Positive emotion in L2 learning is the desire to learn the target language and interest in foreign language, just like adults' attitude towards L2 learning. Students often experience negative emotions, such as anxiety about using the target language in the classroom [11].

The biggest difference between students and adults in careers is the environment. In 2005, Zoltán proposed a new notion, the L2 Motivational Self System (L2MSS), he suggested the importance of individual subjective initiative in learning and teaching [12]. Teenagers are more likely to be influenced by others, they are accustomed to following others' instructions because of the class management mode [7]. Beyond the classroom, researchers have noted that family members also significantly influence L2 learning [13]. It indicates that teenagers' initiative is in shortage. This situation results from the unformed and unstable self-cognition. Students frequently experience self-doubt during their schooling [4]. Besides, heavy academic pressure urges students to have no time to make it clear their motivation for L2 learning. This vicious cycle leads to students experiencing negative emotions under significant pressure. Conversely, adults, with their well-developed self-cognition and accumulated knowledge, have a unique perspective that guides their decisions. From this point of view, adults have an advantage in comprehensive L2 learning.

### 5. Approaches to L2 Learning: Adapting to Cultural and Cognitive Diversity

The differences in challenges and motivations cause different approaches to L2 learning. Reviewing the interviews, high school students typically learn English in class. They hardly take advantage of their rest time to learn or review English. Due to stress from other subjects, they lack time to explore English through additional platforms. Additionally, many high school students do not prioritize English learning. They focus more on getting good grades. Therefore, most high school students are good at dealing with examinations, but they cannot use English in practice. For students interested in language learning, they try their best to improve their English ability. They utilize all the opportunities, such as answering questions in class or reading more extracurricular books. In contrast, there is diversity in the ways college students learn English. Besides classroom learning, college students also utilize mobile phones and laptops for online courses, accessing a variety of learning platforms. Additionally, many universities facilitate study abroad programs. These programs allow college students to practice their spoken English through volunteer work. Similar to college students, most adults choose to attend online lessons due to their lack of time. Their careers also provide opportunities to interact with people globally. In other words, they can learn English in a practical way, not just learn in the textbook.

Age-related distinctions, such as cultural and cognitive diversity, are influenced by the innate psychological development patterns of humans and are challenging to alter. However, approaches to L2 learning should adapt to the learners themselves. The interviewees, at different life stages, face unique challenges; these variations in external conditions necessitate distinct learning approaches for each. In a study conducted by Cole and Vanderplank in 2016, the study found that learners can obtain more language benefits through informal learning mode --- learning by mobile devices (e.g., mobile phones, and tablets) [14]. This kind of learning method can be used in the process of L2 learning to adjust the approaches to language learning [15]. The further exploration of informal mobile language learning (IMLL) also attracts many linguists to help learners of different ages find the most appropriate approach. A recent study advocated for a person-centered approach to be combined with other language learning methods [16].

Analyzing interviewees' answers, all of them own mobile devices, however, teenagers with Chinese educational backgrounds, have no time to use mobile devices unless with the permission of their parents. Consequently, while informal mobile language learning (IMLL) is effective, it is impractical for Chinese teenagers. As previously discussed, the L2 Motivational Self System (L2MSS) is more suitable than IMLL for self-disciplined teenagers in L2 learning [17]. According to an L2MSS study, high school students can develop self-regulation and practical skills, facilitating adjustments in their L2 learning process [17].

#### 6. Conclusion

According to three interviewees' perspectives on L2 learning, students are more likely to be influenced by their lack of self-cognition. This performance of young adults in self-cognition is different from Erickson's stages of psychosocial development. The research reflects a common phenomenon because of Chinese educational methods. Therefore, young adults are also ambiguous about their self-cognition. However, they generally possess advantages over adults, such as better memory, a greater capacity to accept new things, and more abundant energy. Adults are less influenced by their surroundings due to their specific determinations. The research demonstrates that adults have certain advantages in cultural understanding and cognitive abilities. The advantages of cultural and cognitive distinctions for adults can both promote and limit their L2 learning. From the aspect of cultural distinctions,

adults possess more experiences than children. Otherwise, students in school are in a state of continuous learning. Keeping learning provides students the ability to integrate their knowledge, but it causes the loss of practice. In conclusion, age inevitably influences language learning differences due to its objective and stable nature. However, age cannot represent the competence of language learning. Additionally, learners in different age groups should choose an optimization for themselves.

