

## **How preterm birth and social burdens of the family are affecting on children`s executive functions?**

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### **Abstract**

There is an importance of understanding how premature birth and social burdens of the family might interact cognitive development and form a risk for neurodevelopment delays of the child. The aim of this longitudinal study is to describe cognitive development and executive functions (EF) of preterm and early term children (N=93) during their first three years in families which have social burdens, like social, financial and/or psychological risk factors. The other aim is to study intervention effects when Parents as Teachers program is used. Participants are withdrawn from ZEPPELIN 0-3 research project which is a longitudinal intervention study (N=248 families with 261 children) conducted in Switzerland. It aims to study whether early support during first three years has positive impacts on children`s development and parents show improved parenting practices in families with social burdens. In ZEPPELIN 0-3 four comprehensive developmental assessments are conducted during the first three years of the child. Generally, there is a lack of EF measurements for toddlers and situation is even more complicated with preterm children. This study will use EF components from Bayley Scales of Infant and Toddler Development (BSID-III, 2005). In addition, maternal questionnaire of emotional and behavioral problems, Child Behavior Check List will be used. The study is retrospective, and the analyses will be conducted during autumn 2021. The educational significance of this study emphasizes the prevalence of preterm and early term children and the need of studies on early interventions which support developmental trajectories and environmental factors.