

Age-Related Differences in the Motivation of Learning English as a Foreign Language Universidad de Guayaquil

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SUMMARY: *The effects of age on language acquisition is one of the predominant topics in linguistics and second language acquisition (Pérez, 2007). These effects have led to the coining of the critical period hypothesis, which states that one's capability to learn a second language are only high if one's age falls within the critical period range and diminishes as one's age moves away from the critical period (Torres, 2009). In this light, this study aims at finding the age related differences in one's motivation to learn English as a second language (Pérez, 2007).*

From the findings of the study, one's age directly affects his or her motivation to learn English such that younger learners had more motivation to learn the second language as compared to the older learners (Uribe, Gutiérrez & Madrid, 2008). This effect is attributed to the inactivity of the neuromuscular mechanism in one's brains beyond the age of 20, which affects one's ability to process and understand L2 (Uribe, Gutiérrez & Madrid, 2008). The poor language learning techniques of the older adults is also another major cause of the low motivation to learn English as a second language (Torres, 2009). Children engage in more interactions with adults and friends as compared to adults, which is perceived as one of the main factors why children learn a second language faster as compared to adults. The interaction helps them to discover new vocabulary, new ways of pronunciation and new grammar rules, which builds their language faster as compared to adults (Peal & Lambert, 1962).

Generally, it can be argued that the younger an individual is the higher the motivation to learn English as a second language at the University of Guayaquil. It can also be argued that the age of an individual directly determines his or her determination to learn English as a second language regardless of the period of exposure to the language (McBride, 2009).

Keywords:

1. **L2:** This is a short term referring to second language. In most cases, the first language is referred to as the L1 while the second language L2.
 2. **Critical period hypothesis:** This is a period where one is believed to have full potential of achieving native state fluency in a second language provided he gets the required exposure to that language. This period starts when one is two years and runs through to the end of puberty.
 3. **Foreign language:** This is a language belonging to another country or region but practiced or learned by natives of another country or region.
 4. **Age differences:** These are the inborn, natural differences among individuals resulting from their difference in age.
 5. **L2 motivation:** This is the inborn or self-motivation to learn a language.
 6. **Native state fluency:** This is the level of language fluency where one is equated to the natives of a language even though it is a second language to him or her.
 7. **Lexical structures:** The lexical structures of a language refer to the semantics, morphology and grammar of a language.
 8. **Language acquisition:** It is the process of learning a language, from the time of onset to completion.
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INTRODUCTION

Age plays a pivotal role in determining the motivation one has to learn a second language (L2). According to Cook & Singleton (2014), individuals are naturally motivated to learn a foreign language if their age falls below the last year of puberty, after which one finds a lot of difficulty in acquiring a second language. As such, children are naturally superior in second language learning as compared to adults (Genese & Caroline, 2006). Similarly, one's competence and fluency in learning L2 is directly proportional to age, where one's capability and flexibility in learning L2 drops steadily as one grows older. This effect has led to the creation of the critical period hypothesis, which claims that attaining fluency in a foreign language is only capable during the critical period – usually before the end of puberty (Cenoz, 2003). In this regard, the hypothesis asserts that the younger the learner in second language, the faster the learning process and the better the outcomes of the

lessons. In addition, younger L2 students tend to acquire native state fluency in pronunciation, writing and spelling as compared to adult learners, who usually have pronunciation and spelling challenges even if they learn L2 for longer periods (Peal & Lambert, 1962).

Apart from the above arguments, DeKeyser (2007) argues that the age of acquisition or the age at which one gets exposed to a second language also plays a pivotal role in determine the motivation of learning the language. Learners who are exposed to their second language at a tender age tend to adapt faster to the lexical, semantics, pronunciations and grammar of the second language as compared to adults (MacSwan & Pray, 2005). Similarly, the rate of adaptation to a language is hypothesized as being directly proportional to one's age, such that younger learners adapt faster to a language as compared to older learners (Genese & Caroline, 2006).

In light of the above facts, this paper presents findings to investigate the age related differences in motivation to learn English at the University of Guayaquil, one of the many public universities in Ecuador. This university was selected as the most appropriate for this study because it is located in interior areas of Ecuador, a Spanish speaking country, hence making English an L2 language (Goldenberg, 2008). This study uses 310 respondents as participants selected across the different courses offered at the university. The selection of the participants was made uniformly across both genders, fields of study and courses to ensure that the findings were unbiased and reliable for drawing conclusions. Apart from the student community, those in office positions were also included in the study to ensure that all age ranges were considered, to ensure that the findings were unbiased and reliable for use by other studies and research.

