

Associations Between Temperament, Mental Health, and Parent Stress

Racquelle E. Moxey^{1,2}, Cassidy L. McDermott², & Allyson P. Mackey²

MindCORE Summer Fellowship Program¹

Changing Brain Lab, Department of Psychology, University of Pennsylvania²

Introduction

- Life course theory (LCT) suggests that health inequities experienced during childhood increases individual's risk for health problems & premature death¹
- Experiences such as discrimination are social determinants that can impact health outcomes.
- o Higher levels of discrimination are associated with poorer mental health status²
- Temperament can be a predictor of externalizing behaviors, but it is unclear as to whether it may serve as a protective factor³

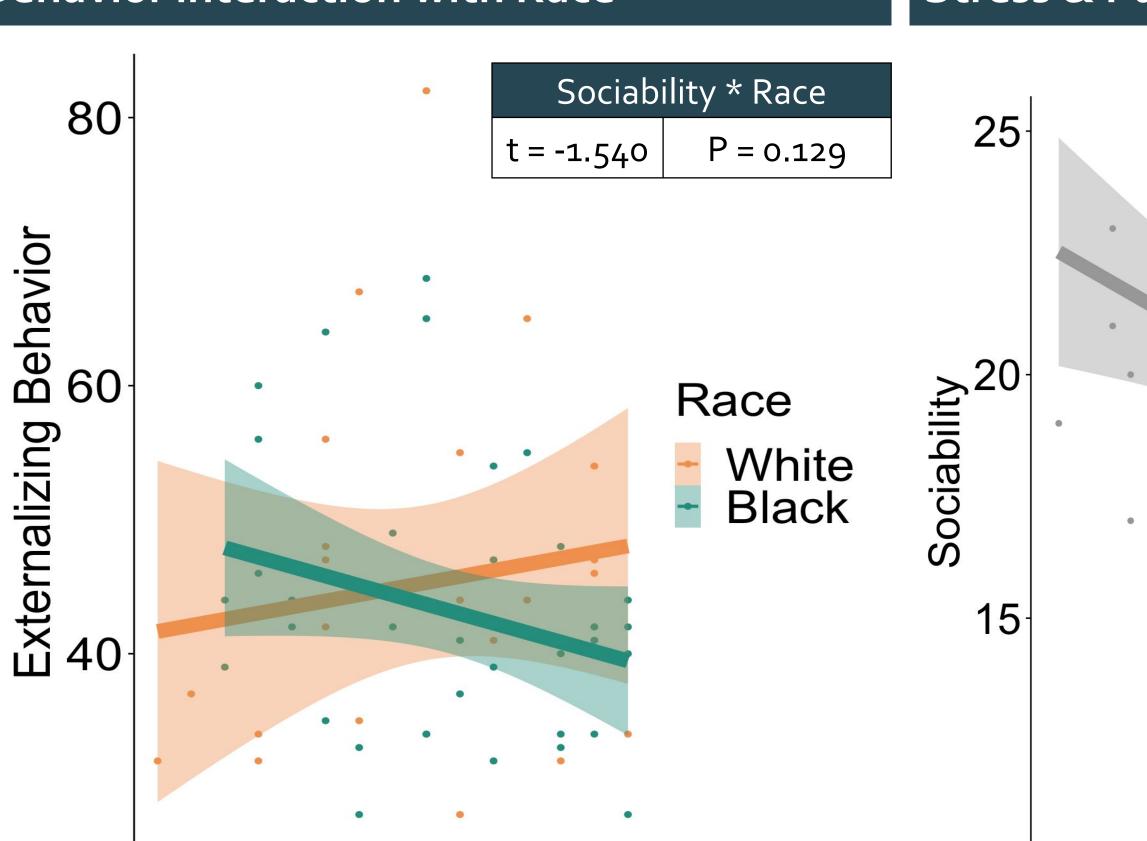
Does temperament, in particular sociability, serve as a protective factor over mental health outcomes amongst white and black children?

- Several studies have cross-sectionally examined a positive relation to parental stress and externalizing behavior, but the specific relationship is unclear.⁴
- It is suggested that parenting stress and externalizing behavior co-evolve and mutually influence each other.⁴
- O Child temperament can contribute to parental stress and in some ways be shaped by parental stress. This relationship has been less explored than parent stress and externalizing behavior.

What is the relationship between Parent stress, child externalizing behavior, and child reported sociability?

