

ADDING FUEL TO THE FIRE:

THE RELATIONSHIPS BETWEEN ADHD, IMPULSIVITY, AND EMOTION DYSREGULATION

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INTRODUCTION

- Attention-deficit/hyperactivity disorder (ADHD) is a developmental disorder characterized by inattention, hyperactivity, and impulsivity²
- Emotion dysregulation (ED) is a lack of control over emotional responses¹
- Impulsivity is acting without consideration⁴
- Increased hyperactive-impulsive symptoms predicts increased ED³

Hypotheses:

- Increased impulsivity will predict more severe ED in adolescents
- ADHD diagnosis will moderate the relationship between impulsivity and ED

METHODS

- $N = 75$ adolescents; 52 ADHD and 23 typically developing (TD)
- Difficulties in Emotion Regulation Scale (DERS):** self-report emotion regulation survey
- Emotion Regulation Checklist (ERC):** parent-report emotion regulation survey
- Conners Rating Scales 3 (CRS-3):** parent report ADHD symptoms, used for impulsivity score
- MINI:** defined diagnostic group
- T-tests (group differences) & linear regression

	ADHD (N=52)	TD (N=23)
Sex (females)	25%	43.5%
Age (years)	11.6±0.90	11.1±0.88

Table 1. Demographics

RESULTS

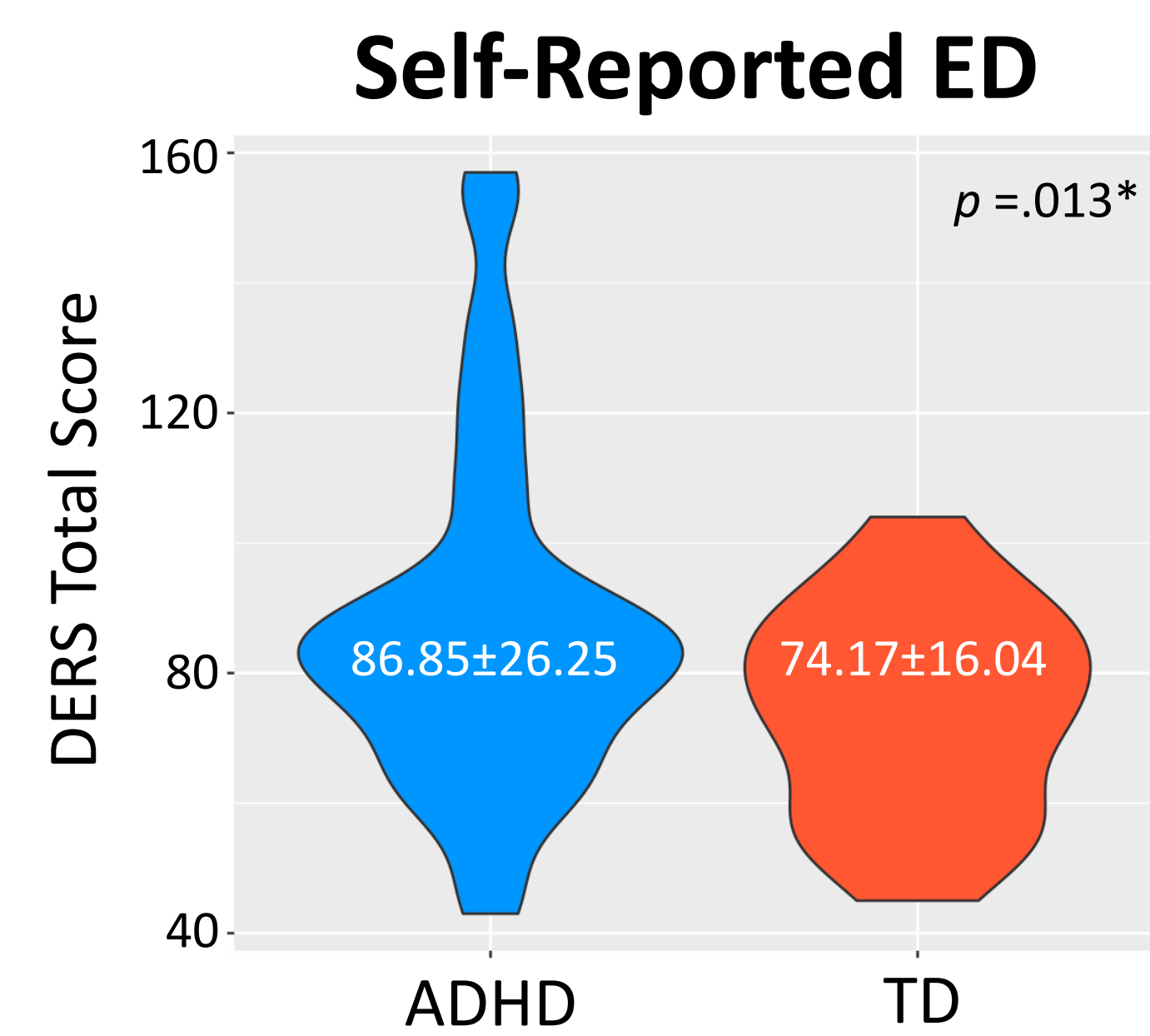


Figure 1. ADHD adolescents demonstrated significantly higher DERS scores than TD adolescents

