ARE THERE DIFFERENCES IN THE DEVELOPMENT OF THE EXECUTIVE FUNCTIONS OF CHILDREN WITH A TYPICAL AND ATYPICAL DEVELOPMENT STIMULATED BY A GAME ON A TABLET?

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Introduction: Executive functions (EF) are developed early, building a fundamental basis of higher cognitive processes in adulthood (Garon et al., 2008). There are studies with children of typical development (Passolunghi et al., 2006; Welsh et al., 2010) that have demonstrated the key role of EFs, such as working memory, inhibitory response, planning and attentional control, in initial literacy and precalculus. What is still unclear is whether these EFs can be stimulated early and if it has any effect on their development. At the same time, it is known that children with atypical development, such as ADHD, have deficiencies in the development of EFs (Barkley, 1997). The early stimulation of EF in this type of population will have the same effects as in a typical development population? The objective of the study is to evaluate the effect of a stimulation program of the EFs (working memory, inhibitory response, planning and attentional control), by means of a tablet game, in the development of the FE of preschool children with and without symptoms of ADHD, of socioeconomically disadvantaged sectors. Method: Two groups, comparison (CG) and intervention (IG) were selected at random, both were evaluated twice (before and after). In total there were 408 participants, 212 of typical development and 196 of atypical development. The IG was exposed to a game of FE through a tablet during 12 sessions (in the classroom). Results: The main results show differences in favor of IG in the different FE evaluated, both for children with and without ADHD symptoms. There are differences in the effect of EF among the children evaluated. Discussion: These differences and their possible implications in the educational and social environment are discussed.