

THE ROLE OF AGE IN SECOND/FOREIGN LANGUAGE ACQUISITION

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Abstract. Age is considered to be a significant factor for language learning, and its effects on second/foreign language acquisition are accompanied by voluminous research extending decades back. The main focus of research so far has been on natural second/foreign language learning contexts and not on instructed second/foreign language learning contexts. The differences presented in the parameters between natural second/foreign language learning contexts and instructed second/foreign language learning contexts make the outcomes and the processes of the former not able to be generalized to the latter. Existent research and hypotheses concerning issues relevant to the role of age in language learning are used, and the function of age as a factor for learning both in natural second/foreign language learning contexts and instructed second/foreign language learning contexts is presented. It is deduced that the earlier a person starts learning a second/foreign language (henceforth written as “L2”), the better in terms of L2 attainment, provided that there is significant exposure to L2.

Keywords: Affective, Age, Acquisition, Analytical Ability, Attainment, Cognitive, Coordinate Bilingual, Compound Bilingual, Critical Period Hypothesis, Exposure, Factors, Foreign Language, Immersion, Instructed Language Learning Context, Input, Instructed Learner, Metalinguistic Awareness, Motivational, Natural Language Learning Context, Naturalistic Learner, Neurological, Sensitive Period Hypothesis, Sensory Acuity, Second Language, Storage

REVIEW - DISCUSSION

The effects of age on L2 acquisition have been researched extensively “in natural settings where the immigrants’ level of proficiency in the target language has been examined on the basis of their age of arrival in the L2 community” (Muñoz, 2010, p.39). The findings support that the younger the learner is immersed in a natural L2 setting, the better this is for L2 learning. Age of acquisition is established as an important factor for acquiring a native-like mastery of L2 (Patkowski,1980), thus asserting the Sensitive Period Hypothesis, which resembles the Critical Period Hypothesis (CPH) but exclusively refers to L2.

Contrastively, the influence of age on L2 acquisition in a classroom setting has not attracted the same degree of attention and “research findings have not appeared to be so consistent” (Muñoz, 2010, p.40); both the outcome and the process of learning a second language in a natural setting have been generalized to the situation of foreign language learning (Muñoz, 2010, p.40-41). Since parameters differ extensively between natural and instructed L2 learning contexts, findings concerning age and L2 acquisition in the former should not be applied to the latter.

CRITICAL PERIOD HYPOTHESIS – SENSITIVE PERIOD HYPOTHESIS

Concerning L1 acquisition, the Critical Period Hypothesis suggests that “the processes by which the realized, outer structure of a natural language comes about are deeply-rooted, species-specific, innate properties” (Lenneberg, 1967, p.394) which serve to acquire language at specific times in life and that there is a critical period for language acquisition. According to the Critical Period Hypothesis, language acquisition may be incomplete and imperfect and “automatic acquisition from mere exposure to a language may disappear after puberty” (Lenneberg, 1967, p. 176). According to the Sensitive Period Hypothesis, there is a period up to a certain age during which learners can acquire L2 easily and achieve native-like competency (Patkowski,1980). L2 acquisition becomes more difficult and is rarely entirely successful after a certain period, the Critical/Sensitive Period, a phenomenon for which Selinker coined the term “fossilization”. L2 learners’ failure to achieve L2 competence results in them forming their individual internalized rule system, which is called “interlanguage” (Selinker,1972).

Research supports that the termination of the L1 Critical Period and the L2 Sensitive Period coincide at puberty (Birdsong, 2006). However, other researchers differentiate the termination of the Sensitive Period on the basis of the area of L2 acquisition. More specifically, it is supported that the Sensitive Period is terminated at a younger age regarding phonology and pronunciation (Long,1990) and at an older age such as 18 years old concerning grammar, morphology and syntax (Bialystok & Hakuta, 1999). Thus, there may be multiple Critical/Sensitive periods for different aspects of language. Finally, “It is possible to acquire a second language after the Sensitive Period”, but not “to the extent of attaining native-like proficiency and thus being able to pass for native”(Patkowski, 1980, p.449).

