Associations between Poverty and Disruptive Behaviors in Early Childhood: The Mediating Role of Maternal Depression and Parenting Practices

Julia Mazza[1,2], Jean-Baptiste Pingault[3], Linda Booij[1,4], Michel Boivin[5], Richard Tremblay[1,2], Maria Victoria Zunzunegui[1], Sylvana Côté [1,2]

[1]CHU Sainte-Justine, Montréal [2]Université de Montréal, Montréal [3]Kings College, London [4]Queens University, Kingston [5]Université Laval, Québec

Introduction

- Poverty is a risk factor for children's mental health[1];
- Researchers have identified several mediators of poverty and disruptive behaviors[2-4];
- Few studies have examined the association between poverty and disruptive behaviors in early childhood. Even less is known about potential mechanisms explaining this association.

Objectives

❶ Examine whether poverty contributes to an excess risk of disruptive behaviors in early childhood – i.e. physical aggression and hyperactivity;

❷ Identify whether parenting practices, family processes, and maternal depression explain the association between poverty and disruptive behaviors.

Study Design

- Québec Longitudinal Study of Child Development (1998-2010);
- A population-based birth cohort;
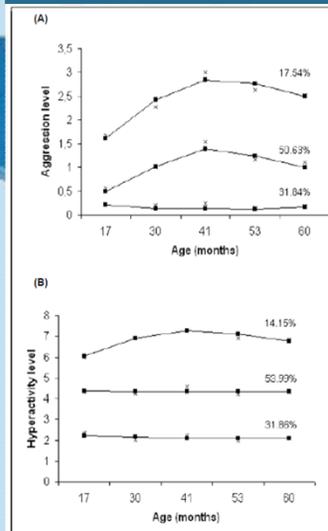- N=2120 followed yearly from birth to 5 yrs.

Main outcomes

- High trajectory of physical aggression;
- High trajectory of hyperactivity;
- 1½ -5yrs.

Exposure

- 3-4 episodes of household income below the federal poverty line ;
- 5mo-3½ yrs.
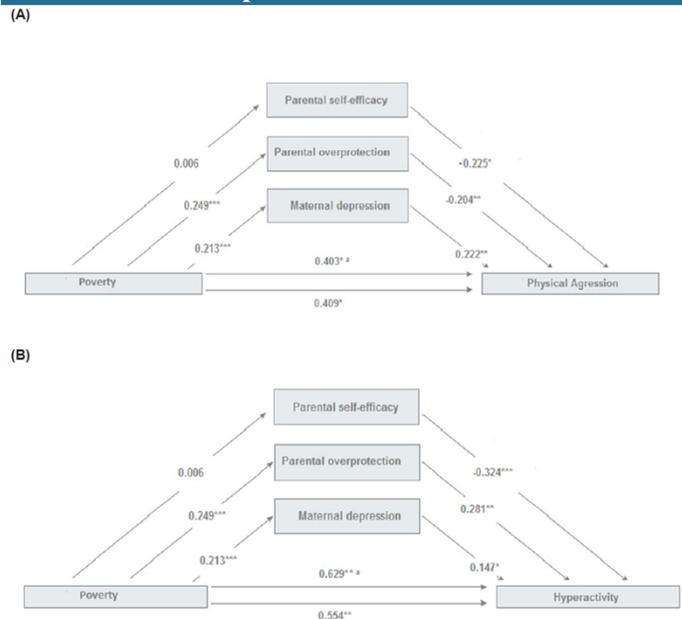
Result I : Trajectories

Analytical Strategy

- Semi-parametric mixture modeling to calculate physical aggression and hyperactive trajectories;
- Multivariate logistic regression to examine the contribution of poverty;
- Bivariate associations to select potential mediators (criteria of $p<.30$);
- Single-step multiple mediation model[5] to identify indirect effects of family variables;
- Confounds: child's sex, maternal education, family structure, childcare service.

Result II : Poverty Predicting High Trajectories of Physical Aggression and Hyperactivity

Disruptive Behaviors°

	Unadjusted model		Adjusted model	
	OR	CI	OR	CI
1.Physical aggression	1.57	1.20-2.04	1.53	1.10-2.10
2.Hyperactivity	2.21	1.67-2.91	2.03	1.43-2.85

Result III : Multiple Mediation Model

(A)

(B)

°Direct relation between predictor and outcome (path C).
*.05 **.01 ***.001

Conclusion

- Poverty heightens the likelihood of disruptive behaviors over the rst 5 years of life and its contribution occurred partially through parenting practices and maternal depression.
- Developing policies and practices to address maternal depression, parenting, and poverty is one important avenue to improve children's mental health early in life.

Références

1. Reiss, 2013. Soc Sci Med 90 (2013): 24-31.
2. Jackson et al. Child dev 71.5 (2000): 1409-1423.
3. Costello et al. Jama 290.15 (2003): 2023-2029
4. Luby J et al. Jama pediatrics167.12 (2013): 1135-1142.
5. Preacher & Hayes. Behav res methods 40.3 (2008): 879-891.4