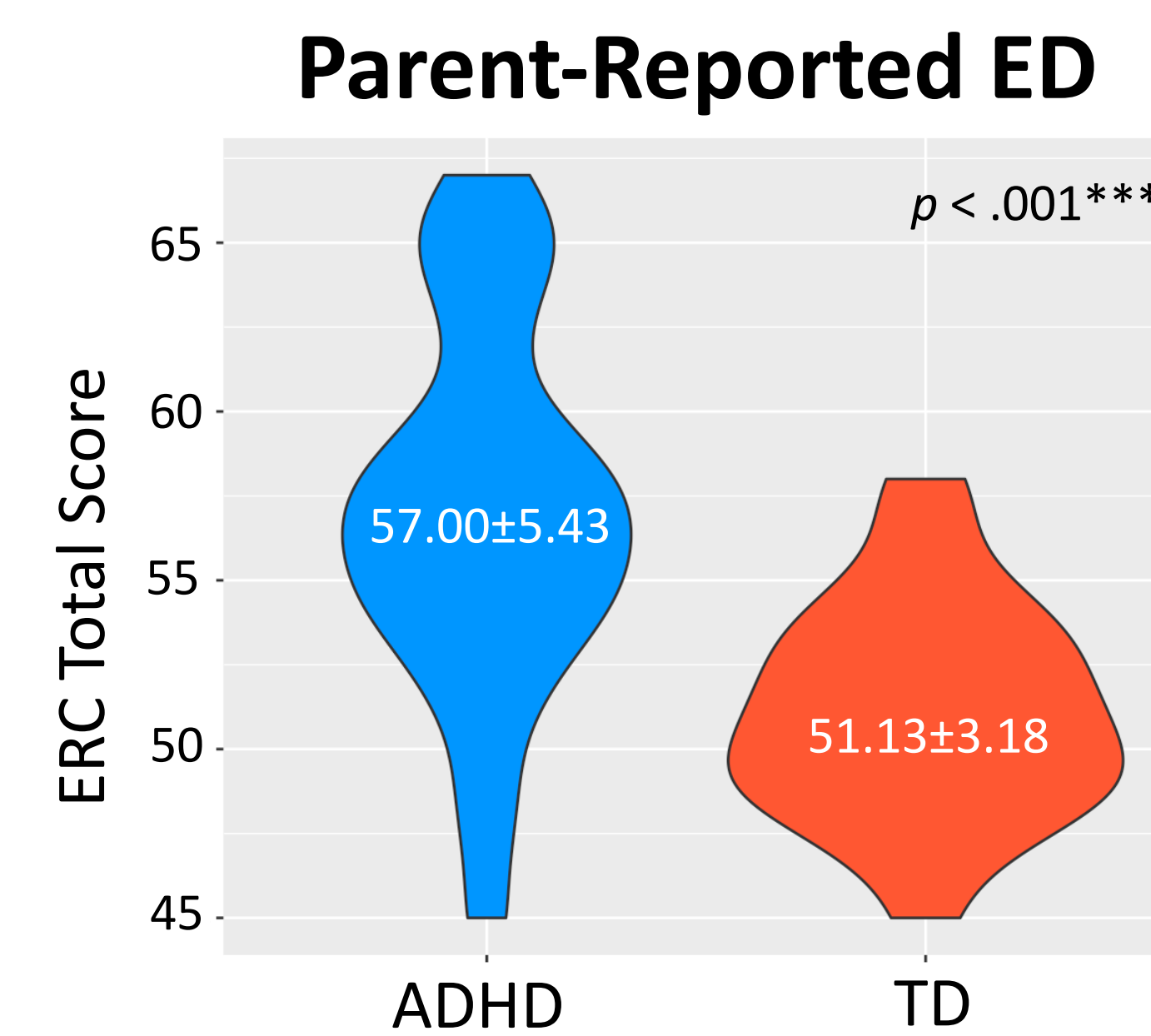


Figure 2. ADHD adolescents demonstrated significantly higher ERC scores than TD adolescents

