**Project title**: Effects of pre-school on child development and school achievement

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**Period**: 2001-2006

**Project goals**: to follow-up child development in early and at the beginning of middle childhood, and to explore its relations to school achievement in the 1st grade; to compare indicators of development and academic achievement between firstgraders who attended and those who did not attended pre-school prior to school entry; to determine: (a) the effects of child and family characteristics, and pre-school on children's adjustment and achievement, (b) whether early entry to pre-school exerts a long term-effect on child development and achievement; to explore protective and risk factors in emotional and social development, and school achievement; to identify profiles of children who require a special attention and to provide guidelines for planning professional work with pre-school and first grade children.

**Methodology**: a longitudinal design with 4 repeated measurements and data on school achievement obtained in wave 5, a multiple-informant, quasi-experimental, observation methods, ability tests, psychological inventories and check-lists to assess the attainment of standards in school curricula were used. The sample consisted of 430 children (different Slovenian regions), their mothers, fathers, primary and secondary teachers in pre-school, and teachers and assistants in schools.

**Results**: children having attended pre-school at least from age 3 increased in efficiency and adjustment over time and across domains (cognitive, emotional-social, personality). With increasing age, externalizing and internalizing behaviour decreased as well as the percentage of children exhibiting problem behaviour. Controlling for parental education the children who attended pre-school were, in comparison to those who did not, assessed as more joyful, trustful, integrated in the peer group and independent from adults. Regarding personality, the former were rated as slightly more conscientious, open, extraverted and emotionally stable, but more strong willed than the latter. The firstgraders who attended pre-school scored somewhat higher on general non-verbal ability and did slightly better in Slovenian language relative to their peers who did not attend pre-school. The age of entry to pre-school (1 to 3 years) had no long-term effect on development and achievement. Some beneficial effects of early entry were demonstrated to be short-term. Child characteristics had, concurrently and longitudinally, a clearly stronger unique effect on adjustment and school achievement as compared to pre-school and family factors. Among the latter parental education, stimulation of cognitive development and authoritative parenting were significant. The children at risk scored (a) low in conscientiousness and openness but high in extraversion and emotional stability or (b) low in conscientiousness, openness, extraversion and emotional stability, especially when they exhibited relatively low abilities.