Apart from the findings from the study, this report also includes a detailed literature review that is used as a guide and backup to the findings from the study. The literature review also gives findings from previous studies on the topic, which act as control studies in deriving of conclusions. As such, it helps in confirming if the outcomes of the study are consistent with previous studies and if there are new discoveries on the subject.

LITERATURE REVIEW

According to a study by Gardner (2010), the age of onset or date of acquisition plays a pivotal role in determining the level of determination one has in learning a second language. In his report, Gardner (2010) defines the onset age as the age where one gets significant or full exposure to the second language. The report hypothesizes that the younger the onset age the higher the chances of one acquiring full fluency in a language (Gardner, 2010). As such, individuals with more than 60 years have lower probabilities of achieving fluency in a second language while toddlers of one to five years have higher probabilities of achieving fluency in a second language even if they had already been exposed to a first language (Cenoz, 2003).

In connection to the above arguments, Moyer (2004) argues that the length of exposure to a second language is also a major factor in determining one's motivation to learn a second language. Individuals with shorter exposure to a second language tend to have lower motivation to learn the language as compared to their counterparts who have lengthy exposure to a second language (Kormos & Csizér, 2008). In light of this, it can also be argued that younger individuals can have longer periods of exposure as compared to adults because younger learners interact easily, with nearly anybody, making it easy for them to learn a lot within short periods of exposure (Goldenberg, 2008). On the other hand, adults might depend on class related exposure to a second language, which is not an effective way of language learning (MacSwan & Pray, 2005).

According to Barrera (2009), younger L2 learners also tend to learn a language faster as compared to adults because they have high capability for imitation, which is one of the most effective language learning techniques. The imitation of language pronunciation and application of vocabularies helps younger L2 learners to form memory maps and vocabulary database, which helps them to acquire proficiency in a language faster as compared to adult L2 learners (Barrera, 2009). The imitation of language is also helpful to language learners as it restructures their language processing sections of the brain to be have plasticity in identification of the two different language registers and lexical formats (Kormos & Csizér, 2008). As such, it helps in formation of language detectors, language processors and pronunciation mechanisms (Tucker & Corson, 2003).

From a research study conducted by Muñoz (2006), younger L2 learners tend to learn the language faster as compared to their adult counterparts because of neuromuscular mechanisms, which are very active before the age of 12 years. After 12 years, these neuromuscular mechanisms become inactive and dormant, making it hard for one to learn L2 faster (Tucker & Corson, 2003). Similarly, the human simulation perspective, the neuroimaging techniques, functional magnetic resonance, event related potential and other neuromuscular mechanisms related to language acquisition affect L2 learning (Barrera, 2009). As such, although age is a major determinant of one's level of fluency in second language acquisition, the capacity of one's brain to handle multiple languages is also a major determinant of the level of determination one has in learning L2 (Kenworthy, 1987). In light of this, Muñoz (2006) argues that it is then evident that younger L2 learners are expected to learn a language faster as compared to adults because adults have very little brain plasticity, hence influencing their second language processing and learning (Tucker & Corson, 2003).

The high curiosity levels among children are also a major factor as to why younger L2 learners tend to have higher motivation to learn the language as compared to their adult counterparts. According to Bueso & Casamián (2001), adults are highly motivated to engage in an endeavor due to the benefits attached to the endeavor and are not motivated by curiosity. On the other hand, curiosity gives younger L2 learners a higher competitive advantage, exposing them to various language learning contexts, which boosts their retention power (Bott, 2005). The curiosity in younger language learners also helps them to ask questions and clarifications during learning, which helps them to rectify mistakes and learn new language features and grammar rules (Kenworthy, 1987). This makes them naturally fluent in a language even after shorter periods of exposure to a language as compared to their adult counterparts (Singleton & Ryan, 2004).

Another factor that boosts language-learning motivation and is directly linked to the age factor is language-learning mechanisms. According to Cenoz (2003), language-learning mechanisms play a big role in determining faster or slower language acquisition process and fluency. Age affects one's language learning mechanisms because beyond 17 years, one loses the mental capability and flexibility required for implicit induction of a new language's lexical patterns, grammar rules, pronunciations and sentence patterns (Singleton & Ryan, 2004). As such, the automatic language learning process fails beyond puberty. This condition then makes it hard for adults to learn a second language through mere exposure to a second language. This thus affects their language learning process because the process becomes programmed, strenuous and effortful. According to Murad (2009), language learning is predominantly dependent on automatic infusion of a language's grammar patterns and lexical structures into one's brain. As such, adults, due to the lack of automatic acquisition mechanisms, lag behind in acquiring a second language (Johnson, 2008).