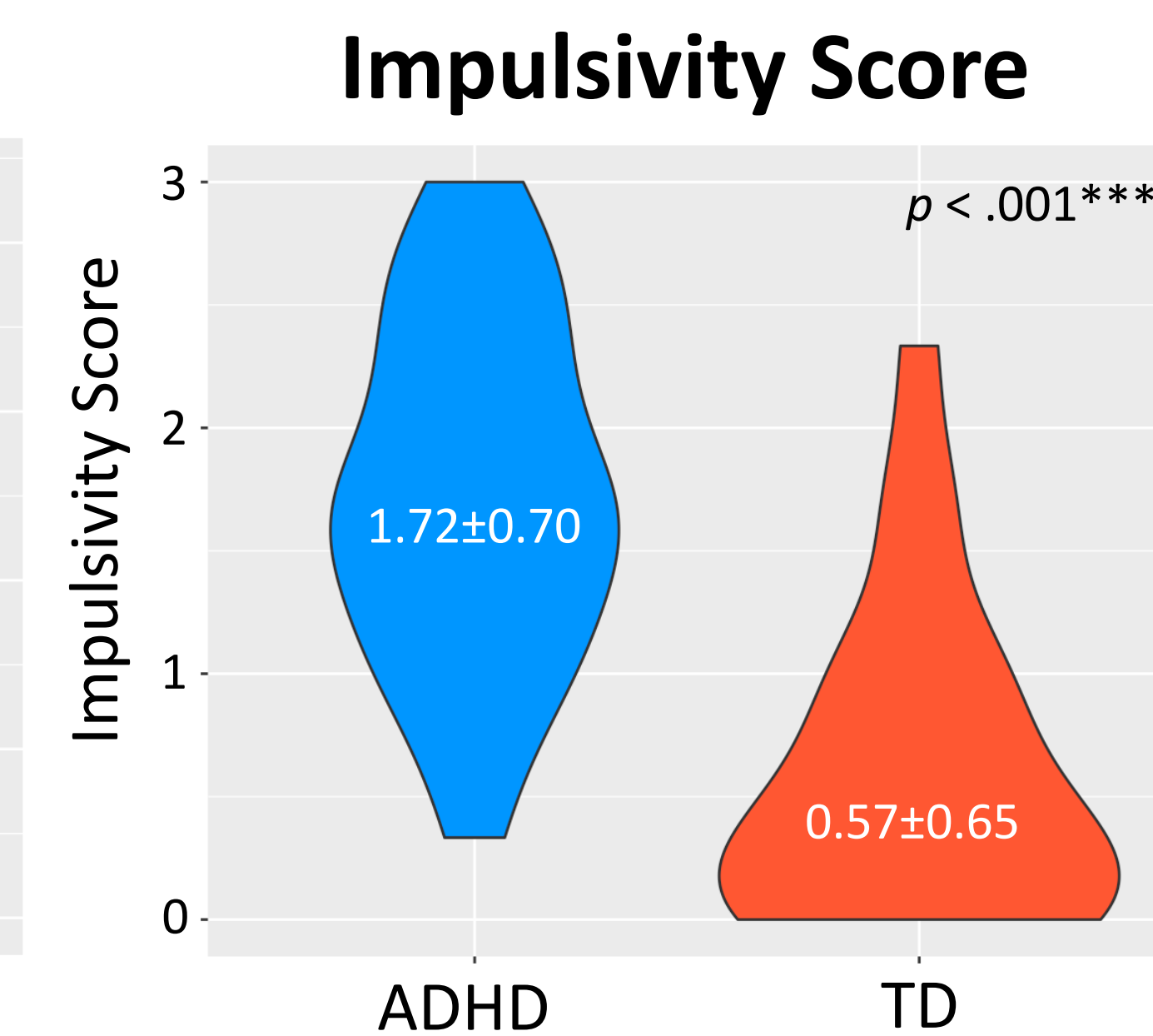


Figure 3. ADHD adolescents demonstrated significantly higher impulsivity scores than TD adolescents

