

## THE DEVELOPMENT OF EXECUTIVE FUNCTIONS IN HIGH SCHOOL STUDENTS RECEIVING BILINGUAL EDUCATION

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These days many people use more than one language in the course of daily life, thus the acquisition and interaction of multiple languages are being intensely studied within the domain of psycholinguistics. A special group of multi-language users are the so-called bilinguals, who acquire and use two languages at native level from their early years of life. It is hardly surprising that bilingualism influences the development of the language system in children, but now it is also evident that, compared to monolinguals, bilingual individuals show differences in many other cognitive areas as well. One of these areas is the executive functions (EF), the term referring to a collection of inter-related processes (e.g. anticipation, monitoring, mental flexibility, planning and inhibition) responsible for purposeful, goal-directed behaviour. The frontal cortex is thought to regulate EF, a brain region known to continue maturing throughout adolescence, causing EF to develop until early adulthood. Although having some weakness in lexical performance, recent studies have provided evidence that bilinguals have advantages in the development of EF. One plausible explanation for this is that bilinguals, in order to be able to use two languages in parallel, need to switch between languages and constantly inhibit the unused language to prevent interference with the currently used one. These constant switching and inhibiting processes are managed by EF, leading to their more robust development in bilinguals. A question here can be addressed: how does bilingual education influence the development of EF in high school students? The form of bilingual education is now a popular way of acquiring second language with more children attending this type of schools. Still, the effects of studying in multiple languages on EF are unknown. Is it possible that the process of using two languages in parallel results in the same advantages in bilingual students as it does in born bilinguals? Since EF are linked to many aspects of personality, better EF are associated with the use of more adaptive coping mechanisms, lower level of anxiety and depression, or extraverted, open behaviour – traits that are important for a person's mental health. The aim of the present study is to investigate whether 14-18-year-old students receiving bilingual education have the same advantages in EF as born bilinguals and if so, whether enhanced EF in these teenagers correlate with better mental health. To examine these issues EF will be measured using the go/no-go paradigm, the Stroop-test and the task switching paradigm. To assess mental health and personality traits, the Eysenck Personality Questionnaire, The Beck Depression Index, the CISS-48 Coping Mechanisms Inventory and the Spielberger State/Trait Anxiety Inventory will be administered. The current presentation addresses the theoretical background of the present study (including research plan), putting its educational and psychological significance in perspective.