Abstract

(English)

Bilingualism is currently an issue of broad study within fields of psychology and cognitive neuroscience. It points not only to the cognitive or even health benefits of this phenomenon, but also to its risks. However, research is hampered by the immense variety of manifestations of bilingualism. Each bilingual has a unique linguistic history with each of their languages. Some phenomena, such as the age of acquisition of a second language, or the level of proficiency of a second language, are better explored. However, other factors, such as the similarity of the languages used by a bilingual has only recently begun to be studied. This thesis focuses on the influence of the similarity of the bilingual's language on their language processing. In the EEG experiment, the technique of evoked potentials has been used, specifically, the N200 (inhibitory) and N400 (semantic) waves have been monitored. These are probably the most frequently studied evoked potentials in bilingual subjects. Participants are divided into three groups according to the similarity of their languages: participants with similar languages (Slovak-Czech), bilingual with partially similar languages (Russian-Czech) and participants with different languages (German-Czech). A difference in the N200 effect was not observed between groups, but the N400 effect differed between groups, both in latency and amplitude. This suggests that the language distance of bilinguals can affect language processing at least at some levels of cognitive processing. Further consequences are considered and discussed in the study.

Keywords: bilingualism; cognitive processing; EEG; event-related potentials; N200; N400; language similarity