American Psychological Association

Developmental Psychology

0012-1649/19/$12.00

2019, Vol. 55, No. 4, 823–834
http://dx.doi.org/10.1037/dev0000666

Theory of Mind and Preschoolers' Understanding of Misdeed and Politeness Lies

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We told ninety-nine 4- and 5-year-olds stories in which speakers told lies and truths in two contexts: those told to deny a transgression (misdeeds) and those told to spare another's feelings (politeness). Participants identified each statement as a lie or as the truth, morally judged it as good or bad, and decided whether or not to assign punishment to the speaker. All children received measures of first- and second-order false-belief understanding. Although 4-year-olds were above chance in their identification accuracy, they did not differentiate between lies and truths in their moral judgments or punishments. Five-year-olds outperformed 4-year-olds in their identification accuracy, morally judged lies more negatively than truths, and assigned speakers of lies more punishment than those who told truths. Five-year-olds also treated lies about misdeeds more negatively than politeness lies in their moral judgments and punishments. Children's identification of both lies and truths related to their first-order false-belief understanding, while their moral judgments and punishment of lies related to their second-order false-belief understanding. These findings suggest that different considerations are made when children reason about the conceptual and moral differences between lies and truths.

Keywords: identification of lies, moral judgment of lies, theory of mind, false-belief understanding, second-order false-belief understanding

Philosophers and psychologists define lying as a verbal act of deception that occurs when a speaker makes a statement she believes to be false with the intention to deceive another (e.g., Bok, 1978). This definition specifies both that the speaker believes her statement is false and that she intends to deceive her audience, thereby instilling a false belief. As an example, consider the case of Naia telling a lie to Holly by denying that she broke a vase that she really did break. To do so, Naia must compare her own belief about the true state of affairs (that she broke the vase) to her assessment of Holly's belief about that same state of affairs (what does she know about the vase being broken?), and how both of these correspond to the (false) belief that Naia intends to create in Holly's mind (that Naia did not break the vase). In turn, when considering the truthfulness of Naia's statement, Holly ought to compare her own belief about the true state of affairs (Holly may suspect that Naia broke the vase) to the statement Naia made (that she did not break the vase), informed by an assessment of Naia's beliefs and intentions (Naia was present when the vase broke so she ought to know how it happened; Naia may be motivated to avoid responsibility for breaking the vase). These complex requirements have placed research on children's telling and understanding of lies in the context of their developing theory of mind (ToM), the ability to represent and reflect on the mental states of self and others in order to explain or predict behavior (e.g., Lee, 2000). Since lying involves creating a false belief in the mind of another, both telling and understanding lies ought to rely, at least in part, on the ability to represent and reflect on the beliefs of others. This ability is the fundamental feature of ToM, which develops significantly between 4 and 5 years of age (e.g., Wellman, Cross, & Watson, 2001).

Lying is also a morally relevant act, and when considering lies, one must not only consider the mental states of the speaker (i.e., their beliefs and intentions), but also the moral implications of the lie. Research on children's moral development reveals that by around 5 years of age, children begin to consider mental states (e.g., intentions) more than outcomes when making moral judgments (e.g., Helwig, Zelazo, & Wilson, 2001; Liao, Li, & Deak, 2011; Zelazo, Helwig, & Lau, 1996) and that ToM relates to these considerations (Killen, Mulvey, Richardson, Jampol, & Woodward, 2011). Developmental research on lying should therefore consider both ToM and moral reasoning, as these are likely key factors contributing to children's abilities to tell and understand lies, and since children make significant gains in both of these

This article was published Online First December 20, 2018.

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This research was supported by a Natural Sciences and Research Council of Canada Standard Research Grant to Deepthi Kamawar. The data presented in this article are part of Corrie Vendetti's doctoral dissertation. We thank the daycares and children who participated in this project. We also thank Tracy Thomson and Michelle Sappong for help with data collection.

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domains during preschool, this is a particularly interesting developmental period for such research.

To date, most empirical work on the topic has focused on children's lie telling. From the lie-telling literature, we have learned that most children begin to tell lies around the ages of 2 or 3 (e.g., Evans & Lee, 2013; Wilson, Smith, & Ross, 2003), most frequently lies about misdeeds, told to conceal one's own transgressions (e.g., Evans & Lee, 2013; Lewis, Stanger, & Sullivan, 1989; Talwar & Lee, 2008) and politeness lies, told to spare the feelings of others (e.g., Popliger, Talwar, & Crossman, 2011; Talwar & Lee, 2002). Research has also demonstrated that children's lie telling is related to aspects of ToM understanding (e.g., Hsu & Cheung, 2013; Talwar & Lee, 2008). In contrast, we know much less about the factors that contribute to children's conceptual and moral understanding of lies.

