# Research paper on second language acquisition

Education, Learning

Critical period is a hypothesis in linguistics on whether language acquisition is linked to age. According to Davutoglu (152), this hypothesis states that there is an ideal window of acquiring language in an environment that is linguistically rich. Hence, from the hypothesis, after this period, language acquisition becomes hard, and it requires a lot of effort to learn. The crucial time to acquire language is before a person reaches adolescent so long as sufficient stimuli are provided. Therefore, after the critical period, an individual never acquires full competency in learning a second language.

However, evidence of this is limited, and people rely on arguments of critical periods. It is a fact that many people accept the hypothesis. Psycholinguistics plays a crucial role in debating this hypothesis. The critical period has also been referred to as the optimal period. Other people refer to it as the sensitive period (Davutoglu 189). The main causes of the critical period are physical and cognitive factors. Duration of this period is debatable, and it ranges between six to fourteen years according to Gallagher (63). The most common evidence of a critical period hypothesis is the fact that older language learners do not achieve the native accent of the language. Bleakley et al. (173) asserted that, in some situations, older learners have been able to achieve the native-like accent. Therefore, the argument posited is that other factors, apart from biological factor of age, play a role in language acquisition. These factors may include identity and motivation. Furthermore, Wang (62) contributed to issues of second language acquisition by stating that age, experience with the language, biology, typological differences, and cognitive ability factors affected second language acquisition.

# I. Age/ maturation

The hypothesis of whether there is an age when second language learning is effective is referred to as the critical period or the sensitive period. The basis of this period is that the process of acquiring language is different from the normal cognitive functioning. The argument here is that when language is acquired close to the critical period, the acquisition becomes efficient. The critical period is said to be at the end of puberty, or around the same time (Vanhove 79).

However, the truth of the existence of this stage is debatable. Some people claim that it exists because children learn language faster that adults. Furthermore, Mitchell (1112) claims that adults out-do kids when it comes to learning. Some other individuals believe that the whole issue is complex. A critical period is when individuals can learn a second language easily and achieve competency exists, which is between 6 to 14 years. During this age, a person achieves competence, which is native-like. Young people’s acquisition of second language is better than that of older people. Research shows that adults find it hard to acquire expertise in second language. They can learn grammar structures and apply them correctly, but they never achieve the accurate accent (Mitchell 1113).

Similarly, according to Birdsong and Molis (235), there are three evidences that maturational factors affect second language acquisition. In their experiment, they found out that, in the first evidence, there should be a negative correlation between language performance and the age of acquiring the second language. It is necessary to note that such effect is

evident when second language learning takes place at mid and late adolescence stage, which is said to be the maturation period. In late learners, other factors, other than maturational factors are significant for second language performance. The other evidence is that those who succeed in attaining efficiency in second language learning at a later stage should be remarkably few. Such results would signify biological constraints. The final evidence is that if at all second language acquisition is maturational; it should happen to second language learners in general. When it comes to language pairing, primary language learners and secondary language learners, weak effects are observed (Birsong and Molis 249).

## II. Experience

At some point in a life cycle, several structures become susceptible to certain structures, as well as experiences or to lack of those experiences in a manner that changes certain aspects of future instantiation of the function/structure (Davutoglu 190). It is also true that some environmental events ought to occur at some point in life, in the development of something in order to ensure that normal development occurs in an organism. The sensitive period is, indeed, a maturational period of significant experience in learning development, which results into normal behaviour of the environment that the organism is exposed (Vanhove and Kaiser 78). Thus, if an organism does not have the experience before the critical period and then it is exposed later on, the effect of the experience reduces. In some other cases, Davutoglu (189) asserts that the experience does not affect the organism at all.

Acquisition of second language declines with a person’s age due to educational factors, social factors, and cognitive ageing that affects the mind’s ability to acquire a new language. Therefore, under the social factors, the strongest determinant of acquiring a second language is the amount of the second language that one is exposed. This depends on an individual and it varies among people, and with immigrants having little experiences with the language (Davutoglu 150). Therefore, this varies in terms of quality and quantity of exposure. Some people have few opportunities to familiarize with the language, and cannot achieve language proficiency. In addition to social factors, there are cognitive factors related to the age of an individual. These affect a person’s ability to learn a new language (Gallagher 74).

III. Biology

Language acquisition is biological. It is only acquired through learning at the optimal period, which starts early in life (Davutoglu 163). In addition, this learning ends at puberty. When one tries to acquire language outside this sensitive period, one does it with many difficulties, or else, one has to use different processes to learn the language. Neural mechanism for language acquisition has also been suggested. Wang (58) hypothesized lateralization, which the sensitive period ends with the establishment of the cortex, when the brain matures at the end of puberty. Also, language acquisition is directly related to brain plasticity. There is enough evidence linking language acquisition and brain growth (Wang 58).

## IV. Cognitive

Cognitive factors are crucial in language acquisition. As a result, young people are advantaged when learning a second language. The cognitive

mechanisms deteriorate as one becomes old. This has been confirmed by studies of lifespan cognition that confirm deterioration of cognitive mechanisms with age. In one such study of paired-associate task, learners who were old appeared sensitive to factors related to timing. Furthermore, during presentation they also needed more time to recall the pairs than the younger learners (Vanhove and Kaiser 89).

