

A synthesis of empirical research on the linguistic outcomes of early foreign language instruction.

What this research was about and why it is important

This study reviewed 42 empirical studies (1964-2014) examining the effect of the age of learning (AoL) variable in a foreign language (FL) formal instruction context or laboratory setting. The ever-increasing Early FL programmes worldwide, particularly English as a FL, rest upon the assumption that “earlier is better” for language learning (Huang, 2014). However, most research on the “earlier is better” hypothesis has been conducted in naturalistic immersion contexts, such as looking at how German and Chinese migrants learn English in the United Kingdom (UK). Given the substantial differences between naturalistic immersion and FL formal instruction contexts, it remains an empirical question whether the findings from immersion studies can be applied to a FL instruction context where input and instruction are structured and relatively limited (Muñoz, 2008; Singleton, 2003). This study thus aimed to address this gap to better understand the effect of an early start on language learning outcomes in a FL formal instruction context.

What the researchers did

The researchers searched through major research databases and Google Scholar using a combination of two sets of keywords related to the AoL variable and FL learning context and a set of inclusion criteria. Studies identified from this initial search not meeting the criteria were excluded. After two rounds of searches and screening, the researchers identified 42 studies that met the requirements. Based on the number of datapoints (single vs. multiple timepoints of data collection) and type of language outcomes (Short Term (ST) vs. Mid Term or Long Term (MT/LT)), the researchers divided the 42 studies into three categories: 1) single-time-point laboratory studies on ST outcomes (n = 10); 2) single-time-point studies on MT/LT outcomes (n = 19); and 3) multiple-time-point studies on both ST and LT outcomes (n = 13). Each of the studies was then carefully reviewed. The researchers presented and discussed these studies by category. The length of instruction/learning for ST outcomes ranged from a single training session to several weeks of after-school instruction whereas the length for MT/LT outcomes ranged from 600 hours to 18 years.

What the researchers found

Category 1: The 10 studies examining Short Term learning outcomes in laboratory settings mostly involved native English speakers in the UK or the United States learning various FLs (e.g. French, Mandarin, and Russian). All studies used participants’ biological age as AoL (ranging from 5 to 17; some studies included adult learners for comparison) and compared the FL outcomes between younger and older learners. The majority of studies looked at listening comprehension or speech perception/production outcomes. Results were mixed. Two studies found a younger advantage, but eight did not; five studies actually showed that older learners outperformed young learners.

Category 2: Most of the 19 studies (single-time-point studies on MT/LT outcomes) were conducted with English as FL and learners in Spain. All used a retrospective design comparing MT/LT learner outcomes with varying age of initial FL instruction (ranging from preschool to secondary grades). Length of instruction ranged from 600 hours to 18 years. The majority of studies showed that, compared to learners with a younger AoL, learners who started learning at an older age performed similarly or even better than younger starters. The only exceptions where younger starters outperformed older starters were in speech perception, pronunciation/speech production, and listening comprehension.

Category 3: The majority of the 13 studies (multiple-time-point studies on both ST and LT outcomes) were also conducted in Spain. All studies involved FL data at two or three time points. Similar to the results from the first and second category, the synthesis revealed no clear early advantage. However, some studies found a trend of younger starters catching up with older starters after an extended length of instruction in speech perception and oral production.

Overall, the synthesis revealed no clear evidence for a younger learner advantage in FL learning; studies examining ST outcomes revealed an older learner advantage; studies examining MT/LT outcomes did not support a younger learner advantage, though there was some limited evidence for an earlier is better effect in auditory/speech perception.

Things to consider

Many of the studies utilized data from two large-scale projects in Europe (Barcelona Age Factor project ; Basque Project) that included Spanish, Basque or Catalan speakers learning English as a FL. Results may not be generalizable to learners from other native language backgrounds. There can be other non-linguistic benefits of early FL instruction, such as positive attitudes toward other languages and cultures.