Reflecting the work on lie telling, in the present study we investigated: (a) preschoolers' identification and moral judgments of lies and truths told in misdeed and politeness contexts, and (b) how aspects of children's ToM (first- and second-order false-belief understanding) contribute to these abilities. Previous work on children's understanding of lies tends to focus on discriminating between lies and other kinds of false statements, primarily in misdeed contexts. This work has not explored how preschoolers' understanding of lies is related to their developing ToM, or how their understanding differs across lie contexts, focusing instead on an older age range or on development across childhood. The current study addresses these limitations.

Following Piaget's (1932/1965) seminal work, much of the early research on children's understanding of lies contrasted simple, intended lies (wherein speakers intentionally make false statements in order to deceive) with more complex false statements that arise from different pairings of beliefs and intentions (e.g., honest mistakes, verbal accidents, etc.). These studies have found that young children (until age 8) fail to consider speakers' beliefs and intentions when classifying statements as lies, overextending the concept to include other false statements (e.g., Lyon, Quas, & Carrick, 2013; Peterson, Peterson, & Seeto, 1983; Wimmer, Gruber, & Perner, 1985). However, some of these studies have reported that when asked to morally judge lies and other false statements, the same children are able to differentiate among them (e.g., Peterson et al., 1983; Wimmer et al., 1985).

More recently, research has shown that even preschoolers are quite skilled at identifying lies and truths when speakers' statements are more straightforward. For example, Lyon et al. (2013; Study 1) told 2- to 5-year-olds stories about characters who either correctly or incorrectly labeled an object. Children were asked if the character lied or told the truth and whether her statement was good or bad. Children older than two performed above chance, rating false statements as lies and judging them negatively and rating true statements as truths and judging them positively. However, the characters' intentions were not indicated nor implied. When children were required to track a character's knowledge to distinguish between lies and mistakes, 3- to 5-year-olds' performance was below chance (Lyon et al., 2013; Study 2). Using more socially complex stories, Bussey (1992) established that 4-year-olds' accuracy in identifying lies and truths about misdeeds was greater than chance and that they morally judged lies more negatively than truths, though their accuracy was lower and moral distinctions smaller than 8- and 11-year-olds'. Recent work reports similar patterns (e.g., Bussey, 1999; Talwar & Lee, 2008; Talwar, Lee, Bala, & Lindsay, 2002; Williams, Ahern, & Lyon, 2017).

Research has also shown that the context in which a lie is told can impact children's moral judgments. For example, Bussey (1999) presented children with stories about speakers who told lies and truths, both after misdeeds and in politeness contexts. In the misdeed context, speakers committed minor transgressions and either lied about them or told the truth. In the politeness context, speakers did not like something and either lied about it or told the truth. Again, children were asked to identify the statements as lies or truths and to provide moral judgments. While 8- and 11-year-olds were very accurate in identifying lies and truths in both contexts, 4-year-olds were not, and their accuracy varied by context: they were more accurate in the misdeed context than in the politeness context. Across all age groups, lies were morally judged more negatively than their respective truths, and this also varied by context: misdeed lies were rated more negatively than politeness lies, and misdeed truths were rated more positively than impolite truths. The only other published study examining preschoolers' understanding of politeness lies and impolite truths reported similar findings (Popliger et al., 2011).

Work with older children and adults suggests that although they can accurately identify lies and truths in politeness contexts, they are less likely to do so than in misdeed contexts (Lee & Ross, 1997; Xu, Luo, Fu, & Lee, 2009) and they rate politeness lies less negatively (though still negatively) with age (Xu et al., 2009; Xu, Bao, Fu, Talwar, & Lee, 2010). Cheung, Siu, and Chen (2015) have suggested that these differences exist not only because the characters have different intentions across contexts, but also because misdeed lies tend to misrepresent an observable state of reality, whereas politeness lies tend to misrepresent one's opinion. In a recent study with 7-, 9-, and 11-year-olds, these authors sought to disentangle these two factors. They found that both influenced performance: lies about opinions were identified less frequently and rated less negatively than lies about reality, and prosocial lies were identified less frequently and rated less negatively than self-serving ones. The factors also interacted, such that the effects of content were more pronounced when characters had prosocial intentions and mattered less when lies were self-serving. The authors concluded that school-age children's considerations are informed by the speaker's intentions, though only marginal relations to ToM were found. These findings are consistent with those in the literature, in which the typical comparison is between lies about misdeeds and politeness lies. Children tend to judge both kinds of lies negatively (and truths positively), though they judge politeness lies less negatively than lies about misdeeds.