Results

Figure 1. Sociability vs Externalizing
Behavior interaction with Race

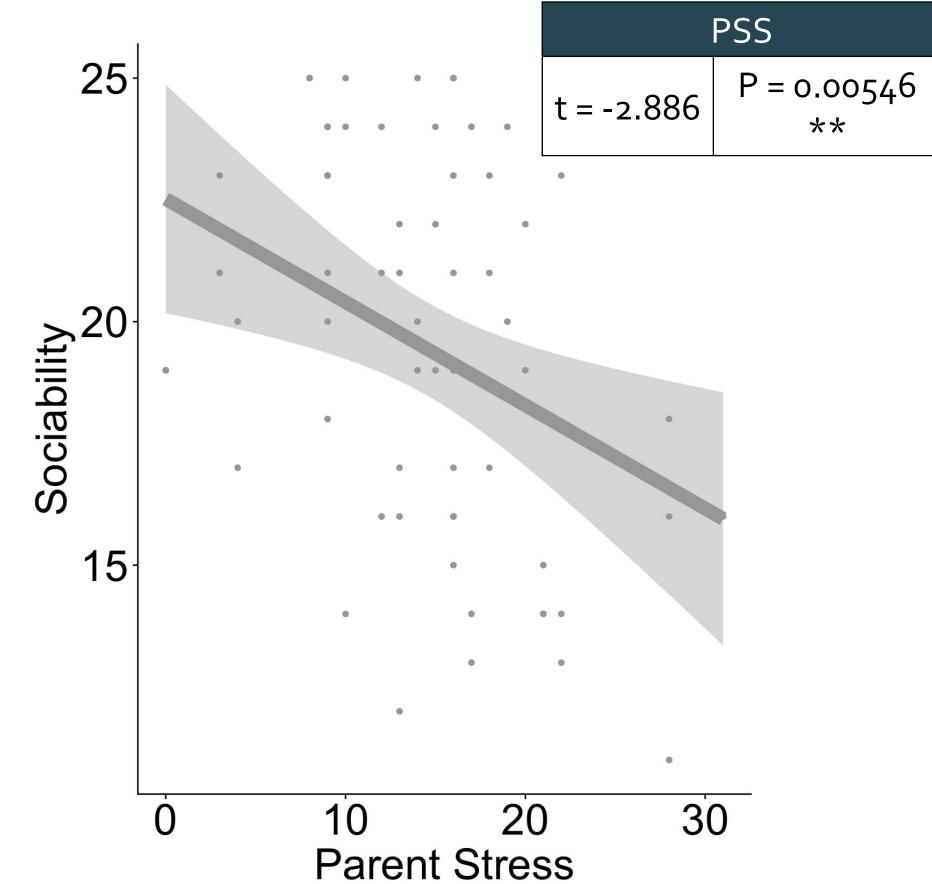


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Negative relationship between sociability and externalizing behavior in Black children but not White children with no statistically significant evidence (P> 0.1).

Sociability

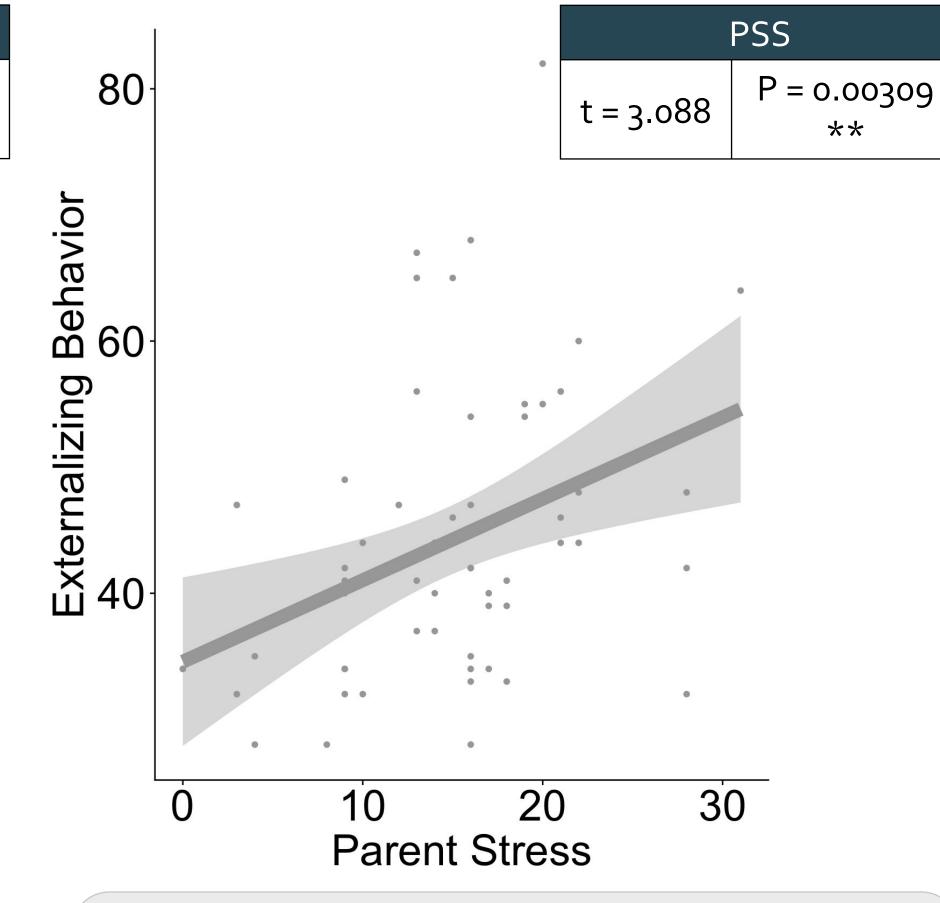
Figure 2. Relationship of Parent Perceived Stress & Parent Report of Child Sociability



Negative relationship between PSS and parent report of child sociability.

Higher PSS correlates with lower sociability reporting for both Black and White children.

Figure 3. Relationship of Parent Perceived Stress & Externalizing Behavior



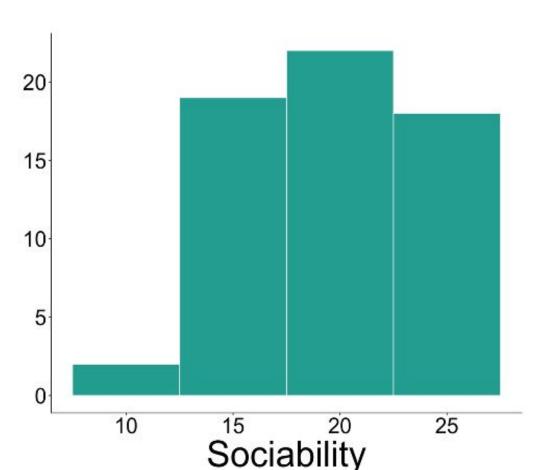
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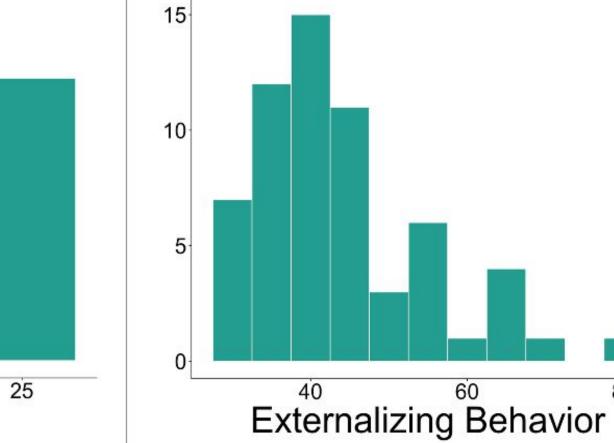
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Methods

Sample. Children ages 3 - 10 recruited from Philadelphia area.