In yet another study, Muñoz (2012) discovered that younger L2 learners had stronger speech segmentation and word recognition mechanisms as compared to adult learners. Children have better segmentation mechanisms because of the high plasticity levels of their brains in comparison to adult brains (Gutiérrez & Falcón, 2010). This segmentation capability helps them to easily identify new vocabularies within sentences, hence forming a stronger vocabulary database for use during communication (Johnson, 2008). The high level of word and sentence segmentation mechanisms also helps children to learn the language patterns and relations between words as they are used within sentences, which builds their lexical and grammatical command of the language (Johnson, 2008). The ability to discover transitions within sentences and relations between words also helps children to have better pronunciation of words and intonation of sentences as compared to their adult counterparts (Gutiérrez & Falcón, 2010).

According to Nikolov (2009), learning a second language during the critical period gives one higher chances of attaining fluency and native level competence in a language as compared to learning a second language in adulthood. According to his findings, the language learning process during this critical period is mainly governed by endogenic factors, hence making it easier for one to control self-motivation and initiative in learning the language (Nikolov, 2009). Similarly, second language learning during this period is characterized by minimal exogenous interference, making it the ideal period for language learning. According to him, these factors affect all individuals alike, forming a pattern that helped in coining the critical period hypothesis. In addition to this, Nikolov (2009) argues that learning a second language outside the critical period is hampered by many factors, making it both an erratic and less certain endeavor. The success of learning a second language outside the critical period is also minimal, where one fails to attain command of a language's grammar, pronunciation and lexical structures (Gutiérrez & Falcón, 2010). Apart from that, although one may attain command of a language's lexical structures and grammar, one may fail to achieve native state fluency in pronunciation and intonation (Nikolov, 2009).

Apart from the above arguments, Pawlak (2012) argues that the decline in the effectiveness of the procedural memory among adults is also a major cause of the difficulty to achieve the native state fluency in L2 acquisition. The decline in the effectiveness of the procedural memory causes adults to rely on explicit learning, which is usually ineffective for L2 acquisition. The use of explicit learning techniques is also ineffective in L2 acquisition because it uses poor cognitive systems, which do not support language acquisition constructs (Jenkins, 2002). Age affects language acquisition using implicit competence because one's brain plasticity to language recognition and sentence segmentation starts to decline once one hits age 5 and gradually declines with increase in age. In addition, a study by Nikolov (2009) shows that as one's age increases, one tends to rely on his conscious declarative memory, which is usually a poor memory for use in language acquisition. Older language learners are also believed to rely so much on pragmatics and metalinguistic knowledge, which is not as effective in language acquisition as automatic infusion of language (Jenkins, 2002). As such, older language learners might find it difficult to learn a language in case the semantics and lexical structures of their first language differ significantly with their second language (Bueso & Casamián, 2001). This makes them have problems in pronunciation, tense formulation, sentence structuring and grammar when using their second language.

In addition to the above, once one gets used to a first language for a long period they tend to rely on it for communication and inference and will therefore lack motivation to engage in the active process of learning a second language (Philp, Oliver & Mackey, 2008). As such, the higher one's age is the more rigid one is in engaging in active learning of a second language. The dependency on the use of the first language for communication and survival also ties individuals to their first language, hence depriving them the motivation to learn a second language (Bueso & Casamián, 2001).

However, Taylor (2013) sites that children are normally poor class members in L2 acquisition because they have limited concentration thresholds, which makes it hard for them to grasp all the grammar rules given by a teacher in a class setup. As such, children tend to learn L2 mainly through automatic infusion from their interactions and environment and through imitation (Philp, Oliver & Mackey, 2008). In this regard, they are become good in pronunciations and language vocabulary but might lack the capability to apply all the rules of grammar and semantics. On the other hand, adults might know the language grammar rules and semantics requirements but might not be swift or fluent in pronunciations and application of the language (Bott, 2005). This is attributed to the lack of plasticity of adults' minds, which makes it hard for them to adapt to a new language's grammar and semantics expectations.

In general, the above discussion and findings show that age is a critical actor in second language learning. It is evident that learning a second language during the critical period has many supportive factors that help one in acquiring native-state proficiency and fluency in a language (Philp, Oliver & Mackey, 2008). Similarly, it is also clear that adults are generally slower in second language acquisition as compared to children (Ritchie & Bhatia, 2009). Likewise, children learn a second language mainly through natural acquisition, which is difficult for adults. As such, it can be argued that age is directly proportional to the rate of learning and level of fluency in second language acquisition.