Age obviously should be regarded as a significant factor affecting the possibility of attaining native-like proficiency in L2. However, the learning difficulties involved are differentiated on the basis of the similarities and differences between native language (henceforth written as “L1”) and L2 and also on the basis of existent contexts; learners may reside either in the countries where L2 is spoken as an everyday, native language by the majority of the population, or, contrastively, in their countries of origin, where L2 remains just a foreign language learnt through instruction, not through everyday immersion in a natural context.

DEGREE AND LENGTH OF EXPOSURE TO L2 IN NATURAL LANGUAGE LEARNING CONTEXTS AND IN INSTRUCTED LANGUAGE LEARNING CONTEXTS

Broadly speaking, the degree of exposure to L2 is significantly restricted in an instructed L2 setting in comparison to a natural setting, for various reasons. Firstly, instruction is usually limited during lessons. Secondly, the teacher is likely to resort to learners' mother tongue minimizing L2 use (either as part of the teaching approach or due to limited L2 teacher fluency). Thirdly, L2 is neither the language used among classmates, nor the language used outside the classroom (Muñoz, 2010, p.41).

In Muñoz's study (2010) remarkable findings are both that the average number of hours in which a naturalistic language learner has access to L2 input after 10 years of residence is more than 50,000 and that the distribution of this amount of hours into weeks with 4 one-hour periods of instruction results in more than 200 years. This comparison compellingly reveals the enormous magnitude of the difference in the quantity of input received between naturalistic and instructed learners.

There are also striking differences in the quality of input between natural and instructed L2 learning contexts regarding discourse, situations, topics, speech acts (Muñoz, 2010, p.45); in instructed L2 learning contexts, children are not supplied with the input quantity or quality that can be processed by their implicit learning mechanisms (Muñoz, 2010, p.46), whereas this happens in natural L2 learning contexts.

Additionally, length of residence and language learning in a natural context is not a criterion for L2 attainment after an initial period (Patkowski, 1980), whereas amount, and not length of instruction is connected to L2 attainment in instructed L2 learning contexts. More specifically, in classroom settings, length of exposure to L2 may not necessarily mean more exposure to L2, because in some cases the hours of L2 lessons may be scattered more sparsely than in other cases (Lightbown and Spada, 2017, p.98).

If the objective of L2 learning is L2 proficiency, the learner should "be surrounded by the language as early as possible" (Lightbown and Spada, 2017, p.97), and this is easier in a natural setting in comparison to a classroom setting.

ADVANTAGES RELATED TO AGE

Ellis (1994), researching into age and L2 acquisition, reached conclusions in the areas of sensory acuity, neurological factors, affective/motivational factors, storage, input, and cognitive factors. Regarding sensory acuity, the earlier the learner is exposed to L2, the better the perception and segmentation of L2 sounds and the more native-like the pronunciation (p.494). Concerning neurology, brain ageing and loss of plasticity affect both negatively L2 grammar acquisition and pronunciation (Ellis, 1994, p.494). Regarding affective and motivational factors, younger L2 learners in natural settings bear a stronger and possibly unconscious motivation to communicate with natives and be integrated linguistically into the native culture, whereas adults' conscious motivation (possibly for survival reasons) may lead to greater anxiety, hindering L2 acquisition (Ellis, 1994, p.494). Younger learners have more opportunities to hear and use the language in informal language environments.

Concerning younger learners in such environments, Lightbown and Spada's study (2017) found the following:

“they do not experience strong pressure to speak fluently and accurately from the very beginning. Furthermore, their early imperfect efforts are often praised, or at least accepted. Older learners are more likely to find themselves in situations that demand more complex language and the expression of more complicated ideas. Adults are often embarrassed by their lack of mastery of the language and they may develop a sense of inadequacy after experiences of frustration in trying to say exactly what they mean. Such experiences of frustration may affect their motivation and willingness to place themselves in situations where they might need to use the new language” (p.93).

