

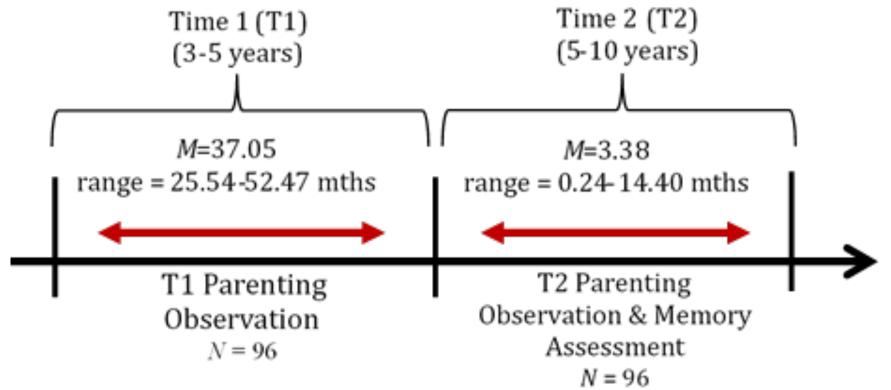
Early positive parenting behavior and maternal depression history predicts episodic memory ability in middle childhood

Morgan Botdorf, Sarah Blankenship, Lea Dougherty, & Tracy Riggins University of Maryland, College Park

Introduction

- Age-related differences in episodic memory have been established in early childhood¹.
- However, individual differences are also important to memory development, yet are relatively under investigated.
- Both parenting and maternal depression have been shown to impact cognitive abilities, including language and executive function 2,3 .
- Little research has investigated how these factors impact episodic memory, an ability that is critical to learning in early childhood.
- The present study seeks to investigate implications of early parenting and maternal depression on episodic memory ability in young children.

Methods



Participants

• 96 children (47 females) from a longitudinal dataset overselected for a history of maternal depression were included in the study.

Observed Parenting

- Children and their parents completed tasks modified from the Teaching Tasks Battery⁴.
- Tasks were rated on Maternal Intrusiveness, Hostility, Support, Negative Affect, and Positive Affect.
 - Negative Parenting Composite: Average of Maternal Intrusiveness, Hostility, and Negative Affect
 - Positive Parenting Composite: Average of Maternal Support and Positive Affect

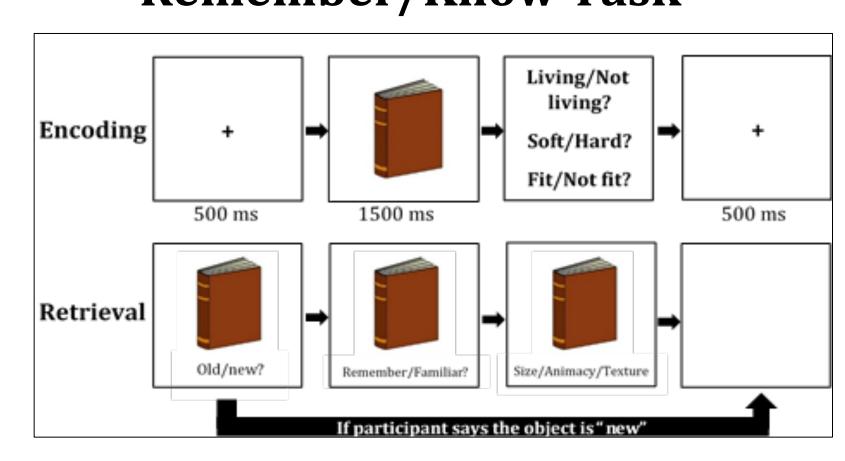
Maternal Depression

- SCID for DSM-IV⁵ was administered at T1 and T2 to children's biological mothers.
- Fifty-seven (59%) mothers had a lifetime history of depressive disorder.

