

Long-term Patterns of Maternal Stress for Mothers with Intellectual Disabilities and Borderline Intellectual Functioning: What the Future of Families and Child Wellbeing Study Tells Us

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Overview of Study

Mothers with intellectual disabilities (ID) and borderline intellectual functioning (IF) are just as capable of parenting as mothers without disabilities. However, they are often left out of research on long-term stress in motherhood. Chronic stress comes from many sources, like social and personal challenges, discrimination, and barriers tied to race, gender, or income. Over time, this stress can build up and harm both physical and emotional well-being. One-time studies—which provide information about experiences at and before a particular point in time—don't capture the ongoing, complicated nature of this stress.

Mothers with ID face unique challenges, like stigma, financial struggles, threats of losing custody, and limited support. These add to the everyday stress of parenting. Despite these hardships, there is very little research on how long-term stress affects these mothers and their families. This project compares stress in mothers with ID and borderline IF to stress in mothers without disabilities. It also looks at how different factors, like income or social support, shape their experiences over time. This is the first study to focus on how long-term stress affects mothers with ID and those with borderline IF.

Methods

One of the central reasons for the lack of longitudinal or long-term studies of mothers with ID and borderline IF is the general exclusion of mothers with ID from general long-term public-health data, data that tracks the same sample of mothers and children over time to see how their living conditions and stress change or develop. In general data, survey and response methods are often inaccessible in terms of language and technology. On top of this, disability-specific health data

focuses on service populations, the group of people with disabilities who receive support services. This leads mothers with ID and those with borderline IF who do not receive or utilize support services to fall through the cracks of health and wellbeing surveillance.

This study draws data from all 20 cities in the nationally represented Future of Families and Child Wellbeing Study (FFCWS). The FFCWS has been collecting data and interviews on primary caregivers of children since 1998. The FFCWS contains data about children at ages 1, 3, 5,9, and 15. The study takes disability status into account through a whole life-course perspective.

Life-course perspective

A theoretical approach used by researchers in the study of populations, this perspective considers how events and conditions from earlier phases of life can affect later experiences, often leading to cumulative advantages or disadvantages over the lifespan. The life-course perspective is useful in studying the effects of stress on individuals' lives.

The final sample of individuals drawn from the FFCWS study included 2,333 mothers with ID or borderline IF, or who were likely to have an ID. Due to loss of follow-up during the study, the sample size decreased to 1,807 by the fifteenth year of the study.

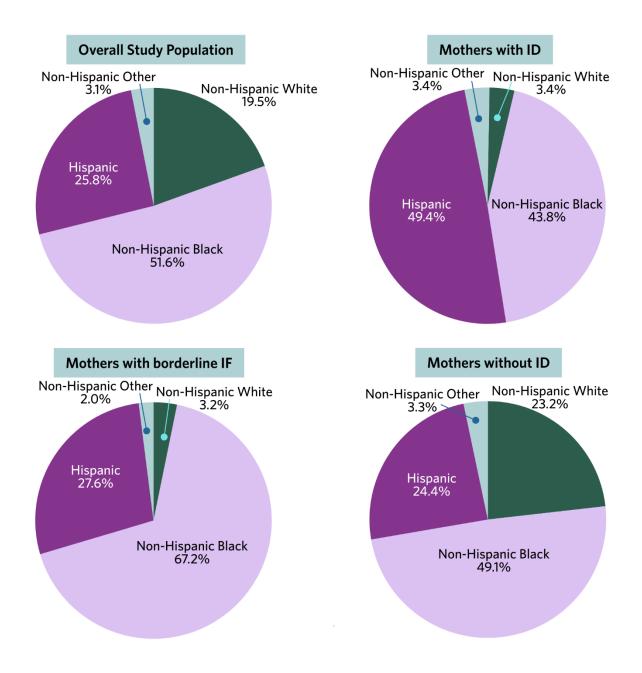
The present study looked at several variables in the FFCWS data that were measured each year including predictors of stress (material hardship, social support, child's age, and number of children under 18 in the household), and variables related demographic information (maternal education, employment, income, marriage/partner status with birth father, and receipt of Social Security Income [SSI]). Certain demographic variables were only recorded when the family entered the study. These include maternal age at child's birth, maternal race/ethnicity, child's gender, and child's birthweight. Maternal stress was measured using the Parent Stress Inventory (described below).