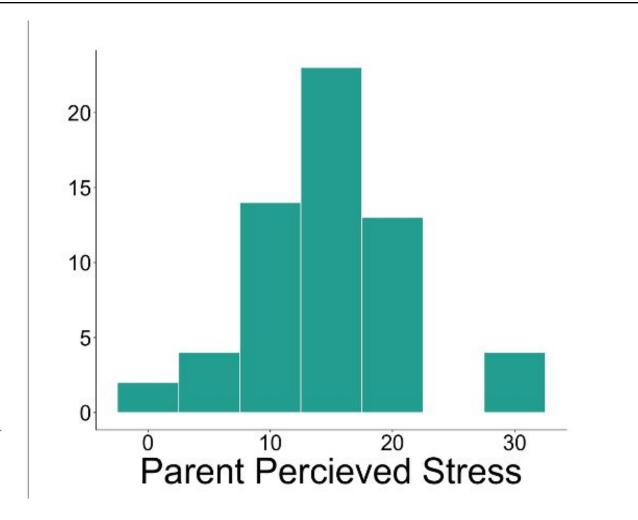
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N	61				
Age	Mean: 6.40 SD: 1.63				
Gender	49.18% F 50.82% M				
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externalizing behaviors.

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Parent-reported measures of temperament, mental health, and

parent stress

* Excluded: CCTI < 10 & children with psychiatric diagnoses

o Colorado Child Temperament Index (CCTI). Parent report on aspects of

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Discussion

- o In our dataset of 3 to 10-year-olds, there was no significant interaction between sociability & race in predicting externalizing behavior. However, preliminary evidence shows that greater sociability may serve as a protective factor against externalizing behavior for Black children and not for White children.
- Higher Parent perceived stress significantly correlates with lower sociability reporting; however, it is unclear whether parent stress causes lower reporting of sociability or if child sociability levels contribute to parent stress
- Higher Parent perceived stress significantly correlates with higher externalizing behavior in children; however, it is unclear whether parent stress causes higher externalizing behavior or if externalizing behaviors contributes to parent stress

Limitations

- Race is used as a proxy of discrimination, but cannot truly measure discrimination experienced
- No causal relationship can be drawn from preliminary data on parent stress and child sociability and externalizing behavior
- Parent report of child behavior and temperament may lack full accuracy, but holds value as a measurement tool since parents see kids in many contexts

Future Directions

- Further investigate formal measurements of discrimination such as the Child Perceived Discrimination Questionnaire (CPDQ)⁶
- Include a larger sample with a variety of racialized groups
- Consider exploring a more dynamic way of reporting child sociability to limit any possible biases, possibly combining parental reports with behavioral observations⁷⁻⁸
- Further explore the interrelatedness between Parent Stress and Child temperament by controlling for other factors that influence stress (e.g., financial stress)⁴

References

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Generalized Linear Models (GLM)

