

The Relationships Between Infant Development and Caregiver Depression

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Background

Maternal depression is associated with lower cognitive scores in infants.¹ However, the relationship between maternal depression and other aspects of infant development (such as motor development) remains understudied.

Methods

Edinburgh Postnatal Depression Scale (EPDS)

Please check the answer that comes closest to how you have felt IN THE PAST 7 DAYS, not just how you feel today.

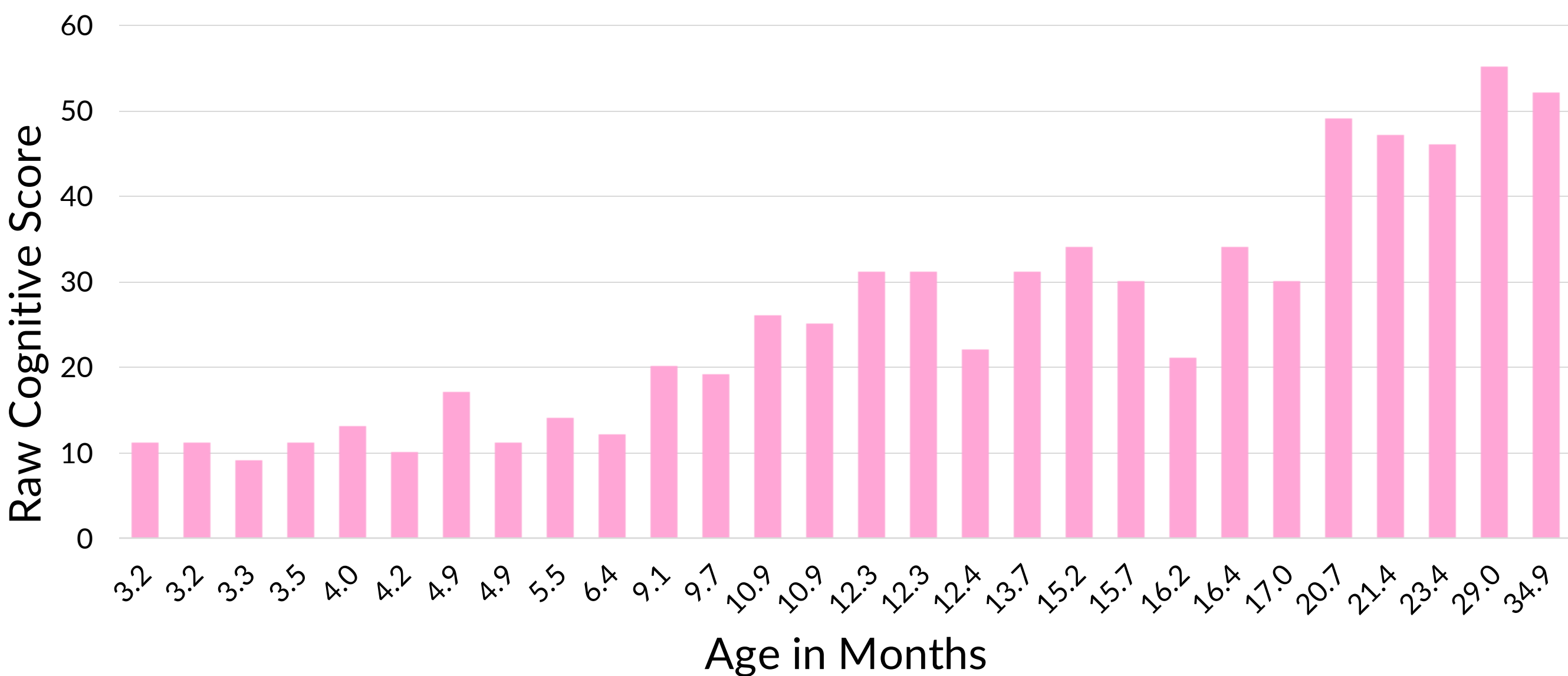
- In the past 7 days:
- I have been able to laugh and see the funny side of things
 - have looked forward with enjoyment to things
 - I have blamed myself unnecessarily when things went wrong
 - I have been anxious or worried for no good reason
 - I have felt scared or panicky for no very good reason
 - Things have been getting on top of me
 - I have been so unhappy that I have had difficulty sleeping
 - I have felt sad or miserable
 - I have been so unhappy that I have been crying
 - The thought of harming myself has occurred to me

