

Title: Maternal Depression and Family Life Events as Risk Factors for Behavioural and Emotional Problems in Children with Intellectual and Developmental Disabilities and the Function of Child Resilience as a Compensatory Factor in this Relationship

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Introduction: There is a well-established relationship between adverse or stressful life events and psychopathology amongst the general population (e.g., Goodyer, Wright & Altham, 1990). This association has also begun to be explored among the child IDD population. and Emerson (2004) found associations between several life events and mental health and well-being in children with IDD: parental separation, parents having negative involvement with the police, death of a child's close friend, parental financial crisis, and the child experiencing hospitalisation due to illness were associated with high rates of emotional disorders. A less well researched relationship is whether maternal well-being is predictive of child behavioural problems in children with IDD (Zeedyk & Blacher, 2015). The influence of maternal depression on child outcomes is cause for concern in children with IDD as behavioural problems are more common than among their typically developing peers (e.g., Abbeduto et al., 2004). In this study we conceptualised family life events and maternal depression as two risk factors likely to lead to higher levels of child behavioural and emotional problems. Child resilience may act as a protective factor in this relationship and thus we would expect child behavioural and emotional problems to be less affected when exposed to high levels of adverse life events or maternal depression.

Method: Mothers provided data through completing a cross-sectional online survey about 312 children with IDD aged between four and 15 years old ($M = 10.02$, $SD = 3.08$). The mothers' ages ranged from 23 to 67 years ($M = 42.50$, $SD = 7.13$) and 252 were currently living with a spouse or partner. Most mothers (308) were the primary carer for their child.

Measures included: Demographic questionnaire; Strengths and Difficulties Questionnaire (SDQ: Goodman et al., 1997, 1998); The Wagnald and Young Resilience Scale (1993); Child and family life events were measured using life event questions from the Millennium Cohort Study (2012); Maternal depression symptoms over the past seven days were measured by the Hospital Anxiety and Depression Scale (HADS: Zigmond & Snaith, 1983).

Results: The moderated multiple regression analyses showed that child resilience was a significant independent predictor of child behavioural and emotional problems in all six of the models SDQ subscale and total scale models (all $ps < .001$ or $= .001$), and maternal depression was a significant independent predictor of child behavioural and emotional problems in three of the six models (all $ps < .05$) (total difficulties score, emotional symptoms subscale and conduct problems subscale). Contrary to predictions, exposure to more negative life events was not significantly associated with child behavioural and emotional problems. There were no significant interaction terms in any of the six models run, either in interaction one (resilience x life events) or two (resilience x maternal depression).

Discussion: This study has shown firstly that maternal depression and child resilience are both associated with child behavioural and emotional problems. Secondly, maternal depression was found to act as a risk factor for child behaviour and emotional problems (specifically emotional symptoms and conduct problems). Thirdly, levels of child resilience consistently had a significant independent effect of child behavioural and emotional problems when maternal depression was present; therefore, we found the strongest support for a compensatory model of resilience. The compensatory model explores whether risk factors have a direct main effect, reducing negative outcomes directly, thus overall the presence of resilience in a child with IDD has a positive impact on their behavioural and emotional problems. Fourthly, child adverse life events were not found to be a significant risk factor in any of the models.

References/Citations:

- Abbeduto, L., Seltzer, M. M., Shattuck, P., Krauss, M. W., Orsmond, G., & Murphy, M. M. (2004). Psychological well-being and coping in mothers of youths with autism, down syndrome, or fragile X syndrome. *American Journal on Mental Retardation*, 109(3), 237-254
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38(5), 581-586.
- Goodman, R., Meltzer, H., & Bailey, V. (1998). The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European child & adolescent psychiatry*, 7(3), 125-130.
- Goodyer, I., Wright, C., & Altham, P. A. T. R. I. C. I. A. (1990). The friendships and recent life events of anxious and depressed school-age children. *The British Journal of Psychiatry*, 156(5), 689-698.
- Zeedyk, S. M., & Blacher, J. (2015). Chapter One-Maternal Depression and Child Behavior Problems: Longitudinal Considerations. *International Review of Research in Developmental Disabilities*, 49, 1-43.
- Millennium Cohort Study (MCS) (2011) Child of the new century; Age 11 Main Stage; Household and main/partner questionnaire. Downloaded from:
[http://www.cls.ioe.ac.uk/page.aspx?&siteid=883&siteidtitle=The+age+11+survey+of+the+MCS+\(2012\)](http://www.cls.ioe.ac.uk/page.aspx?&siteid=883&siteidtitle=The+age+11+survey+of+the+MCS+(2012))
- Wagnild, G., & Young, H. (1993). Development and psychometric. *J Nurs Meas*, 1, 165-178.
- Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta psychiatrica scandinavica*, 67(6), 361-370.