- CBCL Externalizing ~ CCTI Sociability * Race
- CCTI Sociability ~ Parent Stress
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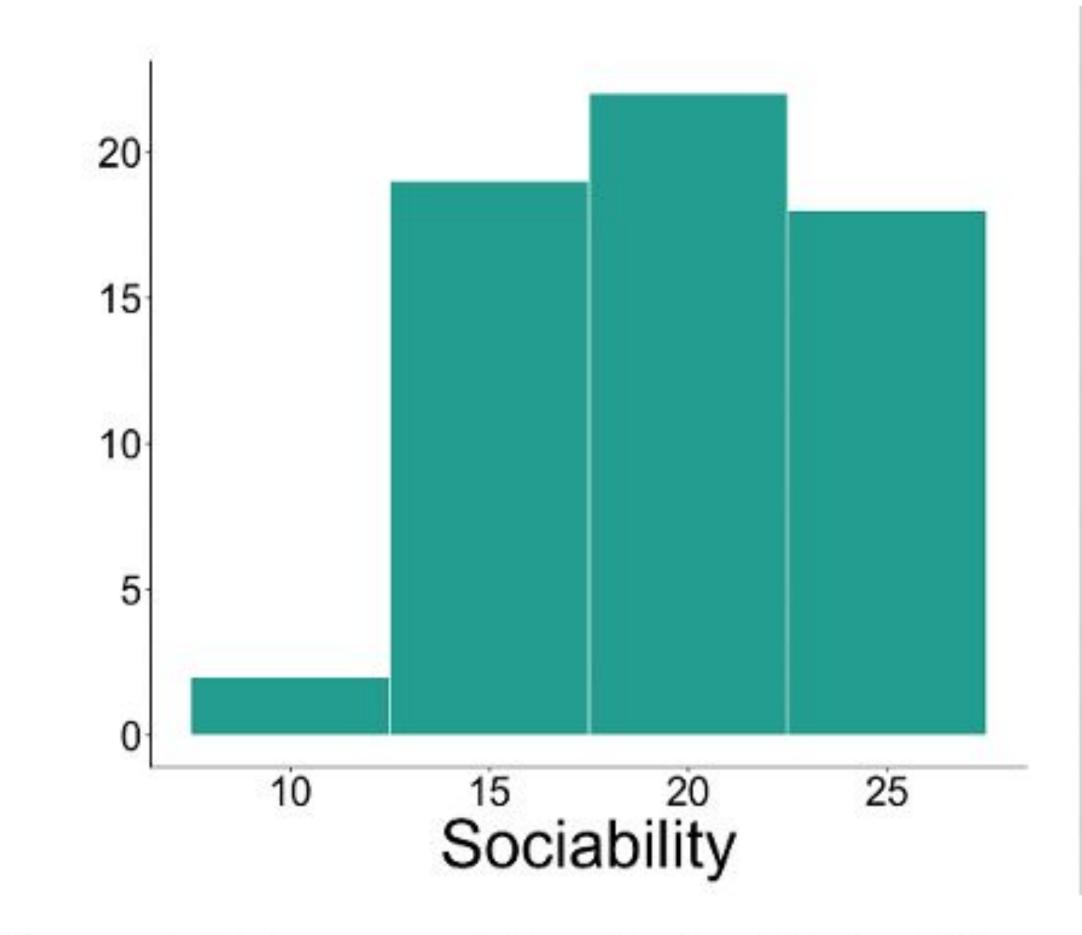
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