In summary, the work on children's conceptual understanding of lies demonstrates that preschoolers can identify and morally discriminate between lies and truths in both misdeed (Bussey, 1992, 1999; Talwar et al., 2002; Talwar & Lee, 2008) and politeness contexts (Bussey, 1999; Popliger et al., 2011). Further, Bussey's (1999) findings indicate that context affects the moral judgments of preschoolers and older children alike. That being said, much work remains to be done. With the exception of Bussey's (1999) study, most of what we know about preschoolers' understanding of lies and truths is quite piecemeal, cutting across studies that explore one context or another, with different age groups and methodologies. Further, since many of these studies used stories, questions, and scales designed to evaluate performance across a

relatively wide age range, they are somewhat complex (e.g., gold stars and black spots representing moral goodness and badness), and may have obscured younger children's understanding. Finally, most of this work has focused on developmental differences in children's identification and moral judgment of lies across a wide age range, and very few studies have considered the skills that contribute to these developments.

Though there is a strong theoretical argument for the role of ToM, and belief understanding in particular, in children's understanding of lies and truths, very little direct evidence exists. Instead, research has investigated the role of ToM in children's ability to distinguish between lies and false beliefs (e.g., Berthoud-Papandropoulou & Kilcher, 2003), in their reasoning about other kinds of false statements (Maas, 2008), or in their ability to produce lies for story characters (e.g., Hsu & Cheung, 2013). Although Cheung et al. (2015) found a marginal correlation between 7- to 11-year-olds' second-order false-belief understanding and identifying liar intentions (opinion lies), no published study has examined the role of ToM in preschoolers' understanding of lies. This is a surprising gap in the literature which the current study addresses.

Children's belief understanding is typically measured via false-belief tasks, which require them to predict the behavior of a character who has an inaccurate belief. To succeed, children need to set aside their own knowledge and represent the character's false belief in order to predict behavior (e.g., Wimmer & Perner, 1983). It has been well established that children do not typically demonstrate false-belief understanding before the age of 4 (see Wellman et al., 2001 for a meta-analysis). Of course, understanding of beliefs is not complete at this point, and more complex situations require more complex representations. For instance, it is frequently necessary to consider someone's representation of another's beliefs. This ability, termed second-order false-belief understanding, involves considering a belief about a belief, or more broadly, a mental representation of a mental representation (e.g., Miller, 2009). Second-order false-belief understanding develops around age 5 or 6 (e.g., Sullivan, Zaitchik, & Tager-Flusberg, 1994).

There are several reasons to expect that children's belief understanding contributes to their understanding of lies and truths. First, since identifying a statement as a lie or the truth requires an appreciation of the speaker's beliefs (i.e., that the speaker does not believe her statement), first-order false-belief understanding should be required. Second, since lies are statements made by a speaker with the intention to deceive a recipient, when making moral judgments about lies, a coordinated consideration of the speaker's and recipient's representations of one another's mental states may also be required. Returning to our example, when making a moral judgment of Naia's statement (that she did not break the vase), we may consider the mental states of both characters and the interplay between them, including: Naia's consideration of what Holly might believe about how the vase was broken; Holly's consideration of what Naia might know about how the vase was broken; Holly's consideration of what Naia's intentions might be; how Naia's statement may affect Holly's beliefs about what happened to the vase; and so on. Third, both abilities play a role in children's lie telling, so investigating their contribution to understanding lies is warranted.

In the present study, we investigated 4- and 5-year-olds' identification and moral judgments of lies and truths in misdeed and politeness contexts, and the roles of first- and second-order false-belief understanding in these developments. Our goals were twofold. Our first goal was to explore development within the preschool period in children's identification and moral judgment of lies and truths across contexts, using stories and scales adapted for younger participants. Our second goal was to directly test the roles of children's first- and second-order belief understanding in these abilities.

