

# Article review on the discontinuity test

[Sociology](#), [Community](#)



The study aims to address and evaluate the influence of age on second-language acquisition. It revealed the critical period hypothesis for the second language (L2) acquisition. According to Flege, Munro and Mackay, in examining the immigrant populations, participants' age of arrival (AOA) in the host country forms a very vital and important part. AOA is an important factor or determinant to gauge the degree of foreign accent as well as degree of accuracy in the pronunciation of L2 and the study intends to confirm this widely accepted belief.

The observation of age effect on the L2 performance of individuals forms the backbone of Critical period Hypothesis (CPH). The Critical period hypothesis is based on an assumption that necessarily states and assumes that age related effects in L2 studies are the result of maturational changes in brain structures that process and help learn an individual, languages.

The study even explores the influence and effect of L1 (first language, in most cases mother tongue) on the person's ability to grasp and learn second language (L2). The article at one point in time states that the more fully developed the L1 system is when L2 learning begins, the more strongly the L1 influences the L2. And hence it could be inferred that L1 impacts the learning of L2 in a big and significant manner.

The main purpose of the study was to evaluate critical period hypothesis by examining the AOA on L2 performance and it used a three-faced approach consisting of three different methods to achieve its purpose or aim. The three methods involved in the study are:

## **Pre/Post Correlation test**

### Matched subgroup method

Each method or test involved in the CPH during the course of study held its own value. The discontinuity test was based on a supposition that L2 acquisition would be better for people who start the learning process before the critical period compared to those who did it at the end of the period. But the main drawback of the test is that the critical age is disputable, while some believe it to end at 12 years of age some say it extends up to 15. The second test aimed to establish a correlation between AOA and L2 groups, with one group having begun the learning process before and the other after the end of critical period. The third method helped us assess and measure the critical period hypothesis and also helped infer and understand the factors associated with AOA and their effects on L2 acquisition.

The study establishes that L2 acquisition as a process could vary in difficulty based on the levels of linguistic skills and various functions and structures of languages involved. The age constraints the learning of functions like phonology and morphosyntax differently and this too was studied in depth to avoid falsification of CPH unlike in previous studies.

The study or research was conducted on 240 native Korean participants who arrived in USA between the ages of 1 and 23 years. The general procedure of the research involved testing participants on foreign accent and Morphosyntax. The foreign accent analysis involved a pronunciation test upfront in which all the participants fared almost equally. It was inferred from the study and evaluated that in terms of acquiring foreign accents the

participants with Higher AOA scored more. Hence, the mean foreign accent rating of participants in the AOA age group 20 and above was almost 3 while it was almost 5 for a person in the critical age group thus establishing the supremacy of former.

For the Morphosyntax analysis of the involved participants, they were judged for their overall grammatical efficiency. The results were again not in resonance with the CPH the native Korean participants' AOAs were inversely proportional to their scores in grammatical judgment scores. While the score for participants in the AOA age group 15-20 ranged was about 75 percent it was around 85 for AOA age group 10-15 and maximum for AOA age group 0-5 where the score stood at healthy 95 percent.

The study importantly revealed two very important points. First, that was critical period for L2 acquisition for immaterial (since both Foreign accent analysis and Morphosyntax analysis refuted it) and that age constrains the learning of L2 phonology to a greater extent than it does for L2 morphosyntax.

The primary purpose of the study was to evaluate the validity of critical period hypothesis and to prove that the effect of AOA on the acquisition of a second or foreign language and it clearly succeeded in establishing relationships and proving these points put across by early theorists in succinct and lucid manner.