The research results also provide a new opinion to second language education teachers. Because of students' less initiative in L2 learning, teachers should develop the habit of positive attendance in class. In addition, teachers would benefit from moving away from predictable teaching methods. Practical teaching methods should be prioritized by teachers. Lessons can be enhanced with IMLL or L2MSS, tailored to the students' backgrounds. Besides, the research offers more details about the influence of age. The research classifies age factors into two parts ---culture and cognition to help more learners and linguists study L2 acquisition. The explanation of the differences between Chinese children and adults indicates the current situation and the common sense of L2 learning.

However, the research has its limitations and deviations. The representatives of different age groups have their inevitable particularity. Their particularities cannot represent all the people in the same age group accurately. For the geographical restriction, the range of research contents is in China. To conduct a further exploration of the age factor, the research needs to expand the survey population. Besides, the interview is a relatively subjective research method. Because of the particularity of the research, the research is lack of data analysis. The research will be promoted in the later study to add more statistical evidence.

#### References

- [1] Chomsky N. Linguistic contributions to the study of mind: present. In: Language and Mind. Cambridge University Press; 2006:21-56.
- [2] White L. Principles of Universal Grammar in L2 acquisition. In: Second Language Acquisition and Universal Grammar. Cambridge Textbooks in Linguistics. Cambridge University Press; 2003:22-57
- [3] Mashrabovna, U. M. ., & Alievna, B. O. . (2023). COGNITIVE FACTORS IN LANGUAGE ACQUISITION. International Journal of Formal Education, 2(7), 47–51. Retrieved from http://journals.academiczone.net/index.php/ijfe/article/view/1097
- [4] Sokol, Justin T. (2009) "Identity Development Throughout

- the Lifetime: An Examination of Ericksonian Theory", Graduate Journal of Counseling Psychology: Vol.1: Iss. 2, Article 14.
- [5] Jürgen Henze and Jiani Zhu, "Current Research on Chinese Students Studying Abroad" in Research in Comparative and International Education 2012 7:1, 90-104
- [6] H. Clark Barrett (2020), Towards a Cognitive Science of the Human: Cross-Cultural Approaches and Their Urgency, Feature Review, Volume 24, Issue 8, 620-638. DOI: https://doi.org/10.1016/j.tics.2020.05.007
- [7] Derya Şekerci Aribaş & Filiz Cele (2021), Acquisition of articles in L2 and L3 English: the influence of L2 proficiency on positive transfer from L2 to L3, Journal of Multilingual and Multicultural Development, 42:1, 19-36
- [8] Amoah, S., & Yeboah, J. (2021). The speaking difficulties of Chinese EFL learners and their motivation towards speaking the English language. Journal of Language and Linguistic Studies, 17(1), [56]-69. https://search.informit.org/doi/10.3316/informit.220198786765725
- [9] Schumann, J. H. (2013). Societal responses to adult difficulties in L2 acquisition: Toward an evolutionary perspective on language acquisition. Language Learning, 63, 190–209.
- [10] Chan, S. (1999) The Chinese Learner: a question of style, Education and Training, 41 (6-7), 294-304
- [11] MacIntyre P. & Vincze L., Positive and Negative Emotions Underline Motivation for L2 Learning, in Studies in Second Language Learning and Teaching, VII:1, 61-88, 2017.
- [12] Dörnyei, Z. (2005). The psychology of the language learner: Individual differences in second language acquisition. Mahwah, NJ: Lawrence Erlbaum Associates.
- [13] SORENSON DUNCAN T, PARADIS J. Home language environment and children's second language acquisition: the special status of input from older siblings. Journal of Child Language. 2020;47(5):982-1005. doi:10.1017/S0305000919000977
- [14] Cole, J., & Vanderplank, R. (2016). Comparing autonomous and class-based learners in Brazil: Evidence for the present-day advantages of informal, out-of-class learning. System, 61, 31-42. doi: 10.1016/j.system.2016.07.007
- [15] Dubreil, S., & Thorne, S. L. (2017). Social pedagogies and entwining language with the world. In S. Dubreil, & S. L. Thorne (Eds.), Engaging the world: Social pedagogies and language learning (pp. 1-11). Boston: Cengage.
- [16] Hongying Peng, Sake Jager & Wander Lowie (2022) A person-centered approach to L2 learners' informal mobile language learning, Computer Assisted Language Learning, 35:9, 2148-2169, DOI: 10.1080/09588221.2020.1868532
- [17] Irgatoğlu, Aydan, L2 Motivational Self System and Learning Approaches of High School Students (April 29, 2021). Education Quarterly Reviews, Vol.4 Special Issue 1 (2021), Available at SSRN: https://ssrn.com/abstract=3836298