

# Examining the relationship between emotional dysregulation and temperament profiles in children with ASD

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## Background

**Temperament**

- a biologically based characteristic describing an individual's patterns of feelings and behaviour<sup>1</sup>

3 dimensions:

- Effortful control
- Negative affect
- Surgency

**Emotional regulation**

- the ability to monitor and modify one's emotions<sup>2</sup>

2 subscales:

- Reactivity
- Dysphoria

## Research question

Is there an association between the temperament profile and emotional regulation capabilities of children with ASD?

## Methods

**Sample**

- 51 children with ASD diagnosis
  - Age of 7-14 (11.06 ± 2.3)
  - 9 females, 42 males
  - Full Scale IQ ≥ 85

**Protocol**

- Parents completed two measures:
  - #1. Temperament in Middle Childhood Questionnaire
  - #2. Emotion Dysregulation Inventory

**Analysis**

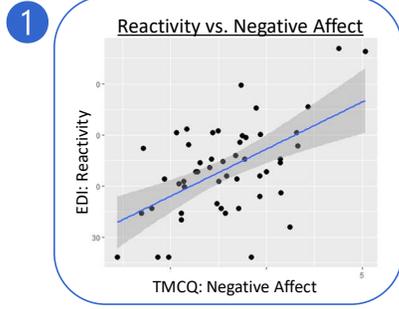
- Linear regression used to examine the association between the 3 dimensions of the TMCQ and the 2 EDI subscales
  - Covariates: age, gender, and Full Scale IQ

Negative affect, a factor of temperament, is positively correlated with emotional dysregulation in children with ASD

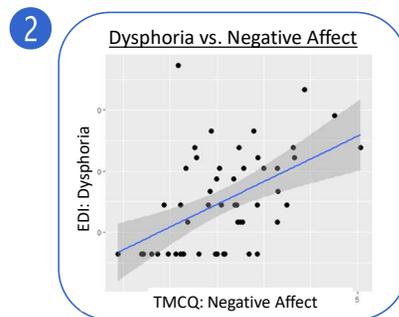


## Results and conclusion

There is a significant positive association between the Negative Affect factor of the TMCQ and...



...the Reactivity dimension of the EDI.  
( $R^2 = 0.28$ ;  $p = 0.00003$ )

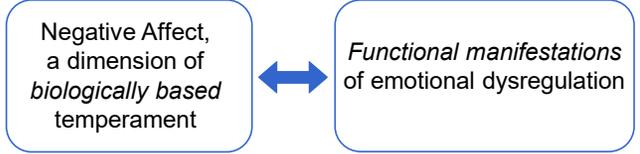


...the Dysphoria dimension of the EDI.  
( $R^2 = 0.23$ ;  $p = 0.0003$ )

Gender, age, and Full Scale IQ do not play a significant role in these relationships.

## Relevance and applicability

These results help us better understand contributors to emotional dysregulation by suggesting that in children with ASD, there is an association between:



## References

<sup>1</sup> Rothbart, M.K & Hwang, J. (2005). Temperament and the development of competence and motivation. In A.J. Elliot & A.C. Dweck (Eds.), Handbook of competence and motivation. Guilford Press, pp. 167-184.  
<sup>2</sup> Beck, K. B., et al. (2020). Assessment and Treatment of Emotion Regulation Impairment in Autism Spectrum Disorder Across the Life Span: Current State of the Science and Future Directions. Child and adolescent psychiatric clinics of North America, 29(3), pp. 527-542.