Bayley-4 Screening Test: Measure of cognitive development

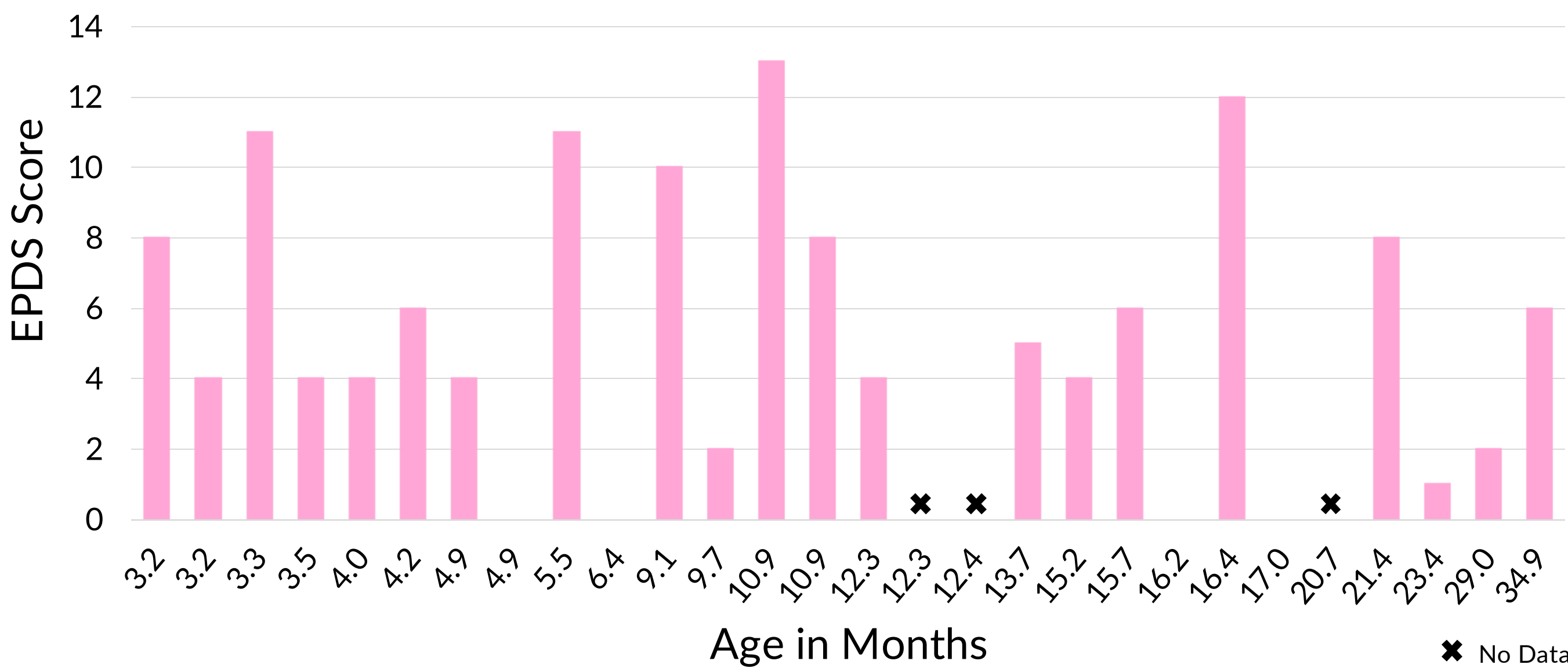


Results

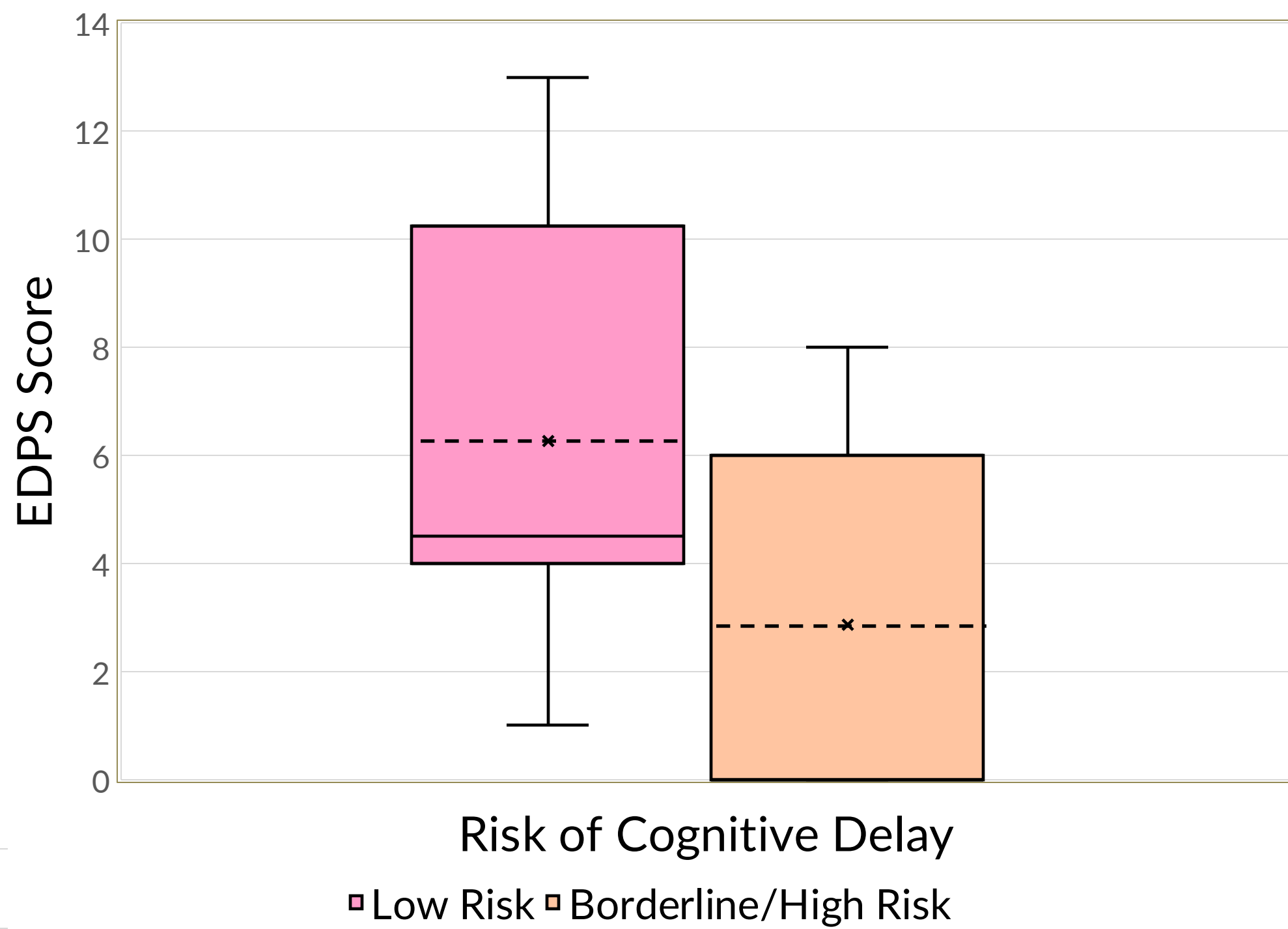
Infant Cognitive Scores by Participant Age



Caregiver EPDS Score by Infant Age



EPDS Score by Infant Risk of Cognitive Delay

