

# Parental Mental State Talk and Associations with Children's Mentalizing Ability in Children with and <sup>(1)</sup>

# without Autism Spectrum Disorder



TD/ASD Groups

**Group Status** 

Statements in TD/ASD Groups

**Group Status** 

**ASD** 

**ASD** 



## Background

- Inference of one's own and other's mental state, also known as mentalizing, is a quintessential part of social interactions
- Autism spectrum disorder (ASD) is characterized by impairments in mentalizing abilities<sup>2</sup>
- Home environments involving early exposure to parental mental state language are important for the development of mentalizing abilities<sup>3,4,6</sup>
- Little is known about effects of parental mental state talk beyond early childhood, and how ASD may moderate the relationship between parental mental state talk and mentalizing ability in late childhood

## **Current Study**

## **Study Aims**

- Aim 1: To identify the presence of group differences in the amount of mental state talk used between parents of ASD group and parents of typical development (TD) group<sup>3,6,7</sup>
- Aim 2: To examine whether children with/without ASD use different amounts of accurate mentalizing statements during a behavioral measure assessing spontaneous mentalizing ability<sup>1</sup>
- Aim 3: To investigate the association between parental mental state talk and the amount of accurate mentalizing statements made by their children<sup>5</sup>

### Methods

#### **Participants**

40 parent-child dyads (20 ASD, 20 TD), with children matched on age and gender

 ASD and TD groups: n=16 male, aged 9-16 (ASD: M=13.00, SD=0.49; TD: M=12.90, SD=0.48)

#### Measures

#### 1. Mind-Mindedness Task:

- Behavioral task assessing spontaneous parental mental state talk<sup>6,7</sup>
- Prompted: "Can you describe your child for me?"
- Coded as mental, behavioral, physical, general, and/or diagnosis.

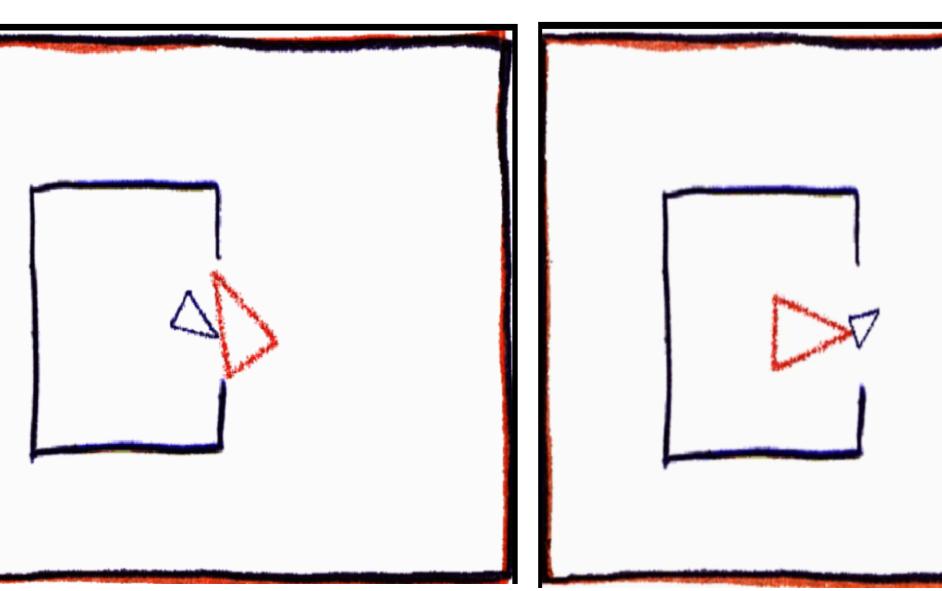
### 2. Triangles Task:

**Screenshot of Triangles "Seducing"** 

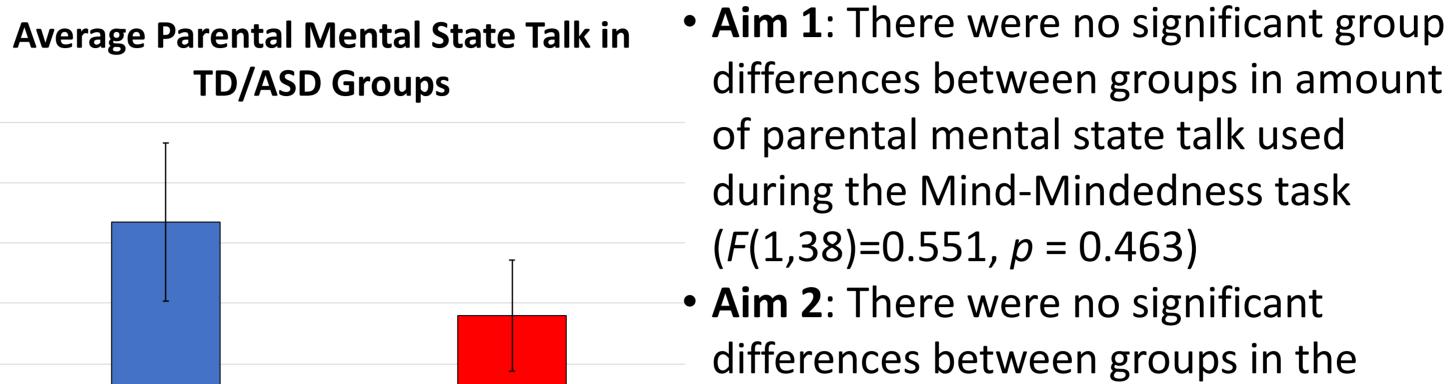
condition:

- Behavioral task assessing spontaneous mentalizing ability in children<sup>1</sup>
- Randomized series of 4 animations of two triangles meant to elicit mentalizing descriptions
- Coded for emotion, intention, and mentalizing

Screenshot of Triangles "Coaxing" condition:



## Results

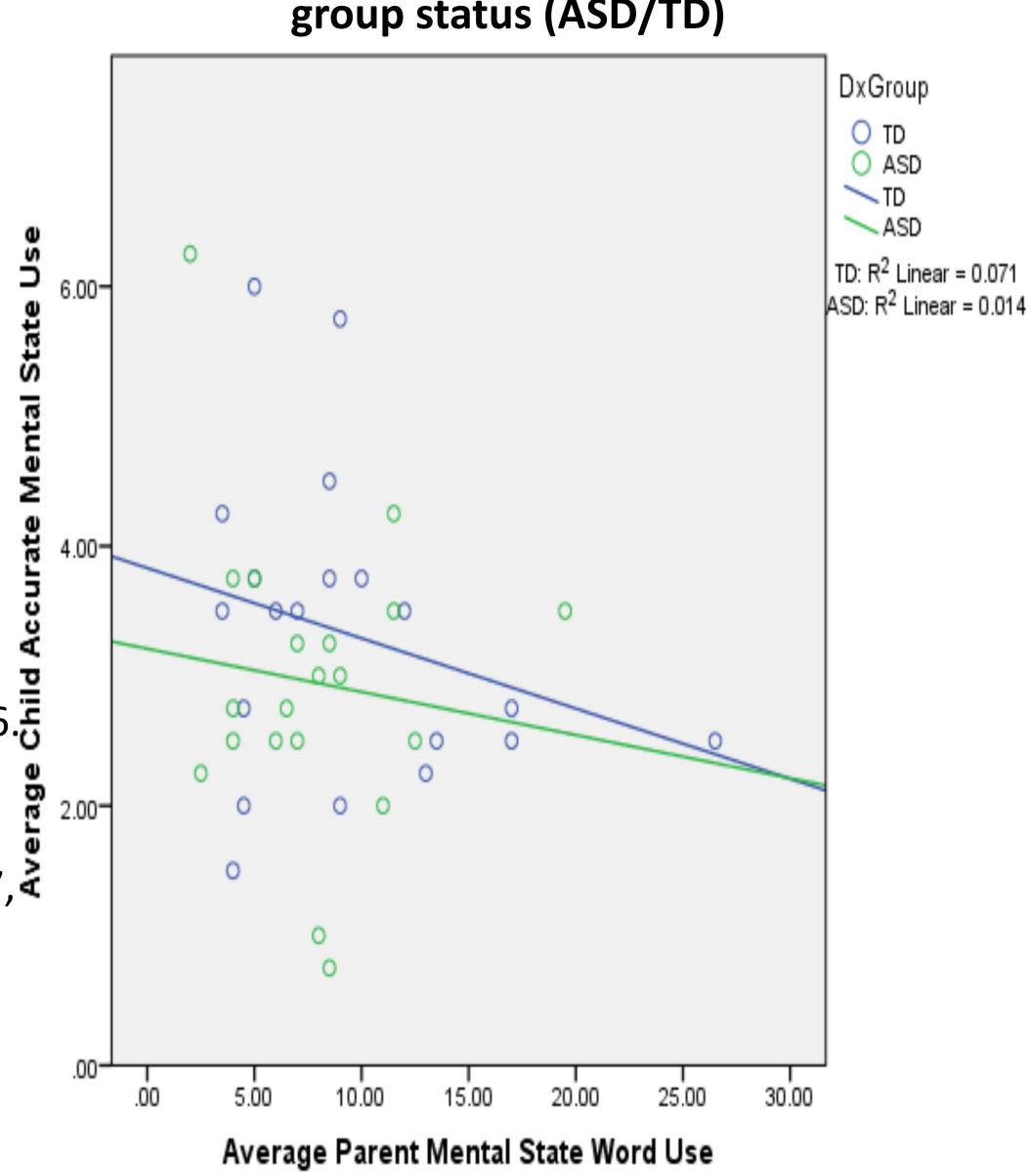


amount of accurate mentalizing statements made by children during the Triangles task (F(1,38)=0.524, p =0.473)

• Aim 3: Amount of parental mental state talk was not significantly **Average Amount of Accurate Mentalizing** associated with amount of children's mentalizing statements regardless of diagnostic group r(38) = -0.173, p = 0.286.

• Parental mental state talk (β=-0.515, p=0.181) diagnostic group ( $\beta$ =-0.319, p=0.351), and the interaction ( $\beta=0.137$ , p=0.691) did not significantly predict amount of child mentalizing statements, with average parental overall comments as a covariate.

Associations between parental mental state talk and accurate child mentalizing statements by group status (ASD/TD)



Results suggest that average amount of child mentalizing statements is not significantly associated with average parental mental state talk, and the relationship is not moderated by group status (ASD/TD)

## **Summary and Discussion**

- Limitations include small study size, lower than optimal measures of interrater reliability on behavioral coding (ICC=0.64), lack of additional direct measures of spontaneous mentalizing ability, and participants needed to meet certain criteria (i.e.: ASD diagnosis and IQ score) in order to meet eligibility for the current study
- Several potential confounding variables may include: child age, verbal IQ score, comorbidity of other psychological disorders, family size, cultural background, or multilingual home environments
- The links between parental and child mental state use in later childhood years represents a key area of exploration for future developmental research

## References

Please click QR code to view references:

