**Title**: Longitudinal Trajectories of Maternal Stress for Mothers with Intellectual Disabilities and Borderline Intellectual Functioning

**Authors**: Weiwen Zeng, PhD, MSSW1,2, & Miriam Heyman, PhD2

**Introduction**: Despite decades of research documenting health disparities faced by adults with intellectual disabilities (ID), there are few longitudinal studies on the mental health of parents with ID. In addition, past research primarily relied on samples derived from service populations. As such, little is known about those with ID or borderline intellectual functioning (IF) who perhaps were not identified, and thus did not receive research attention. This study examines longitudinal trajectories of maternal stress for mothers with ID and borderline IF compared to their peers without ID, over their children’s ages across a period of 15 years. Additionally, it aims to estimate the impact of various individual and socioeconomic (SES) factors on maternal stress over time including race/ethnicity, income, education, marital status, receipt of supplemental security income (SSI), material hardship, social support, and child factors (e.g., child age, gender, and number of children in the household).

**Method**: We used longitudinal data from the Future of Families and Child Wellbeing Study (FFCWS) between Years 1–15. Using mixed-effects multilevel modelling (MLM), we analyzed changes in, and predictors of maternal stress over time for mothers with ID (n=89), borderline IF (n=346), and without ID (n=1,898). A two-step MLM model-building process was employed in which 1) maternal ID was first entered in the unadjusted model to understand the crude differences between mothers with ID, borderline IF, and without ID, and 2) all other variables were then added in the final model to estimate their effects on maternal stress over time. We compared the log-likelihood (LL), Akaike’s information criterion (AIC), Bayesian information criterion (BIC), and the intraclass correlation coefficient (ICC) statistics to assess the goodness-of-fit from the unadjusted to the final model.

**Results**: Across Years 1–15, mothers with ID and borderline IF reported significantly higher levels of maternal stress compared to mothers without ID (also see Figure 1). Maternal stress was especially high for mothers with ID and borderline IF when their children were aged 1–3. The differences in maternal stress between mothers with ID/borderline IF and those without ID cannot be fully accounted for by the factors included in the final model. After controlling for maternal ID and child age, the final model shows that mothers who reported receipt of SSI (p=0.04), greater levels of material hardship (p<0.001), and more children in the household (p<0.001) reported higher maternal stress, whereas those who identified as Hispanic (p=0.01), were employed (p<0.001), married/partnered with child’s father (p=0.002), and had greater social support (p<0.001) reported lower maternal stress. All model fit statistics improve from the unadjusted to the final model, demonstrating the strength and utility of the MLM.

**Discussion:** To our knowledge, this study is the first longitudinal investigation of maternal stress for mothers with ID and borderline IF using a large, national longitudinal dataset in the United States. The consistently elevated levels of maternal stress for mothers with ID and borderline IF compared to mothers without ID may reflect their unique experiences as parents. It indicates the need for developmentally relevant supportive programs and policies for mothers with ID. The finding that maternal stress peaked for mothers with ID/borderline IF when their children were aged 1-3 may also signify the importance of providing early interventions for parents with ID during early childhood. In this study, we found that mothers with ID/borderline IF may experience chronic unemployment/under-employment. Policies that decrease economic marginalization, including universal basic income programs, job training, and employment opportunities for adults with ID, may have positive impacts on families led by mothers with ID. Finally, this study identifies marriage/partnership and social support as correlates of better mental health longitudinally. These findings have important implications for policy and practice to provide long-term support for parents with ID.

**Author affiliations:**

 School of Social Work, the University of Texas at Arlington, TX, USA

2 Lurie Institute for Disability Policy, Brandeis University, MA, USA

Figure 1. Unadjusted means and differences in maternal stress Years 1–15