Regarding cognition differences between younger and older L2 learners, children use their language acquisition device, while adult learners rely on inductive learning abilities (Ellis,1994, p.494). Concerning inputting language information, children input it more efficiently than adults, who may utilize more negotiation of meaning (Ellis,1994, p.494). Young children store L1 and L2 information separately, becoming coordinate bilinguals whilst adult learners store L1 and L2 knowledge together, becoming compound bilinguals(Ellis,1994; p.494). “Coordinate bilinguals can use both languages automatically whilst compound bilinguals cannot” (Matsuoka and Smith, 2008, p.34).

Moreover, in natural L2 learning contexts, older starters learn L2 faster in the first stages of the L2 learning process, whereas younger starters are slower during the first stages of the L2 learning process, but in the long-term they achieve a higher proficiency than older starters, sometimes a native-like one (Muñoz, 2010, p.41-42).

However, in instructed L2 learning contexts, younger learners' final attainment will emerge later than in natural L2 learning contexts, due to the smaller volume of exposure to L2 (Singleton and Ryan, 2004). Also, research in instructed L2 contexts leads to the conclusion that L2 older learners' higher attainment in the first stages of learning exists, especially concerning measures based on metalinguistic awareness or analytical ability (Muñoz, 2006, p.32). Older learners' advantages mirror their ability to employ more explicit approaches to L2 learning thanks to their greater cognitive maturity (Muñoz, 2010, p.46). Contrastively, in foreign language instruction, if time is limited and the curricula do not include L2 immersion, younger learners may not have enough time and exposure to benefit fully from the advantages of implicit learning (Muñoz, 2006, p.33). However, no differences in proficiency are to be expected when differences in cognitive development also disappear with age (Muñoz, 2006a).

In natural or natural-like learning contexts, the age of acquisition is the beginning of significant exposure, or the start of immersion in the L2 context (Birdsong, 2006) and can be a criterion for final attainment. In instructed L2 learning contexts, age of first exposure to L2 is not a criterion for final L2 attainment (DeKeyser R.,2000), as it provides mostly insignificant exposure (White and Genesee, 1996). Thus, the age when one starts to learn a L2 should be replaced as a criterion by the whole age range during which learning occurs, and, in instructed language settings, by the volume of exposure to L2 during each and every age.

CONCLUSIONS

More research has been carried out concerning age and L2 acquisition in natural language learning contexts and less research in instructed language learning contexts;

generalizing the outcomes and processes of L2 learning from natural language learning contexts to the instructed language learning contexts is not functional. Also, research supports the Critical/Sensitive Period Hypothesis for L2, after which period it becomes more difficult to acquire L2, and the final outcome is seldom successful. Additionally, research supports the fact that there may be differing Critical /Sensitive Periods for different aspects of L2 acquisition. In natural L2 learning settings, exposure to L2 is much greater in comparison to classroom settings concerning quality and quantity, and such exposure facilitates children's L2 acquisition through their implicit mechanisms of learning, motivation, encouragement, whereas it may cause to adult learners a feeling of inadequacy due to lack of fluency where there are expectations of it. Exposure to instructed language learning contexts over time is conditioned on the basis of the amount of hours learners are exposed to L2, which may vary according to the given curriculum, and, if not satisfactory in amount or in frequency, may not activate a fast rate of L2 learning among young learners and lead to discouragement. Older learners show greater attainment in the first stages of classroom learning thanks to their greater cognitive maturation. Early L2 learning start in a classroom setting does not necessarily lead to higher attainment, which is a "crucial age-related difference between a foreign language learning setting and a naturalistic language learning setting" (Muñoz, 2010, p.44). The earlier one starts learning L2, the better in terms of L2 attainment or proficiency, on condition that there is significant exposure to L2.

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