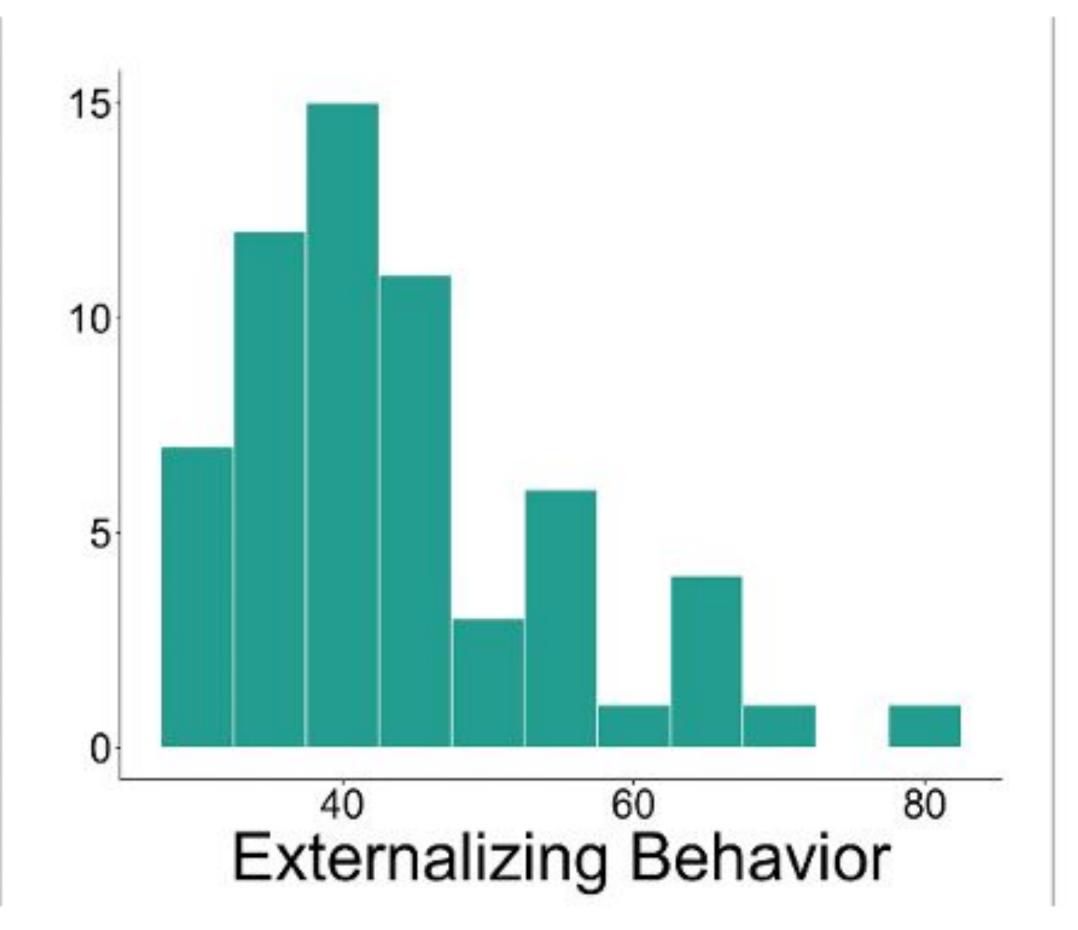
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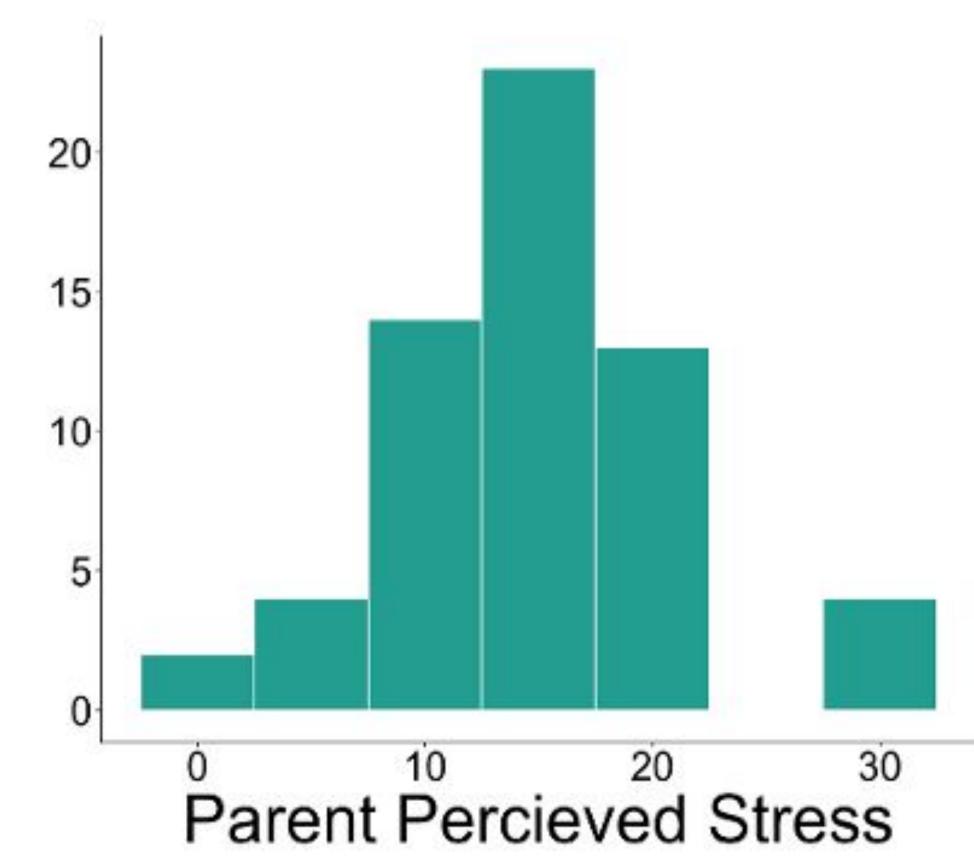
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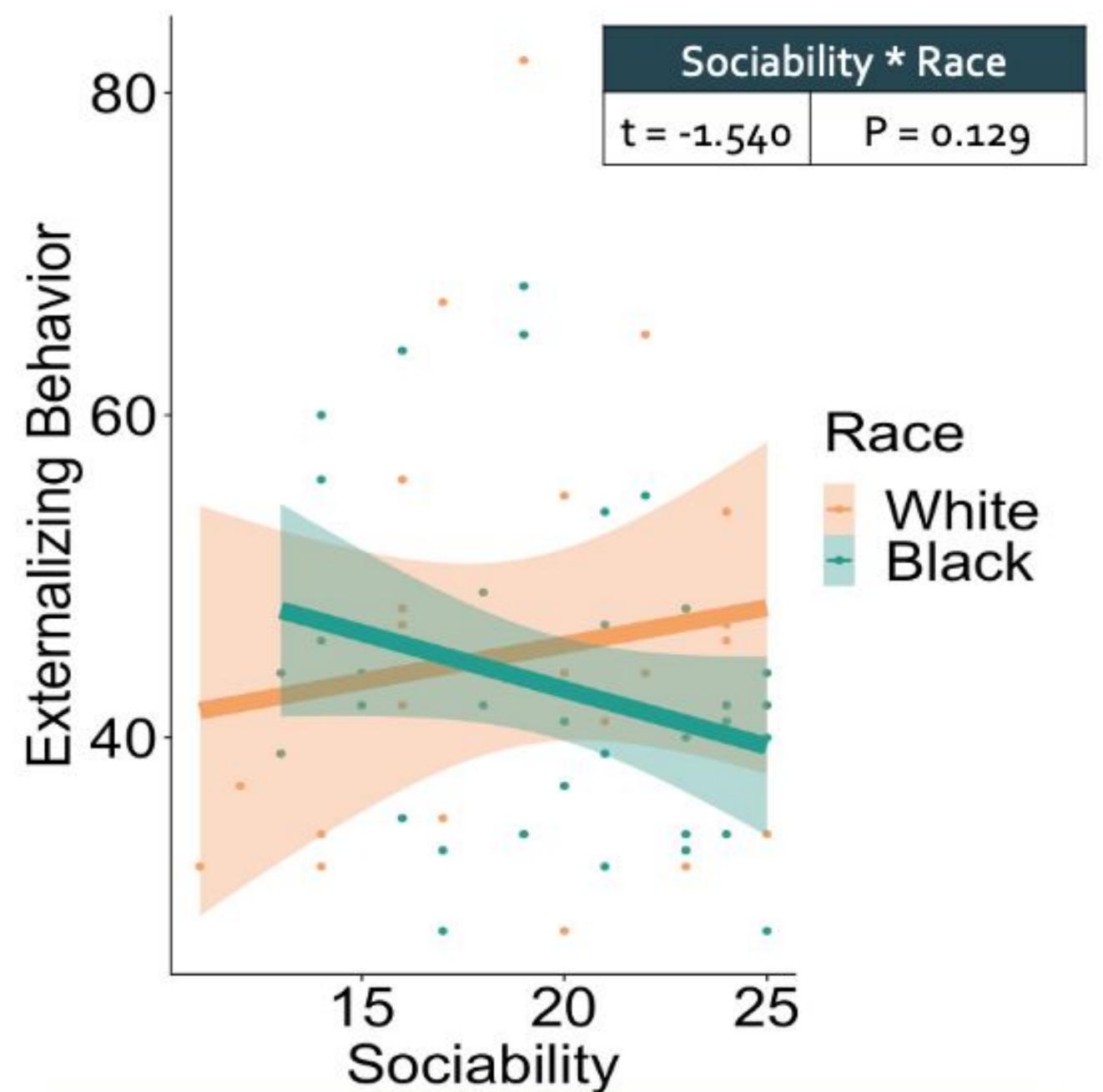