METHODS USED

This study uses 310 participants selected uniformly across the schools, courses and departments at the University of Guayaquil. The participants were categorized in age groups: 17-22, 23-27, 28-33 and above 34. As such, they were tracked and assed as a group and their results tabulated for the entire period of the study. The study lasted for six months and included following the progress of various students attending English classes at the university. This follow up was also accompanied by practical sessions where participants were required to read aloud a written paragraph each month during the study period. The rate of pronunciation and ease of reading the paragraph was then measured from time of commencement to the time of completion (Fraser, 2000). Questionnaires were also administered at the start and at the end of the study to ascertain how much knowledge the students had at the start and at the end of the study.

These methods were selected as the most appropriate for this study because they will help in determining both, one's fluency in speech and one's motivation to learn the language by analyzing the improvement in one's rate of reading the written paragraphs. The questionnaire also came in handy in assessing one's motivation to learn a language at the start and at the end of the study (Ritchie & Bhatia, 2009). The difference in the answers on the questionnaire was also beneficial in assessing one's progress and level of motivation to learn English.

The periodic reading paragraphs were composed of two hundred words, around two hundred and ten syllables and seven sentences long. The paragraphs were mainly made up of a mixture of nearly all vowels and consonants in the English language. The sentences were mainly declarative with straightforward imperative meaning. In reading this paragraph, participants were assessed on both the fluency in pronouncing the words and syllables as well as the speed of reading the entire paragraph (Fraser, 2000). This assessment helped to gauge the competence one has in English, over time, hence help to determine the level of motivation one has in learning the language.

This study assumes that notable improvement in the level of proficiency in a language, over time, is attributed to the motivation one has in learning the language. As such, individuals with high motivation in learning a language were expected to show tremendous improvement in the proficiency in pronouncing the words and syllables as well as higher rates of reading the paragraphs (Ritchie & Bhatia, 2009). On the other hand, those with low motivation were expected to stagnate in their proficiency or have minimal progress in improving their pronunciation and speed of reading the paragraphs.

RESULTS

The results from the study revealed that older students had lower motivation to learn English as compared to their younger counterparts. The younger learners showed initiative in seeking assistance from their teachers and had had great improvements in pronunciation and rate of reading the paragraphs.

The participants were assessed using percentages: excellent (70%-100%), good (50%-60%), intermediate (35%-50%) and poor (below 35%) depending on their levels of pronunciations and rate of reading the paragraphs. The results of the sessions for the first, third and sixth month are as tabulated and graphed below.

Table 1: The first month of the study

Age range (years)	Percentage of competence (%)
17-22	60
23-27	54
28-33	39
Above 34	22

From this table, it is evident that individuals older than 30 years had the poorest motivation in learning English as compared to their counterparts. On the other hand, the younger individuals aged between 17 to 22 years had the most motivation to learn English. The graph of their perceived motivation percentages is as given below.

Figure 1: Graph showing the categorization of participants for the first month

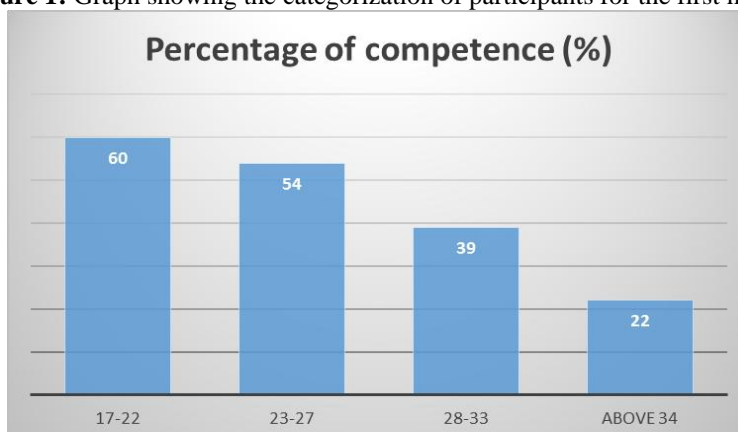


Table 2: The third month of the study

Age range (years)	Percentage of competence (%)
17-22	75
23-27	64
28-33	48
Above 34	24

This table shows that there was slight improvement in the motivation to learn English among individuals aged above 34 years. They only improved by 2% of motivation as compared to the youngest participants aged between 17-22 years who improved their motivation by 15%. Besides, it is noteworthy that the level of improvement in motivation is even across all age groups and is higher among age groups below 23 years.

