

**MARIE CURIE
INTERNATIONAL
EXCHANGE PROGRAM
JUNE 2012**

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OUTLINE

1. About me
2. The GRIP and I
3. Submitted article
4. Ph.D. Project

ABOUT ME

- 2005-2008 - Bachelor degree in Psychology, UNICAP, Recife, Brazil.
- 2009-2011 - Master degree in Clinical Psychology, Université-Pierre-Mendès-France, Grenoble.
- 2011-2012 - Ph.D. Candidate in Clinical Psychology and Psychopathology, Université-Pierre-Mendès-France.
- 2012-2013 - Ph.D. Candidate in Public Health (Epidemiology), University of Montréal.
 - Co-tutelle

GRIP AND I

○ Master's dissertation

- Developmental Considerations of Hyperactivity and Inattention among Preschoolers
- EMIGARDE
- Article (Early Childhood Research Quarterly)
 - Future replication (QLSCD)

January

○ Ph.D. Research Project

- Exploratory Analysis
- Article sketch

OTHER RESEARCH ACTIVITIES

April



- Meta-analysis

- Brazilian Studies
- Prematurity and Cognitive Dvt
- Linda Booij, University of Montreal; Magda Nunes, PUCRS

Submitted article

Early Childhood Research Quarterly

THE RELATIVE ROLE OF EARLY
INATTENTION AND HYPERACTIVITY IN
THE PREDICTION OF SCHOOL
READINESS

INTRODUCTION

- ADHD symptoms and elementary school years
 - Negatively predict school readiness and later academic achievement.

- What about early years? Preschool years?

- Research questions:
 1. Can we estimate links between school readiness, hyperactivity, and inattention in preschool years?
 2. How early in the preschool years?
 3. Are the patterns of the association similar for elementary school years and preschool years?

(submitted - Early Childhood Research Quarterly)

METHOD

- ◉ 4 years, Lollipop Test of School Readiness
 - Cognitive School Readiness (CSR)

- ◉ Participants
 - EMIGARDE
 - N=518; n=345
 - 2, 3, and 4 years of age
 - Children born between 2003-2004
 - Perinatal study conducted in four Montreal maternity hospital (Kramer et al., 2001)

- ◉ Statistical Analysis
 - Bivariate analyses
 - Multivariate analyses
 - Missing data
 - Multiple imputation by chained equations (Buuren & Groothuis-Oudshoorn, 2011)

(submitted - Early Childhood Research Quarterly)

RESULTS

The Contribution of Hyperactivity and Inattention (2-4 years) to Cognitive School Readiness (4 years) (N=345)

| Variable | Model 1 2 years-old | | Model 2 3 years-old | | Model 3 4 years-old | |
|-------------------|------------------------|---------|------------------------|---------|------------------------|-------|
| | $R^2_{adj}=.053$ | | $R^2_{adj}=.075$ | | $R^2_{adj}=.068$ | |
| | β | p | β | p | β | p |
| PREDICTORS | | | | | | |
| Hyperactivity | -.225*** | .000*** | -.299*** | .000*** | -.168* | .011* |
| Inattention | -.008 | .885 | .049 | .460 | -.121 | .067 |

Note. * < .05. ** < .01. *** < .001

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Contribution of Hyperactivity (2-4 years) to Cognitive School Readiness (4 years) after Controlling for Child and Family Variables (N=345).

| Variable | Model 1 2 years-old | | Model 2 3 years-old | | Model 3 4 years-old | |
|--|------------------------|--------|------------------------|---------|------------------------|---------|
| | $R^2_{adj}=.222$ | | $R^2_{adj}=.215$ | | $R^2_{adj}=.205$ | |
| | β | p | β | p | β | p |
| PREDICTOR | | | | | | |
| Hyperactivity | -.123* | .026* | -.183** | .001** | -.171** | .004** |
| CHILD CONFOUNDS | | | | | | |
| Aggressive behaviors | -.013 | .804 | -.015 | .789 | .066 | .236 |
| Sex | .238* | .020* | .220* | .034* | .229* | .026* |
| Morpho-syntactic development task by Age 2 | .472** | .002** | .577*** | .000*** | .536*** | .000*** |
| MATERNAL AND FAMILY CONFOUNDS | | | | | | |
| Family Functioning | .047 | .386 | .024 | .669 | .040 | .466 |
| Positive Parenting | .019 | .714 | .011 | .834 | .036 | .497 |
| Low Coercive Parenting | .057 | .302 | .026 | .646 | .033 | .576 |
| Consistent Parenting | .100 | .062 | .128* | .017* | .132* | .013* |
| Depression during Pregnancy | -.001 | .982 | -.008 | .877 | -.026 | .612 |
| Maternal Education | .157** | .003** | .116* | .033* | .120* | .024* |
| Income | .164** | .004** | .125* | .038* | .134* | .013* |

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DISCUSSION

○ Research questions:

1. Can we estimate links between school readiness, hyperactivity, and inattention in preschool years?
2. How early in the preschool years?
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(submitted - Early Childhood Research Quarterly)

Ph.D. Project

MENTAL HEALTH AND POVERTY
DURING CHILDHOOD: EXAMINING THE
LINKS OVER TIME AND THE
MECHANISMS RESPONSIBLE FOR
THEIR ASSOCIATION

INTRODUCTION

- ◉ Low socioeconomic status (SES) - major risk for physical and mental health.

- ◉ Lack of studies in early childhood development (ECD)
 - Growing up in poverty?

- ◉ Research Questions:
 1. What is the association between social inequalities and mental health in childhood period with SES measures?

 2. How and when the first adverse effects of low SES emerge?

GENERAL AIM

Document the association between low SES in early childhood and children's mental health from infancy to preadolescence as well as the mechanisms that explain this association.

SPECIFIC OBJECTIVES

- Estimate longitudinal aspects of the association between SES and children's outcomes.
- Mediators
 - Parental mental health and parenting
 - Cortisol Level and gene candidates
- Different sub-populations
 - Boys and girls
 - Immigrants

METHOD

- QLSCD (Quebec Longitudinal Studies of Childhood Development) cohort.
- Predictors -2 and 5 years
- Outcomes - 6 and 12 years
- The longitudinal aspect is central in our study:
 - Semi-parametric Trajectories (Jones & Nagin, 2007) or General Mixture Models (Muthén & Muthén, 2010)
 - SEM-Structural Equation Modeling (Kline, 2004).

SCIENTIFIC IMPLICATIONS

The results may have implication for the prevention of mental health problems as they may point to relevant targets for early interventions.

THANK YOU.