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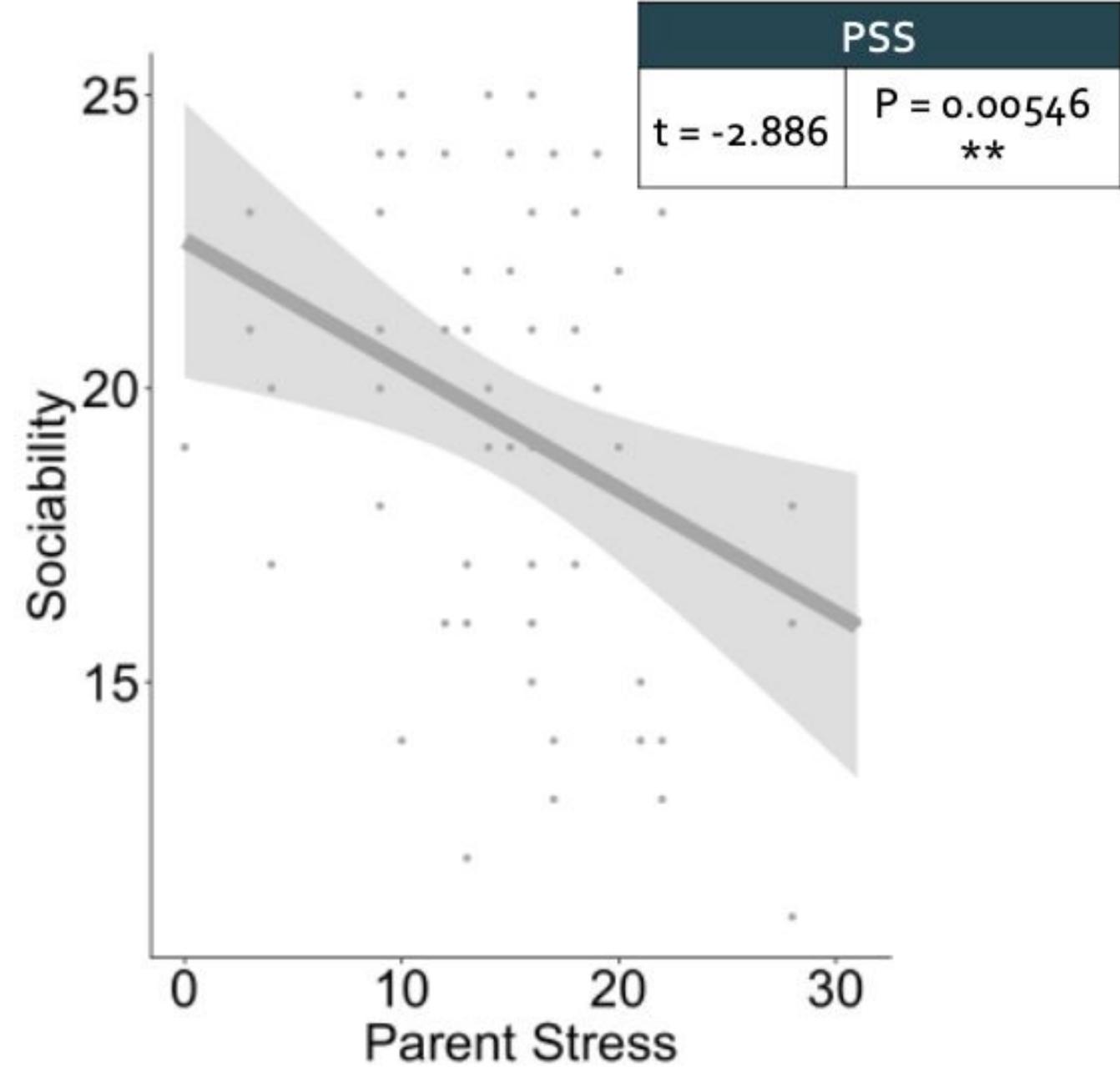
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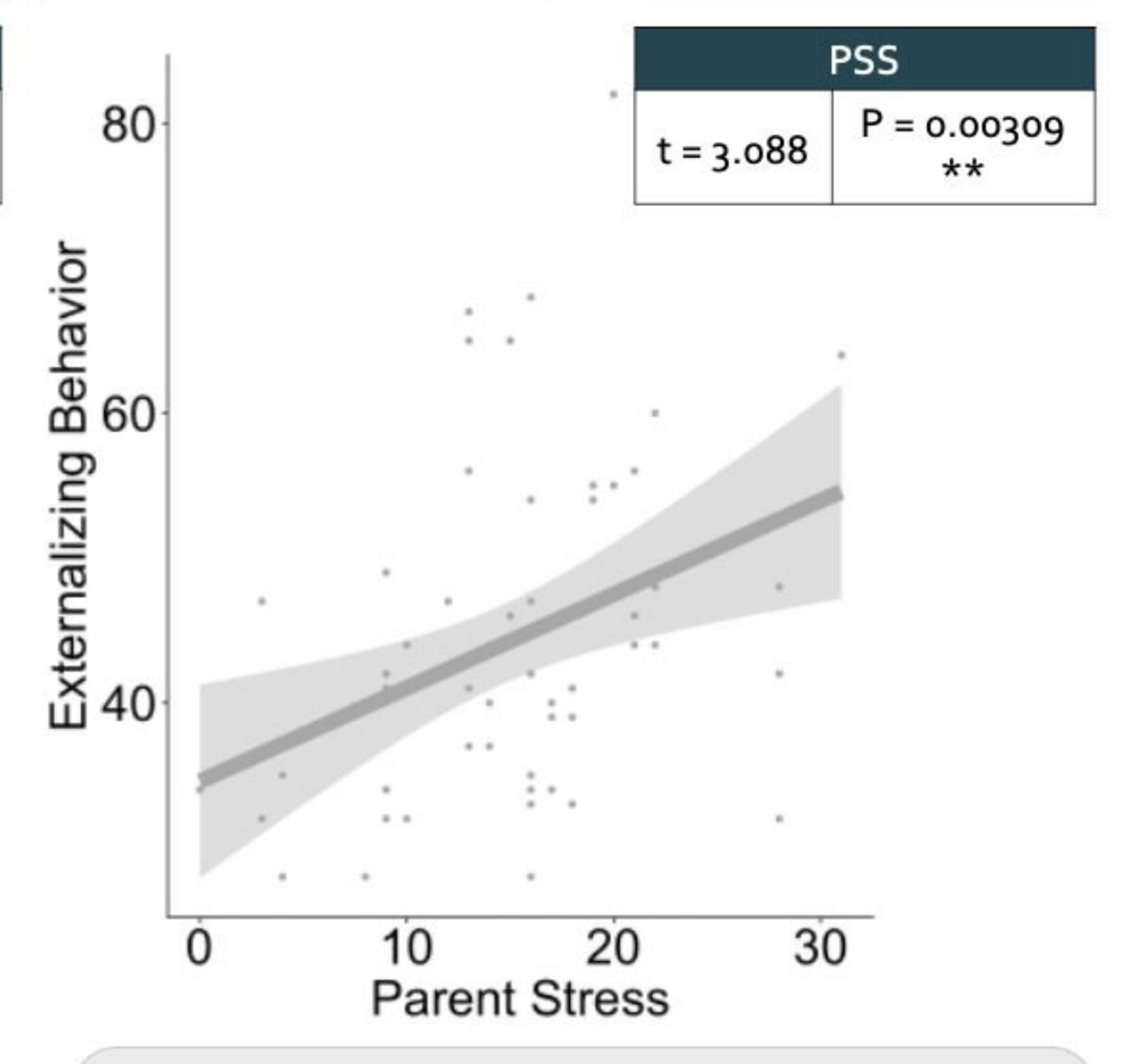