We told children stories about speakers who told simple, intended lies and truths. In misdeed stories, the speakers committed minor transgressions and told lies (to deny their misdeeds) or truths about their actions. In politeness stories, the speakers did not like something and told politeness lies (to spare the recipients' feelings) or impolite truths. After each story, participants were asked: (a) to identify the speaker's statement as a lie or truth, (b) to morally judge the speaker, and (c) whether the speaker should be punished. We included punishment assignment as a second index of children's moral reasoning, as is common in the moral development literature (e.g., Zelazo et al., 1996). Children also completed measures of first- and second-order false-belief understanding, as well as measures of receptive vocabulary and memory to control for their contribution to performance.

Our first set of hypotheses concern our first goal—to examine preschoolers' identification and moral judgment of lies and truths in misdeed and politeness contexts. From the literature, we expected preschoolers' identification accuracy to be greater than chance in both contexts and, extending earlier work, we predicted that 5-year-olds would outperform 4-year-olds, given the gains in belief understanding made between 4 and 5 years. We also expected that children would demonstrate greater identification accuracy in the misdeed context than the politeness context (following Bussey, 1999).

In terms of moral judgments and punishments, we expected preschoolers to rate lies negatively and truths positively, and to assign more punishment to speakers who told lies than those who told truths. In line with Bussey (1999), we expected that children would rate misdeed lies more negatively and assign them more punishment than politeness lies. Consistent with work with older children, we expected politeness lies to be rated negatively overall, and more negatively than their corresponding truths (Bussey, 1999; Cheung et al., 2015; Popliger et al., 2011). Extending previous work, we predicted that 5-year-olds would make greater distinctions between lies and truths, and between misdeed lies and politeness lies, than 4-year-olds, due to developments in their ToM.

Our second set of hypotheses concern our second goal—to examine the role of children's belief understanding in preschoolers' understanding of lies. We predicted that first- and second-order false-belief understanding would play different roles in children's identification, moral judgments, and punishments of lies and truths, over and above the contributions from age, receptive vocabulary, and memory. We hypothesized that children's first-order false-belief understanding would be related to identification accuracy because accurately identifying a speaker's statement as a lie or the truth requires a consideration of the speaker's beliefs, and whether his statement is in line with those beliefs.

We also predicted that children's second-order false-belief understanding would relate to their moral judgments and punishments of speakers who told lies, as these judgments should require a coordinated consideration of the speakers' and recipients' beliefs (as described above). We expected that second-order false-belief would only be related to judgments of stories in which the speakers told lies because it is only in these situations that children need to consider the speakers' and recipients' representations of each others' beliefs in order to reason about the moral implications of their statements. In situations in which speakers told truths, children need not make comparisons between the speakers' and recipients' mental states, since all parties share the same beliefs about the state of affairs, and the speaker's statement is in line with these beliefs. We did not expect the role of belief understanding in children's identification or moral considerations of statements to differ across contexts, since similar considerations need to be made in both misdeed and politeness scenarios.

Method

Participants

Participants were 99 children: fifty-four 4-year-olds (M = 53.5 months, SD = 3.74, range = 48–59 months, 28 girls) and forty-five 5-year-olds (M = 64.6 months, SD = 3.16, range = 60–70 months, 28 girls) recruited from daycare centers in a large, metropolitan Canadian city. Though data on socioeconomic status and ethnicity were not formally collected, the majority of children were from middle class homes. Daycare providers and parents/guardians provided written informed consent for children's participation, and children provided verbal assent. Children were given stickers as thanks. Five children refused to complete the vocabulary measure and one the memory measure. These participants were excluded from the analyses involving those measures.

Procedure

The study, Preschooler's Understanding of Lies, was reviewed and approved by the Carleton University Psychology Research Ethics Board (Protocol no. 12–030). Testing took place in two 30-min sessions, about a week apart, in a quiet spot at the participating daycares. Each child heard eight stories in random order: two with lies about misdeeds, two with truths about misdeeds, two with politeness lies, and two with impolite truths. Stories were told in sets of two, separated by other measures. The order of all other tasks was fixed. In the first session, children heard four stories and completed the first-order false-belief measures and some additional tasks (not reported here[1]). In the second session, children heard the remaining four stories, and completed the memory, second-order false-belief, and vocabulary measures.