Findings

Mothers with ID and borderline IF were more likely to be of racial or ethnic minority status, have lower education attainment, be low-income (below 200% of the Federal Poverty Line), be unemployed, have lower social support, and have a greater number of children in their household. Figures 1a–1d below illustrate

descriptive characteristics and Figure 2 illustrates other demographic characteristics.

Figures 1a-1d. Descriptive characteristics of study population, by race and ethnicity



The data in these figures are available in accessible format in Appendix 1A below.

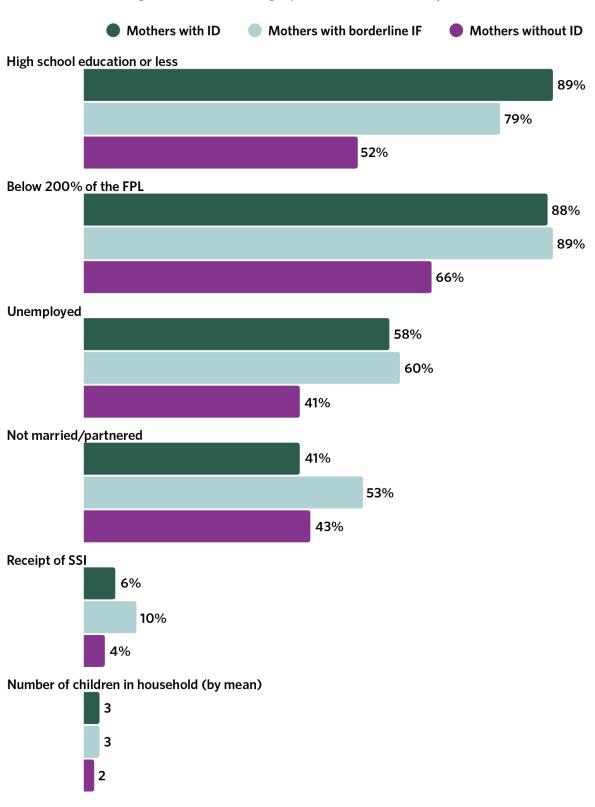


Figure 2. Other demographic characteristics, by %

The data in this figure are available in accessible format in $\underline{\mathsf{Appendix}\, \mathsf{1B}}$ below.

In addition, receipt of SSI, material hardship, and greater number of children in household were associated with higher maternal stress, while partnership with birth father, employment, and social support were associated with lower maternal stress.

Several correlations were found between chronic stress predictors and maternal stress:

- Maternal age at childbirth: lower age increased maternal stress;
- Number of children in household: increasing number of children increased maternal stress;
- Material hardship: increasing material hardship increased maternal stress;
- Social support: decreasing social support increased maternal stress.

Demographic characteristics were also found to have effects on maternal stress (using the adjusted model):

Increased stress—

- Maternal ID: Maternal ID significantly increased maternal stress;
- Maternal borderline IF: Maternal IF significantly increased maternal stress;
- Receipt of SSI: Significantly increased maternal stress;
- Material hardship: Significantly increased maternal stress;
- Number of children in household: Increasing number of children significantly increased maternal stress.

Decreased stress-

- Married/partnered: Being married/partnered to child's birth father significantly decreased maternal stress;
- Hispanic: Being Hispanic significantly decreased maternal stress;
- Employment status: Being employed significantly decreased maternal stress;
- Social support: Increased social supports significantly decreased maternal stress.

In both the unadjusted model and the final model adjusting for demographic and socioeconomic differences that researchers used to analyze the data, mothers with ID and mothers with borderline IF had consistently higher maternal stress than did mothers without ID. Further, mothers with ID were found to have consistently higher maternal stress than both mothers with borderline IF and mothers without ID.

In addition, maternal stress increased in early childhood and adolescence.

Maternal stress of mothers with ID, borderline IF, and without ID all increased from ages 1–3. After peaking at age 3, it decreased until age 9 and then increased from ages 9–15. Though this has been previously reported for mothers without ID, this study reveals that this pattern is consistent across mothers of different intellectual abilities. Figure 3 below depicts the trends and differences in maternal stress over time.