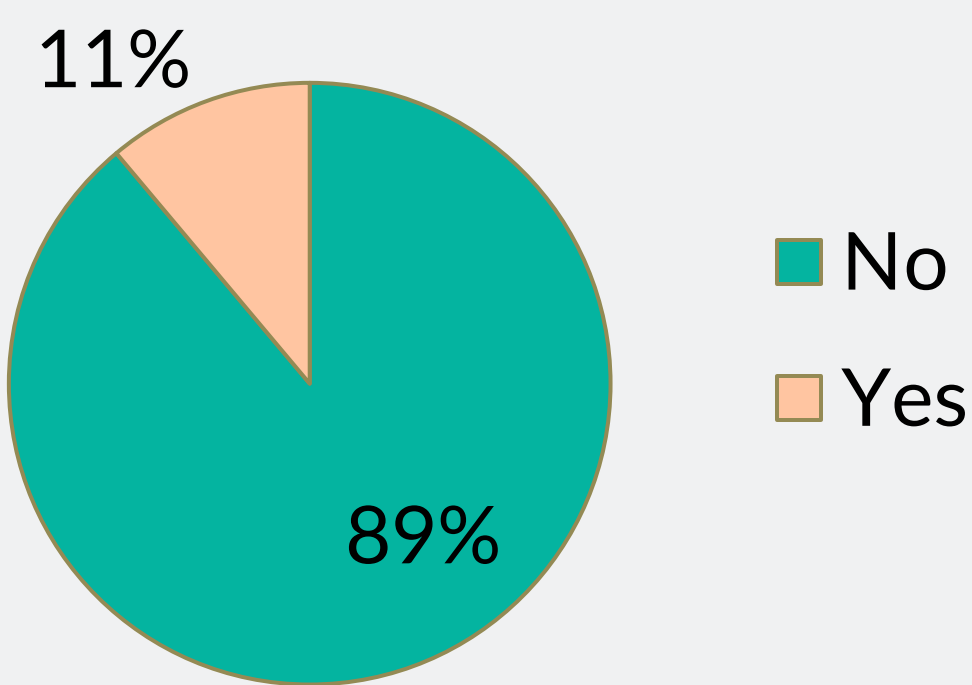


Mean EPDS scores *did not differ* between infants in the low-risk category for cognitive development compared to infants in the borderline/high risk category for cognitive development (t-test $p = .207$).