Tasks

Stories. The stories were modeled on Bussey (1999). Misdeed stories involved a minor transgression (e.g., a child who did not brush her teeth) and politeness stories involved characters disliking something (e.g., a child did not like a book given by dad). See the Appendix for examples of each story type. Each story was seven sentences long and supported by five photos of key scenes (staged using Playmobil toys). The stories were read aloud by the experimenter who pointed out details as she read. Each story included: one sentence introducing the speaker, the recipient, and the setting (first picture); four sentences describing the plot (second, third, and fourth pictures); one sentence in which the recipient posed a question to the speaker and a final sentence in which the speaker told a lie or the truth (both shown in the fifth picture). The speakers were gender matched to participants.

Within each context, one of the lies involved a "yes" statement (e.g., "Yes, I did brush my teeth") and the other a "no" statement (e.g., "No, I did not take an extra turn"). The same was true for truths. Therefore, children could not correctly identify a statement as a lie or the truth based on whether the speaker said yes or no. After each story, children were asked: (a) three comprehension questions, (b) to identify statements as lies or truths, (c) to morally judge the statements, and (d) whether to assign punishment to the speaker. The comprehension questions were always asked first, followed by either the identification questions or the moral judgment and punishment questions (counterbalanced, between-subjects).

A pilot study conducted with a unique sample of thirty 4-year-olds (M = 52.3 months) confirmed that children understood the stories and response scales, and established that the stories were matched for difficulty. Each of 12 stories (6 misdeed, 6 politeness) was presented to half of the sample as a lie story and the other half as a truth story. Performance on comprehension and identification questions was compared and eight stories that were matched for difficulty were chosen for the present study. Children did not have difficulty with the scales.

Comprehension questions. After each story, children were asked comprehension questions: one about what the characters were doing, one about the true state of affairs (the misdeed or the speaker's true feelings), and one that required children to recall the speaker's statement. These questions required both yes and no responses to ensure that children understood that both were appropriate, possible answers to our questions. If a child erred on a comprehension question, story details were retold and the question asked again, up to three times. If a child did not correctly answer all comprehension questions in three attempts their scores for the corresponding story were excluded. A maximum of four children were excluded on any given story, and most children were correct on the first try (≥84% per story).

Identification. In previous research, children have been asked to identify speakers' statements as "a lie or not a lie" (e.g., Wimmer et al., 1985), as "a lie or the truth" (e.g., Bussey, 1992, 1999; Popliger et al., 2011; Talwar et al., 2002), or as "a lie or the truth or something else" (e.g., Strichartz & Burton, 1990; Talwar & Lee, 2008). Although including "something else" should increase the response options available to children instead of forcing them to classify a statement as either a lie or the truth, neither study reported that any children endorsed it. So although three options

[1] Children first received the diverse desires and diverse belief tasks (adapted from Wellman & Liu, 2004). These tasks were excluded since performance was at ceiling. After the false-belief tasks, children also received the Black/White Stroop (Vendetti, Kamawar, Podjarny, & Astle, 2015). This measure was included for reasons not related to the reported study, so is not discussed in the paper.

were offered, only two were used, effectively leaving chance at 50%.

We employed a more stringent requirement by asking children two questions: both whether a speaker's statement was a lie *and* whether it was the truth. We scored these questions contingently such that a child had to indicate that a character's statement was a lie and that it was not the truth (or vice versa) to be credited as correctly identifying a statement. All other combinations were counted as incorrect. Other researchers have used these questions separately, but have either scored them as separate variables (e.g., Peterson, 1995), or have asked them in a stepwise fashion, only asking if the statement was the truth if a child had already answered that it was not a lie, or vice versa (e.g., Xu et al., 2009). In our measure, chance is reduced to 25% per story, and therefore likely more conservative than those used in the literature. Further, our contingent scoring screens out children with yes/no response biases. The order of the lie and truth questions was counterbalanced, between subjects. For each story, children received a score of 1 for identification accuracy if they answered both questions correctly.