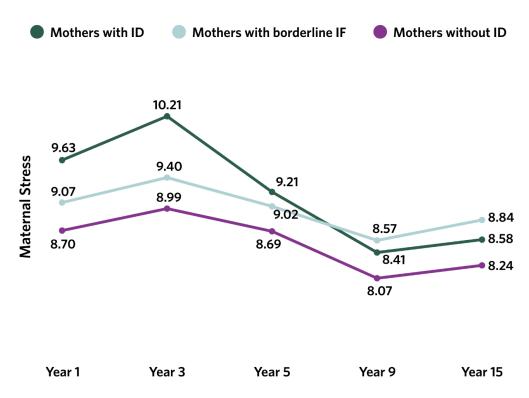


Figure 3. Maternal Stress during Years 1-15 of Early Childhood and Adolescence¹

¹ Maternal stress was measured using a four-item scale of the Parent Stress Inventory, 3rd edition (Abidin, 1995). The items were "being a parent is harder than I thought it would be," "I feel trapped by my responsibilities as a parent," "I find that taking care of my child(ren) is much more work than pleasure," and "I often feel tired, worn out, or exhausted from raising a family." Mothers rated their agreement with the four statements. For this study, researchers rated maternal stress on the scale of 1 to 4, with 1 meaning "strongly disagree" and 4 meaning "strongly agree" and then summing the responses. Higher total scores therefore indicate greater maternal stress, which can range from a low of 4 to a high of 16.

The data in Figure 3 are available in accessible format in Appendix 2 below.

Implications

This novel longitudinal study on maternal stress predicted by experiential factors found that stress levels in mothers with ID and mothers with borderline IF were consistently elevated compared to mothers without ID. These findings highlight the limitations of support programs for mothers with ID. Maternal stress in mothers with ID and mothers with borderline IF is persistently elevated. Support policies need to be expanded into long-term developmentally relevant programs for mothers with ID and with borderline IF, especially for the early childhood (ages 1–3) and adolescence (ages 9–15) years.

Additionally, material hardship and employment were major contributors to maternal stress. Economic marginalization is a major determinant of mental health in all populations, and mothers with ID are especially vulnerable. People with ID, including mothers with ID, are more likely to be unemployed or underemployed as a result of systemic ableism. This study supports the demand for policies that implement universal basic income programs, job training, and employment opportunities for adults, and especially for mothers, with ID and borderline IF. This will benefit mothers with ID and those with borderline IF, their children, and their social supports—as well as the disabled community overall.

Credit

Adapted by Syd Charron from Weiwen Zeng, Miriam Heyman, Sarah J. Jerome, Mark L. Davis, and Ilhom Akobirshoev (2025). Editing and accessibility by Mel Ptacek.

Reference

Zeng, W., Heyman, M., Jerome, S. J., Davis, M. L., & Akobirshoev, I. (2025). "Longitudinal trajectories of maternal stress for mothers with intellectual disabilities and borderline intellectual functioning: Evidence from the Future of Families and Child Wellbeing Study," *Journal of Autism and Developmental Disorders*. https://www.psycnet.org/doi/10.1007/s10803-025-06732-z

Appendices

Appendix 1. Descriptive and Demographic Characteristics of the Study Population: Accessible Format

Table 1a. Descriptive characteristics of the study population by race and ethnicity

Overall study population

Hispanic	Non-Hispanic	Non-Hispanic	Non-Hispanic
	White	Black	Other
25.8%	19.5%	51.6%	3.1%

Mothers with ID

Hispanic	Non-Hispanic	Non-Hispanic	Non-Hispanic
	White	Black	Other
49.4%	3.4%	43.8%	3.4%

Mothers with borderline IF

Hispanic	Non-Hispanic	Non-Hispanic	Non-Hispanic
	White	Black	Other
27.6%	3.2%	67.2%	2.0%

Mothers without ID

Hispanic	Non-Hispanic	Non-Hispanic	Non-Hispanic
	White	Black	Other
24.4%	23.2%	49.1%	3.3%

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Table 1b. Other descriptive characteristics of the study population

	Mothers with ID	Mothers with borderline IF	Mothers without ID
High-school education or less	89%	79%	52%
Income below 200% of the federal poverty level	88%	89%	66%
Unemployed	58%	60%	41%
Not married/partnered	41%	53%	43%
Receives SSI	6%	10%	4%
Mean number of children in household	3	3	2

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Appendix 2. Maternal Stress Years 1–15: Unadjusted Means and Differences: Accessible Format

Table 2. Maternal Stress during Years 1-15 of Early Childhood and Adolescence

	Mothers with ID	Mothers with borderline IF	Mothers without ID
Year 1	9.63	9.07	8.70
Year 3	10.21	9.40	8.99
Year 5	9.21	9.02	8.69
Year 9	8.41	8.57	8.07
Year 15	8.58	8.84	8.24

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How to Cite This Brief

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