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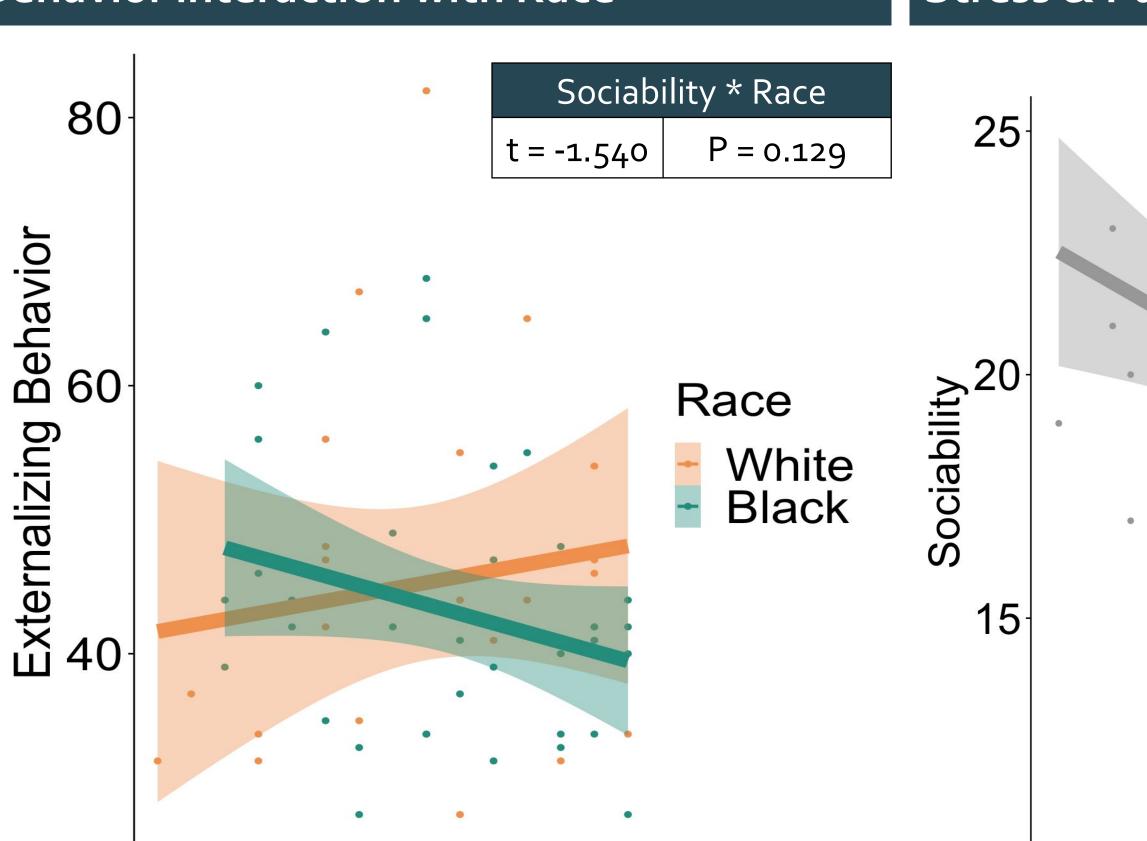
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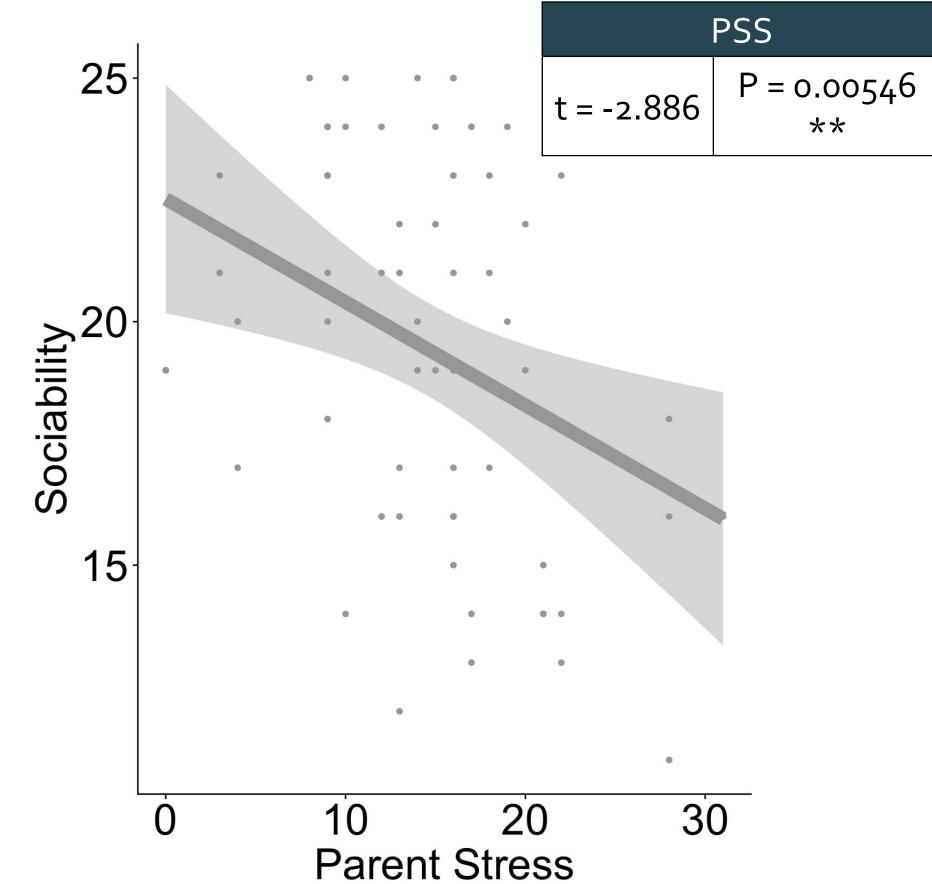


