Introduction

- Lie-telling reflects real-world applications of children’s theory of mind.
- Previous studies found that antisocial lie-telling behaviors are related to performance on false belief tasks in typically developing (TD) children (Pradeau & Thomas, 2005; Tsai, 2002).
- Though many studies have demonstrated that individuals with ASD have a deficit in theory of mind (ToM), researchers have just begun to examine lie-telling behaviors in children with ASD.
- Past research did not consider the possible contribution of verbal ability to the relation between ToM and lie-telling despite the well-established relation between ToM and language ability in both children with ASD and TD children (Perner, Wimmer, & Perner, 1986).
- Current study examines the interrelations among children’s antisocial and prosocial lie-telling behaviors, ToM, and verbal mental age (VMA).

Research Questions

1. How are lie-telling behaviors, ToM understanding, and VMA interrelated in children with ASD?
2. Does the relation between antisocial lie-telling behaviors and ToM understanding in TD children remain after controlling for VMA?
3. Is ToM understanding or VMA related to prosocial lie-telling behavior?

Method

Participants
- 15 children with ASD (3 females, CA: M = 8.01, SD = 1.39; VMA: M = 6.79, SD = 1.91)
- 28 TD children (7 females; CA: M = 7.15, SD = 69; VMA: M = 7.29, SD = 39)
- ASD group is significantly older than TD group, t(17.79) = 2.23, p = .04
- No significant difference between groups on VMA, t(17.81) = .95, p = .36

Materials
- Confirmation of diagnosis: Autism Diagnostic Observation Schedule—Generic (Lord, Rutter, & LeCouteur, 2000).
- ToM understanding: First-order false belief tasks and Second-order false belief tasks

- Temptation Resistance Paradigm
  E1: “I’m going to put a toy behind your back and play a sound. Without turning around and looking at the toy, I want you to guess what the toy is. Are you ready for the sound? What do you think the toy is?” Following 2 easy practice trials, E2 interrupts with a request and E1 has to leave the room. E1: “While I’m gone, don’t turn around to look at the toy.” E2 leaves the room for 1 minute. E1 asks the antisocial lie question: “Did you turn around to look at the toy while I was gone?”

- Undesirable Gift Paradigm
  In E1’s absence, E2 shows the child 4 toys + a bar of soap from a basket. E2 asks, “Which one do you like the best? Which one don’t you like?” in order to be sure the child does not like the bar of soap. When E1 enters the room, E2 quickly leaves. E1: “I’m going to show you a part of a picture and I want you to guess what the whole picture is. If you get it correct, I’ll give you a prize from that basket. What do you think this is a picture of?” When the child is about to win the game, E2 interrupts again and E1 has to leave the room. E1: “Wow you got it correct! I forgot to ask E2 what you like so I’m going to give you this as your prize. Open it up while I’m gone.” E1 gives the child a wrapped bar of soap and leaves the room for 1 minute. E1 asks the prosocial lie question: “Do you like the prize that I gave you?”

- Results and Discussion

![Figure 1. Percentage of children who peaked; told an antisocial lie; exercised SLC when asked what they think the toy is, p(1) = 4.79, p < .05; exercised SLC when asked why they think that; and told a prosocial lie in each group.](image)

Table 1: Correlations between lie-telling behaviors and ToM understanding with VMA controlled for

<table>
<thead>
<tr>
<th></th>
<th>First-order false belief</th>
<th>Second-order false belief</th>
</tr>
</thead>
<tbody>
<tr>
<td>ToM understanding</td>
<td>ASD</td>
<td>TD</td>
</tr>
<tr>
<td>Antisocial lie-telling</td>
<td>20%</td>
<td>35%</td>
</tr>
<tr>
<td>SLC if to question</td>
<td>-36</td>
<td>-46</td>
</tr>
<tr>
<td>SLC if why question</td>
<td>20%</td>
<td>35%</td>
</tr>
<tr>
<td>Overall SLC</td>
<td>20%</td>
<td>35%</td>
</tr>
</tbody>
</table>

* p < .05, N =10

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References