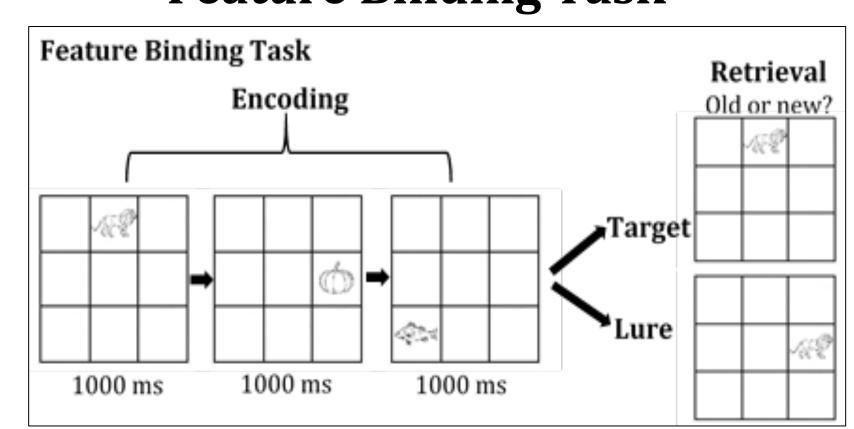
Episodic Memory Assessment

 Scores from the following tasks were standardized and averaged to create a Composite Memory Score.