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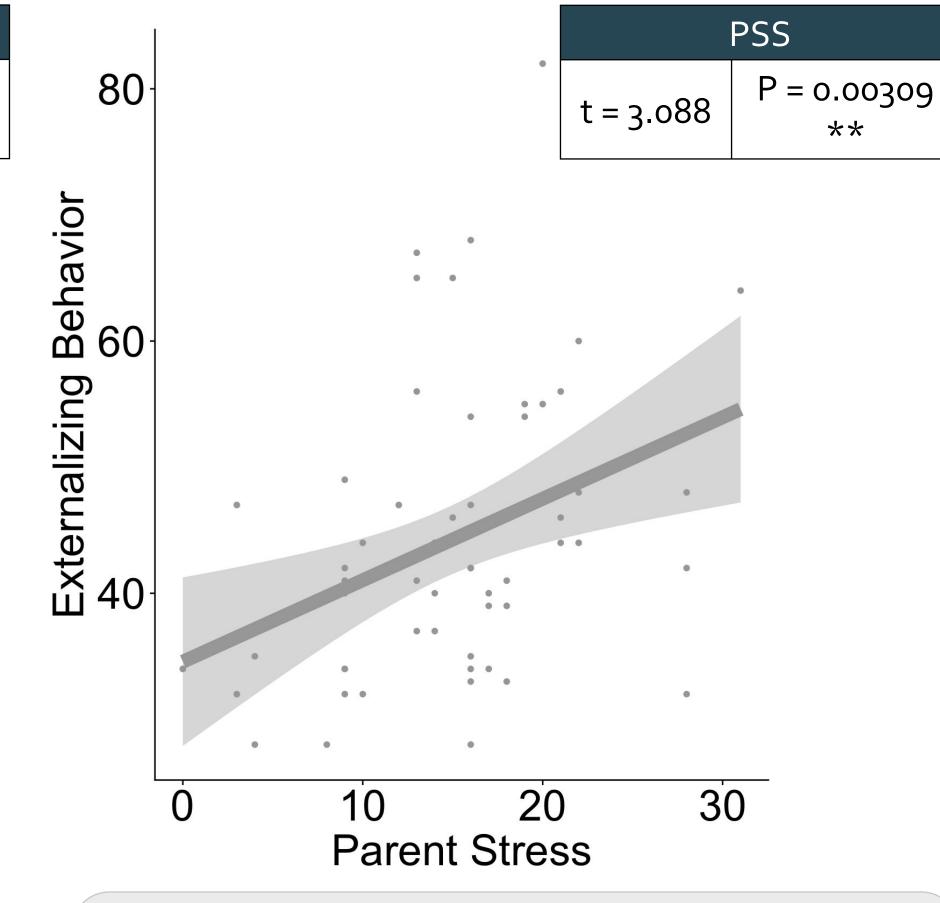
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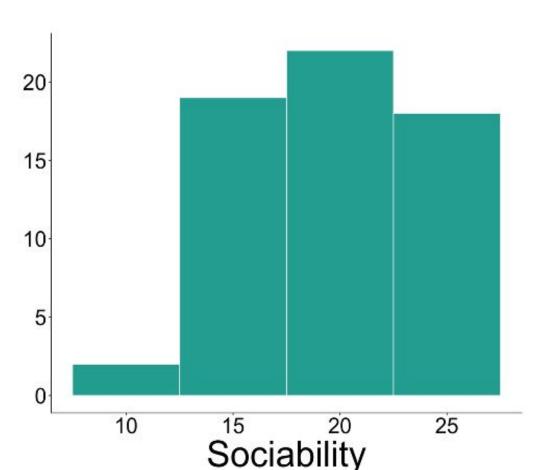
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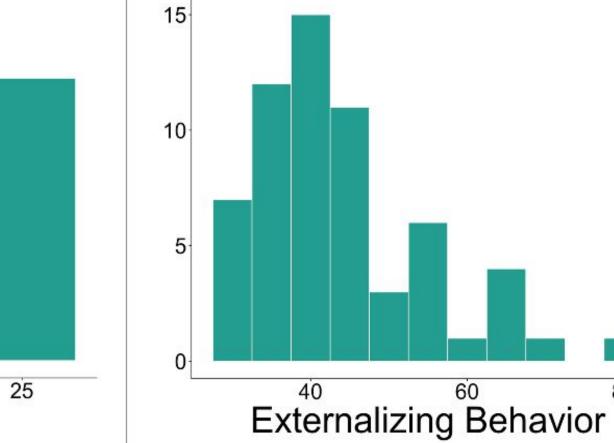
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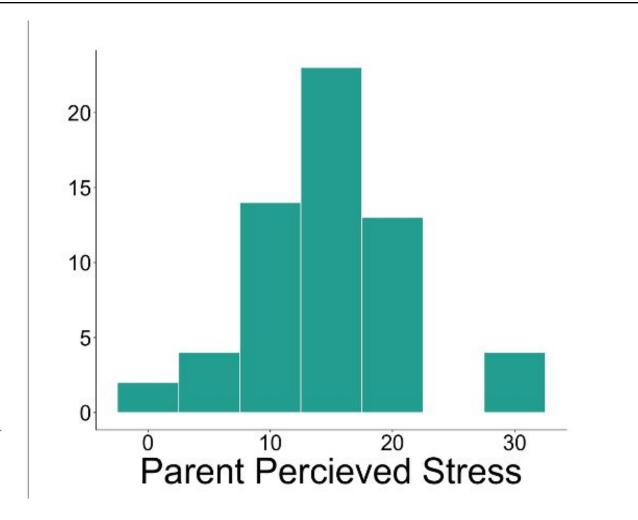
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Sociability Sub-Scale

	Not at all like the child				A lot like the child
Child takes a long time to warm up to strangers (R)	1	2	3	4	5
Child is very sociable	1	2	3	4	5
Child is very friendly with strangers	1	2	3	4	5
Child tends to be shy (R)	1	2	3	4	5
Child makes friends easily	1	2	3	4	5