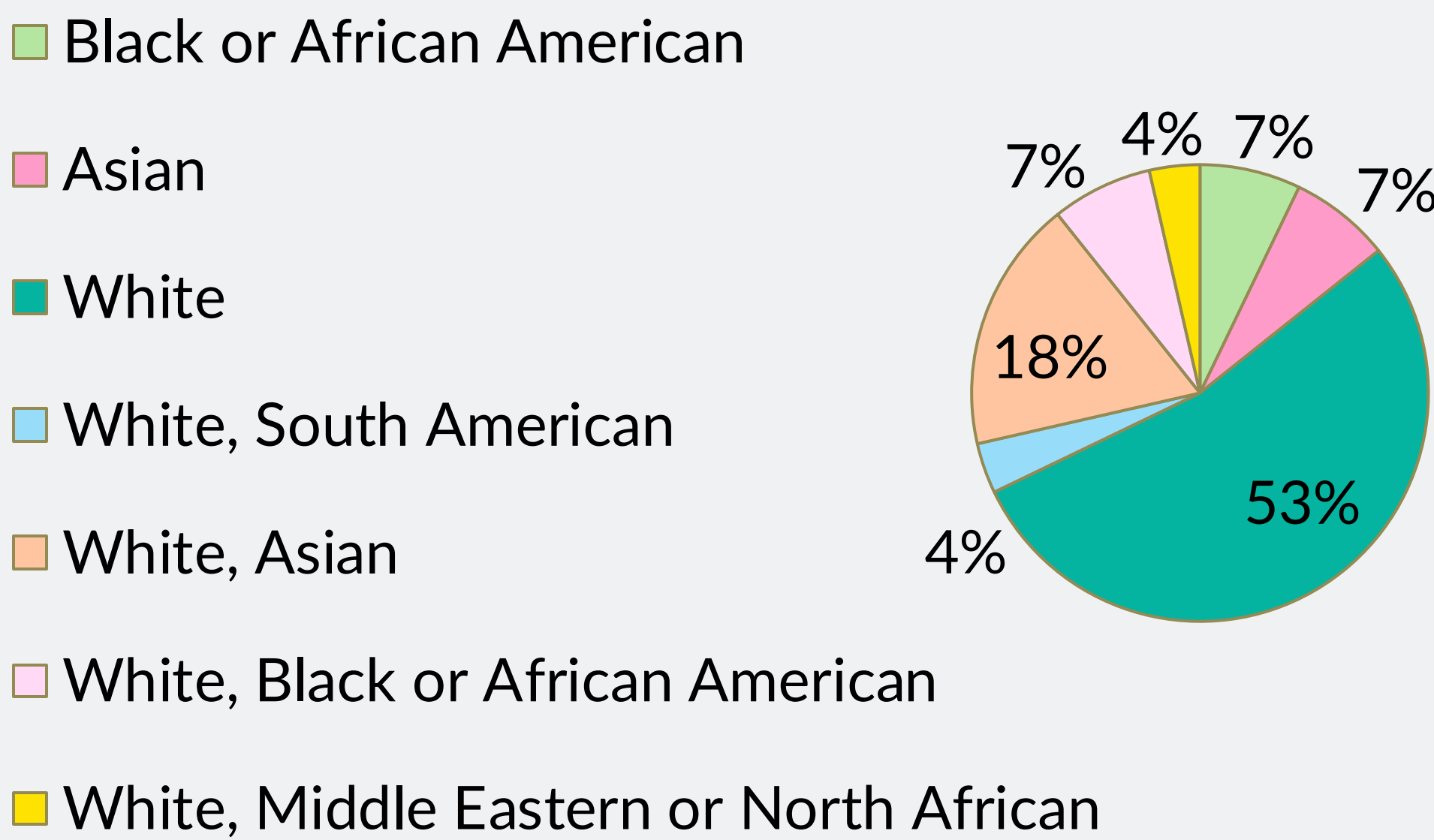
Demographics

Demographic	% of sample
Infant Sex, Female	57.14%
Caregiver Gender, Female	100.00%
Household Income	
\$50,000-\$74,999	14.29%
\$75,000-\$99,999	10.71%
\$100,000-\$199,999	28.57%
\$200,000-\$299,999	14.29%
\$300,000+	17.86%
Prefer not to answer	14.29%