Remember/Know Task⁶



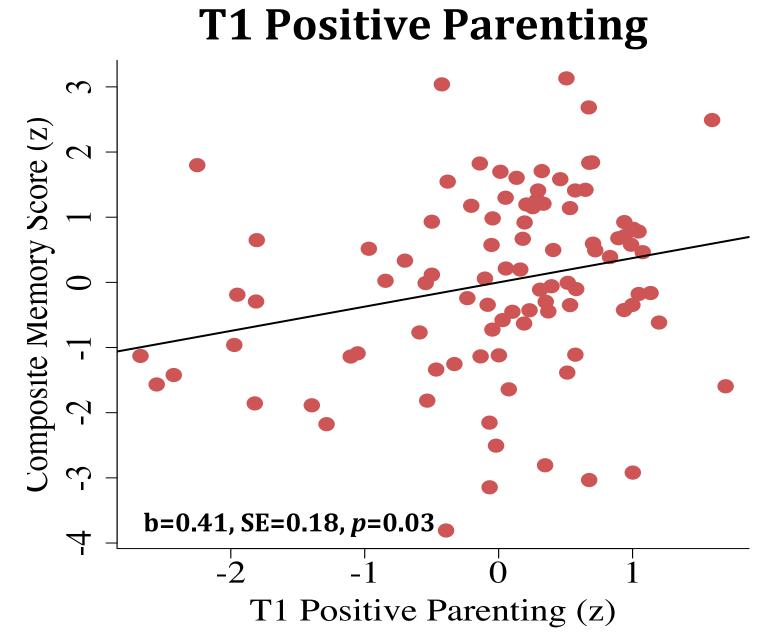
Feature Binding Task⁷

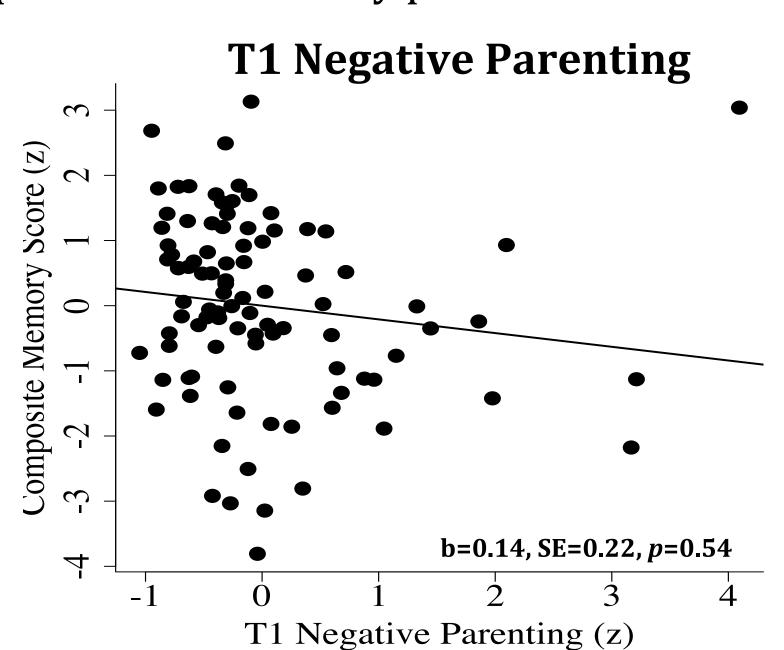


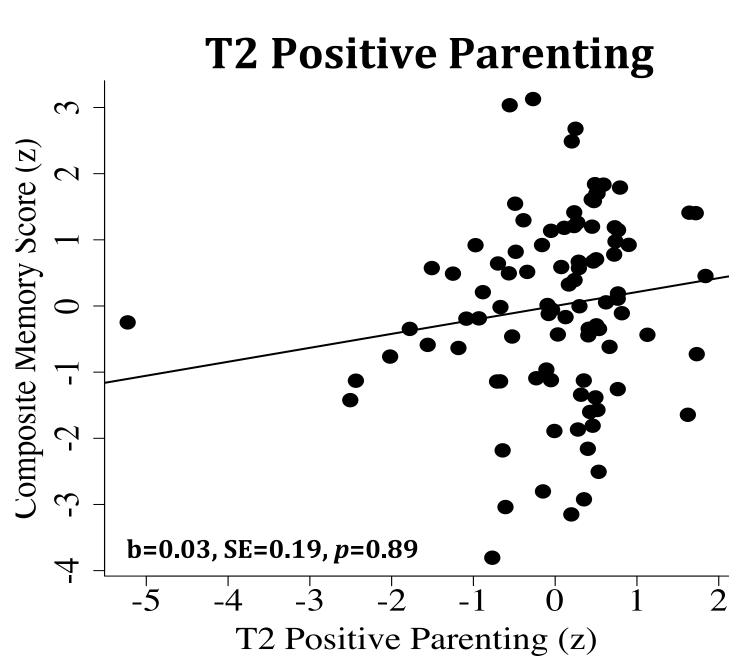
Results

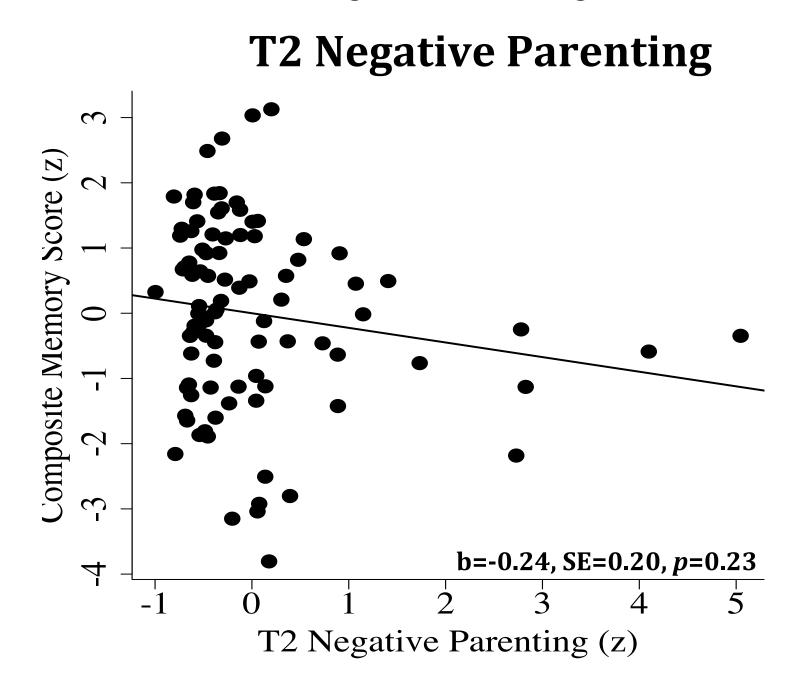
Parenting & Memory

- T1/T2 Positive and Negative Parenting were entered as predictors in a multiple regression to test associations between parenting and composite memory scores.
 - Covariates: T1 general cognitive ability, T2 child age
 - T1 Positive Parenting was the only significant predictor of memory performance.