Figure 2: Graph showing the categorization of participants for the third month

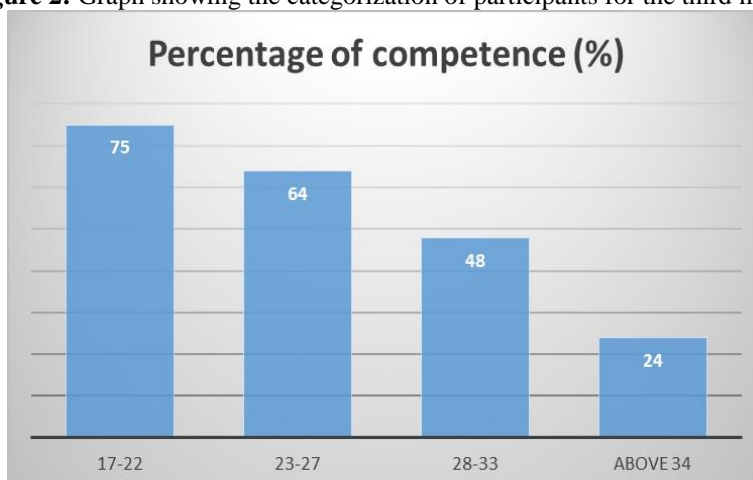
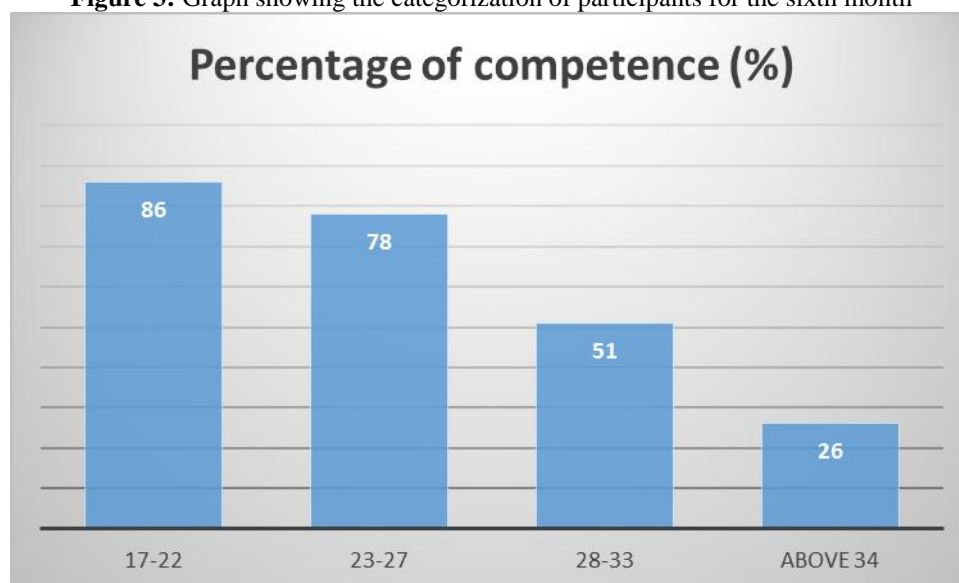


Table 3: The third month of the study

Age range (years)	Percentage of competence (%)
17-22	86
23-27	78
28-33	51
Above 34	26

According to this table, there was tremendous improvement in the rate of motivation to learn English among individuals aged 17-22 years. This increase decreases evenly across the age groups and is lowest among the elderly. This finding is proof that the critical period hypothesis is crucial in L2 learning and that age is a major determinant of the motivation one has to learn English as a second language (Bott, 2005).

Figure 3: Graph showing the categorization of participants for the sixth month



CONCLUSION

In conclusion, it is evident that the motivation in second language acquisition is mainly determined by age, in that, younger L2 learners are usually motivated to learn a second language as compared to their adult counterparts (Fraser, 2000). It is also evident that there are many factors working for language learners during the critical period as compared to those outside the critical period. On the other hand, there are many factors working against L2 acquisition when one is outside the critical period, making it a strenuous endeavor to learn a second language outside the critical period.

From the above findings, it is evident that the motivation one has to learn English is directly proportional to age and reduces with an increase in age. The above findings also point out that the critical period forms the most optimal period for L2 learning, where the results of the learning process are guaranteed and one has ease in learning the language. This study also shows that the motivation to learn a second language decreases as one gets older. This decrease in the motivation to learn a second language is due to the difficulty one encounters in learning a second language beyond the critical period, which makes the endeavor strenuous and stressful. Generally, it can be argued that the younger an individual is the higher the motivation to learn English as a second language at the University of Guayaquil. It can also be argued that the age of an individual directly determines his or her determination to learn English as a second language regardless of the period of exposure to the language.

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