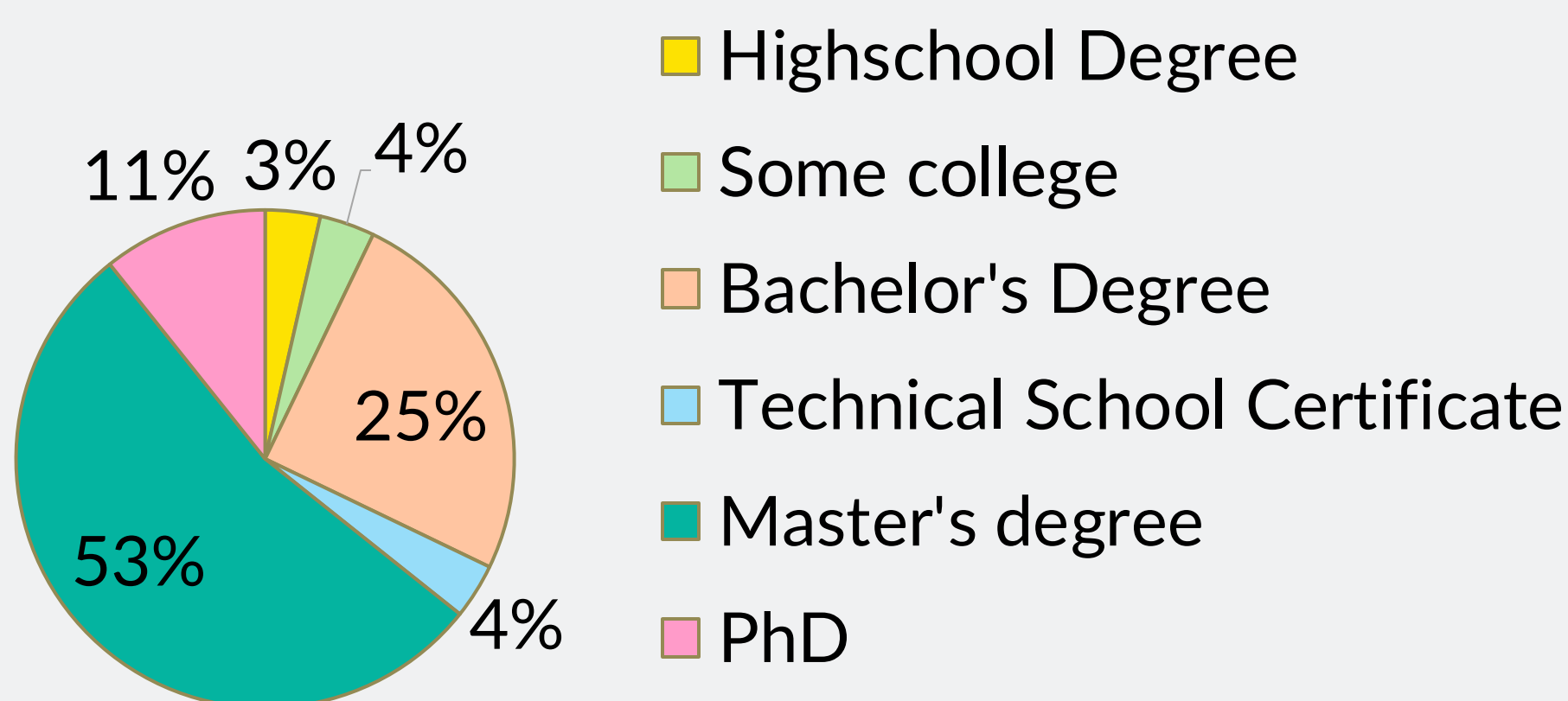
Infants of Hispanic/Latine Heritage



Infant Race Breakdown



Guardian Education



Future Directions

Data collection is ongoing.

We aim to recruit 50 infant caregiver pairs and **assess developmental changes** every 3 months.

Caregiver depression, infant development, and infant brain activity have not yet been studied together. Thus, the study protocols will be expanded on in the future to also **include neural markers** of brain development including non-invasive measures of infant electroencephalography (IRB review pending).



Acknowledgements

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References:
¹Liu, Y., et al. (2017). Maternal depressive symptoms and early childhood cognitive development: a meta-analysis. *Psychological Medicine*, 47(4).