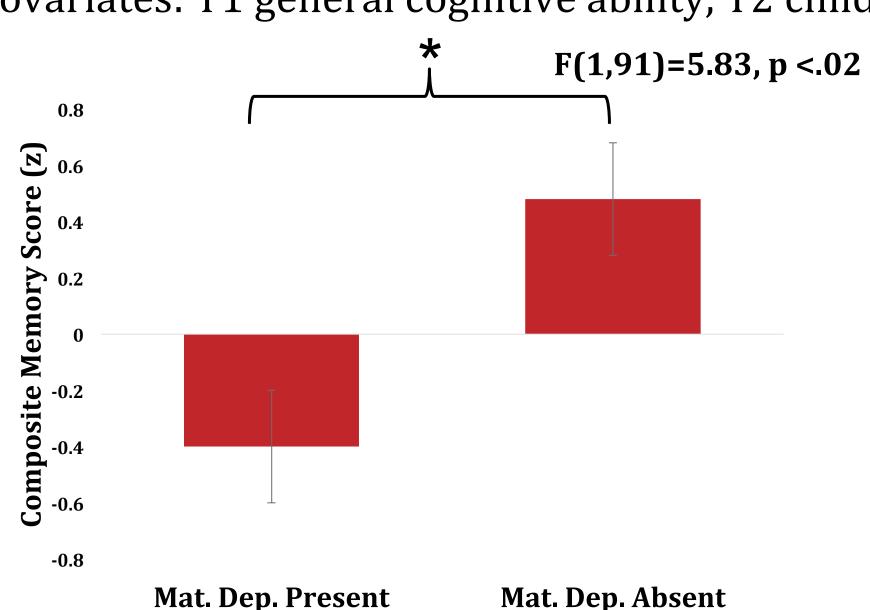




Depression & Memory

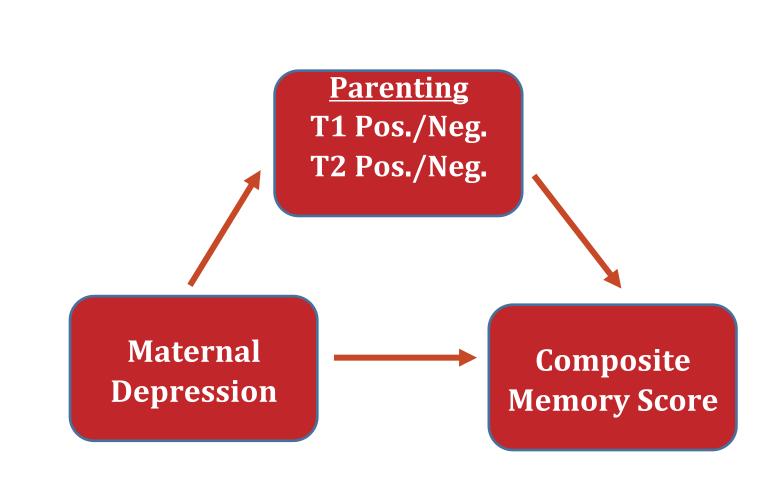
An ANCOVA was run to assess memory differences between children of mothers with and without a history of depression.

Covariates: T1 general cognitive ability, T2 child age



Mediation & Moderation

No significant mediating or moderating effect between parenting and maternal depression predicting children's memory.



Take-Home Message:

Early positive parenting and maternal depression exert independent influences on children's memory ability. Early positive parenting positively impacts memory while maternal depression negatively impacts memory.

Discussion

- Results suggest that the timing and type of parenting is important for memory development, where early positive parenting exerts a particularly strong influence on memory.
- Future research would benefit from exploring mechanisms that link parenting and maternal depression to memory in children.

Mat. Dep. Absent

• Once this link has been elucidated, research can focus on deriving interventions to target children who may be at an increased risk of memory impairments.

References

- 1. Riggins, T. (2014). Longitudinal investigation of source memory reveals different developmental trajectories for item memory and binding. Developmental Psychology, 50(2), 449-459.
- 2. Fay-Stammbach, T., Hawes, D. J., & Meredith, P. (2014). Parenting Influences on Executive Function in Early Childhood: A Review. *Child Development* Perspectives, 8(4), 258–264 3. Sohr-Preston, S. L., & Scaramella, L. V. (2006). Implications of timing of maternal depressive symptoms for early cognitive and language development.
- 4. Egeland et al., (1995). Teaching tasks administration and scoring manual. 5. First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (1996). Structured Clinical Interview for DSM-IV Axis I Disorders: Non-patient edition (Version 2.). New York, NY: State Psychiatric Institute, Biometrics Research.
- 6. Ghetti, S., & Lee, J. (2011). Children's episodic memory. Wiley Interdisciplinary Reviews: Cognitive Science, 2(4), 365-373. 7. Lorsbach, T., & Reimer, J. (2005). Feature binding in children and young adults. *Journal of Genetic Psychology*, 166(3), 313-327.

Clinical Child and Family Psychology Review, 9(1), 65–83.

Acknowledgements

We would like to thank the members of the CSEL and the NCDL labs for assistance with participant testing and data processing. This research was supported by UMD DRI Award, UMD Research and Scholars Award, NSF GRFP, and NSF in partnership with the University of Maryland ADVANCE Program for Inclusive Excellence Award.

For questions or comments, please contact mbotdorf@terpmail.umd.edu