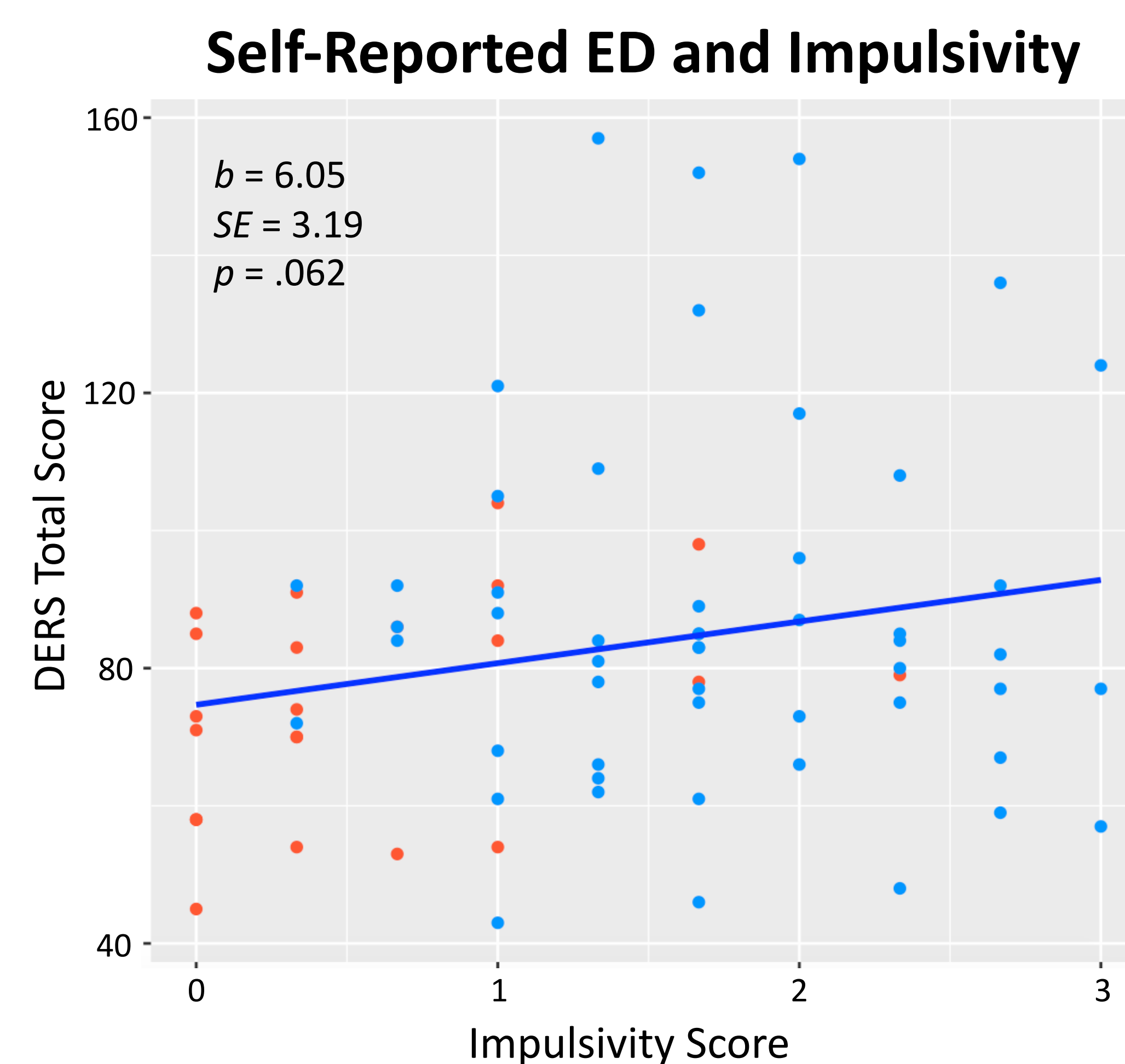


Figure 4. Parent-rated participant impulsivity was not a significant predictor of participant-rated emotion dysregulation

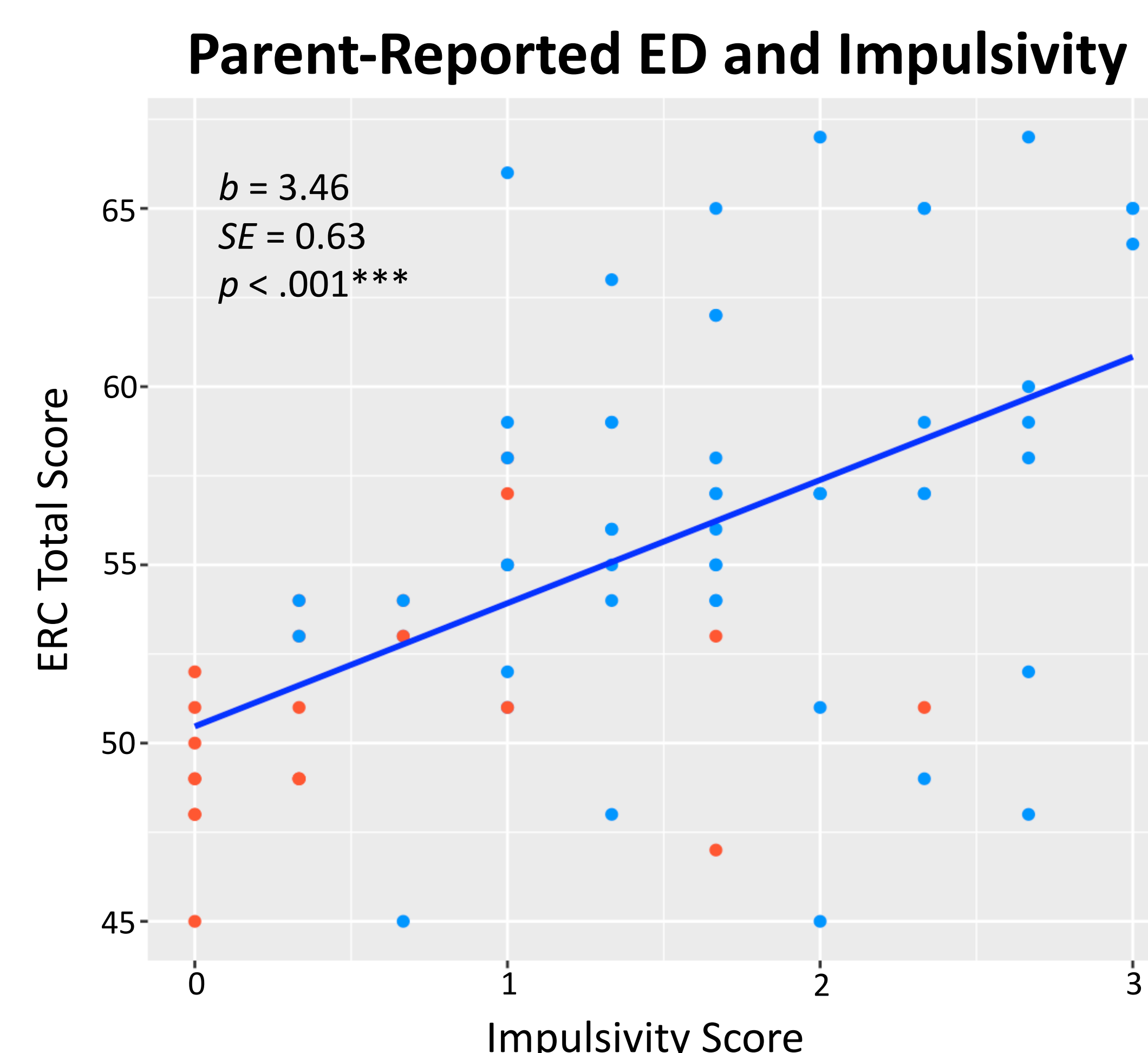
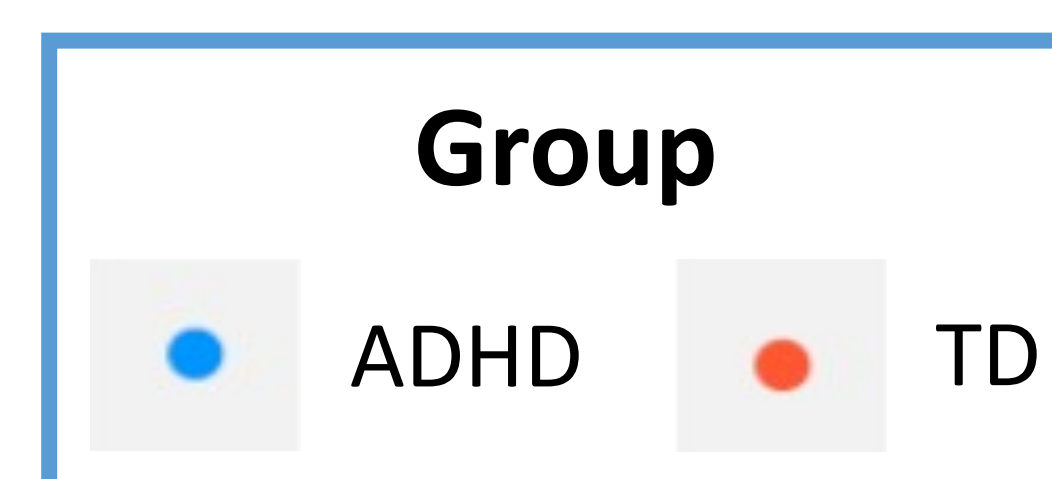


Figure 5. Parent-rated participant impulsivity was a significant predictor of parent-rated participant emotion dysregulation



DISCUSSION

- While youth with ADHD are more impulsive than their TD peers⁴, impulsivity affects adolescents regardless of ADHD diagnosis
- Impulsivity is a significant predictor of emotion dysregulation in both ADHD and TD adolescents such that increasing impulsivity predicts increasing emotion dysregulation
- ADHD group was not a significant moderator in the relationship between impulsivity and emotion dysregulation
- Increases in impulsivity correlate with increases in emotion dysregulation at parallel slopes between ADHD and TD participants
- Impulsivity predicts poorer emotion regulation in the same ways for ADHD and TD adolescents
- Differences lie in the number of impulsivity symptoms corresponding to higher ED
- Implications & Future Analysis**
 - Understanding the role of impulsivity may be critical to improving emotion regulation across all youth
 - Analyze relationship of impulsivity with irritability
 - Identify common brain features linking impulsivity and emotion regulation

REFERENCES

1. Astenvald et al. (2022) 2. Faraone et al. (2015) 3. Groves et al. (2020) 4. Miller et al. (2010) 5. Schreiber et al. (2012)