Old second language learners are also cautious and unlikely to attempt something if they are not sure that the response is correct. Younger people, on the other hand, are venturous. Encoding of information in older learners is also slow. Hence, to learn a list, older second language learners require several trials as compared to the young learners. Older learners have also been found to have a declined ability of recalling whatever is taught. In remembering details, older learners remember the gist. All the above-mentioned facts show that the cognitive ability of people declines across a person’s lifespan. All these abilities are necessary in a new language acquisition. That is the reason their decline affects one’s ability to learn and acquire a new language (Gallagher 73).

The decline is gradual and constant. The first months of learning appear to favour the adult learners especially in vocabulary acquisition and usage in the sentences. However, the long-term effect, and the peak proficiency favours those exposed to the language at infancy stage. The learners eventually attain the native accent of the language, and they have complete control of syntax and morphology. However, some adult learners, but a few,

achieve the proficiency similar to that of the early learners. These effects are seen in both first and second language learners (Vanhove and Kaiser 92).

## V. Linguistic level of analysis

The age of exposure to language does not affect language acquisition aspects equally. Vocabulary acquisition and the processing of sematic occur normally in late language learners. The effects of the critical period focus mainly on syntax, phonology, and other properties of language such as the morphology. They do not focus on meaning processing. Usually, the formal aspects of language do not depend largely on language exposure. For instance, late learners get to know the word order of language relatively well (Bleakley et al. 169). However, aspects of grammar, that is more complex, affects late learner largely. Trying to acquire a second language after seven years makes the patterns of activation not to overlap with those related to native language. Late learned language's neural organization is not entirely lateralized, and similar to language proficiency, it varies from one person to another (Mitchell 1112).

## VI. Affective

Affective issues play an essential part in determining if the second language learner will be successful. These issues are crucial to everyone whether a child or an adult who wants to learn the language. These factors can be more influential than the neurological factors in affecting second language acquisition. Hence, for learners to acquire a second language effectively, they must have an effective filter that is low. High filter leads to

ineffectiveness in acquiring a second language, and can come because of outside pressures (Gallagher 74).

Language ego identifies one with the language one speaks. This can be helpful in explaining why adults have trouble while learning a second language. Children are in the process of developing self-identity. Hence, it is the time they are developing a language ego. At first, while learning the second language, a person gets embarrassed occasionally. Adults will feel the embarrassment more that children and this inhibits them from learning the language for fear of embarrassment. Acquisition of second language is also affected by the learner's attitude towards the language (Wang 61).

A person's culture also affects a person's second language learning. Young children are generally not subjected to strong races, ethnic groups, and other components of culture. As a result, they do not get affected while learning the second language. Other factors that affect the learner' success are style and motivation. Physical illness, hostility, unhappiness, homesick, indecision, loneliness, and frustrations will also affect the learning outcome. The manner in which the content is delivered to the learner also affects second language learning. The classroom setting has also been linked to affecting learning outcome (Wang 60).

## VII. Topology

There is a link between typological differences and language acquisition. These differences bring constraints, known as typological universals. This universality is that languages have certain things in common. Typological universals manifest linguistic principles. These principles constrain language

in human beings. The principles serve as learning biases and facilitate the acquisition of language. Therefore, typological differences are biases in learning. These biases affect both adults and children (Bleakleyet al. 170).

## VIII. First vs. Second language acquisition

In testing whether optimal period leads to the same outcome in both native and second language acquisition, deaf and hearing people (both adults) reported not having linguistic experience compared to when a young group was used. Also, both timed and untimed judgments were used to test the hypothesis. Results revealed that those adults who had acquired language in childhood performed well in second language regardless whether they were hearing or they were deaf, and regardless of the form of language (spoken or sign). Deaf adults, who did not have access to the language at childhood performed poorly. Therefore, a conclusion was made that language exposure during childhood affects the manner in which a person acquires language throughout his early life (Wang 59). This indeed does not depend on the early experiences of the sensory motor. Assurance for learning during the critical time is present, and is similar to all individuals. This is governed by endogenous factors. Usually, exogenous factors have little impact on language acquisition. It is also essential to note that learning before or after the critical period varies across individuals in both success and form (Vanhove and Kaiser 81).

## Conclusion

Critical period is the hypothesis on whether age influences second language learning. The researcher found out that children understand second

language faster than adults do. Children are likely to acquire the native accent, but an adult finds it hard to acquire the accent. However, some few adults have been reported to get the native accent after studying a second language. Cognitive abilities affect second language acquisition in that the cognitive functions decline as one becomes old. An old person finds it difficult to learn a second language because part of the brain that is responsible for learning a language has also aged. Experience with the language also affects the way an individual learns the language. Those people who have experience with language are likely to learn the language faster than those who have never experienced the language. The major affective variables in language acquisition include a person’s attitude, culture, personality, classroom setting and the first language of the learner. Not all levels of linguistic analysis get affect the same way. Finally, the researcher found out the age of a person affects the way he acquires second language.

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