INCLUSIVE STUDY GROUPS BASED ON MAGNE NYBORG'S CONCEPT TEACHING METHOD: EFFECTS OF A COGNITIVE INTERVENTION PROGRAM ON TYPICAL AND SEN PRE-SCHOOLERS

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Many researchers have been urging systematic activation of children with regular and atypical development since the 1960's, when the so called 'cognitive movement' started to unfold. Several cognitive acceleration programs have been created which explicitly teach abstract concepts, inductive reasoning and different metacognitive strategies for both populations. (A non-exhaustive list: Bright Start, Brooks & Haywood 2003; Instrumental Enrichment, Feuerstein, 1980; Tools of the Mind Program. Bodorova-Leong, 2007; Denktraining für Kinder I, II., Klauer, 1989 and Klauer & Phye, 1994; 2008). However, only those cognitive acceleration programs can be recommended for further use that prove to have high effect sizes and possibly can serve inclusive processes of SEN students into mainstream classes (Lebeer, 2011). The aim of our study was to explore the effects of a Norwegian cognitive intervention program, Nyborg's 'Concept Teaching Method' (Nyborg 1985; Sonnesyn-Hem 2006). Our experimental group were typically developing pre-school children from two kindergartens and typically developing first-graders from public schools in Budapest (N=60, age mean=5.3, SD=.48). The same institutions provided us with a control group (N=60, age mean=5.2, SD=.47), which have not participated in any intervention programs besides their general pre-school/first-grade school instruction. In addition to our typically developing students, we have included 6 children with moderate intellectual disability (N=6, age mean=7.8, SD=.43) into our experimental group after a two week sensitization period given for the mainstream children. We have chosen control-match pairs for the 6 ID children from special schools in Budapest (selection criteria: same school-type, same type of disability, same SES, same IQ level and same gender). Our SEN participants in the experimental group gained cognitive activation together with their mainstream peers in so called 'inclusive study groups'. The intervention involved 3 hours per week for 6 months. We hypothesized that the program would have a positive effect on general intellectual abilities (g) in case of both populations; on understanding syntactic structures and relations in linguistic modalities as well; and it would enhance school-maturation in case of relation-comprehension. As for pre- and post-test measurements, we used a general intelligence test; a test for understanding syntactic structures; and a school-maturation test (part Relations). Results show that Nyborg's CTM program has a positive effect on both populations. (We used ANOVA). The effect of the program is high in case of children with average intelligence (Eta Squared is 20,7%; Cohen d is 1.022). Results concerning children with ID are also positive (significant post-test measures in all domains), however, due to our small sample, further investigations are needed. Relevance of our study: remediation of un- or underdeveloped conceptual categories should be supported in the pre-school years.

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