Moral judgment. In previous research, children have been asked to make moral judgments using rating scales ranging from *very, very bad* to *very, very good* with visual supports using symbols like gold stars and black *X*s or spots to denote "good" and "bad" (e.g., Bussey, 1992, 1999; Popliger et al., 2011; Talwar & Lee, 2008). To simplify this judgment for our younger participants, we asked children two questions: both if it was good *and* if it was bad that the speaker had made the statement, and followed up yes responses with questions about degree. For each story, we provided a reminder of what the speaker had said, for example, "Think about what Jenny said, she said 'Yes, I did brush my teeth.'" Followed by the two moral judgment questions: "Was it good that she said that?" and if the child responded yes, "How good was it? A little bit good, or a lot?" and "Was it bad that she said that?" and if yes, "How bad was it? A little bit bad or a lot?" If children answered yes to the initial good/bad question, their response was scored as 1 if they responded it was "a little bit" good (or −1 for a little bit bad), and as 2 if they said it was "a lot" good (or −2 for a lot bad). If children answered no to the initial moral judgment questions ("was it good that she said that?" or "was it bad that she said that?"), their response was scored as 0 (per question). Scores on these questions were summed (within story) and ranged from −2 to +2. The order of the good and bad questions was also counterbalanced between subjects.

Punishment. For each story, children were also asked whether to assign punishment to the speaker (e.g., "Should Jenny get in trouble for saying that?"). If children responded *yes*, they were asked, "How much trouble: a little bit or a lot?" The punishment question always followed the moral judgment questions. Children's answers were scored as 0 if they assigned no punishment, 1 if they assigned a little bit, and as 2 if they assigned a lot, for scores ranging from 0 to 2 for each story.

First-order false-belief understanding. Children completed two measures of first-order false-belief understanding and scores were summed for a composite score as is common practice in the literature (e.g., de Villiers & Pyers, 2002), ranging from 0 to 3.

Change of location. In this task (adapted from Wimmer & Perner, 1983) a scenario was acted out using dolls: "Jill was playing with a ball. When she was done playing with it, she put it in the white box and then she went outside." Jill then exited the scene, out of the child's sight. While Jill was outside, her friend Peter came along. Peter found the ball in the white box and he played with it for a while. When he was done, he put it in the blue box and then he went home for lunch.

Peter then exited the scene, and children were asked a memory question, "Where did Jill put the ball?" and a reality question, "Where is the ball really?" to ensure that the details were understood and recalled. Then Jill returned to the scene and children were asked, "Look Jill is back and she wants to play with that ball again. Where will Jill first look for the ball?" Children passed the task only if they answered all questions correctly, for scores of 0 or 1.

Unexpected contents. In this task (adapted from Gopnik & Astington, 1988), children were presented with a crayon box and asked about its contents, "Look at this box. What's in here?" After children responded (all guessed crayons or similar), the experimenter opened it to reveal that it did not contain crayons, "Look at that, it's really a pig inside!" The pig was placed back in the box and children were asked the reality question, "So, what is in the box?" and the false-belief self-question, "What did you think was in the box *before* we opened it?" Then the experimenter explained that she would show the box to another child "tomorrow" and children were asked the false-belief other question, "What will s/he think is in the box, before we open it?" If children answered the reality question correctly, they received 1 point for correctly answering false-belief (self) question and one for correctly answering the false-belief other question (that another child would think the box contained crayons). Scores ranged from 0 to 2.

Second-order false-belief understanding. In this task (adapted from Sullivan et al., 1994), children were told stories about two characters (acted out with dolls), in which one character had a false belief about the other's belief. John and Sarah were playing in John's room. John had a new book that he just got. Sarah wanted to read John's new book, but he didn't want her to. John's mum called him to go downstairs. So he took his book, and he put it under his blanket and then he went downstairs to see his mum.

John then exited the scene, out of the child's sight. "When John was gone, Sarah took the book and she read it. When she was all done, she put it in John's toy box. But look – " at this point, John reentered the scene, standing behind Sarah. "When John came back from seeing mum, he saw Sarah putting his book in his toy box. John watched Sarah, but Sarah *did not* see John." Children were asked a memory question about the book's initial location and a reality question about its current location. Children were then asked about John's belief, "Does John know where the book is now?" and the second-order false-belief question, "Where does Sarah think that John will look for the book?" Children who passed the recall, reality, and belief questions received 1 point for the second-order false-belief question, for scores of 0 or 1.

Memory: forward digit span. Beginning with two practice trials, digits were spoken aloud by the experimenter, approximately one second apart, and children were asked to repeat them. Starting with two digit sequences, the number of digits increased every two trials. The task ended when children failed both trials of a given length (adapted from Carlson, Moses, & Breton, 2002).

Children received a point for each trial on which they succeeded, excluding practice trials, for scores ranging from 0 to 10.

Receptive vocabulary: Peabody Picture Vocabulary Task—Third Edition (PPVT—III). The PPVT-III (Dunn & Dunn, 1997) is a standardized measure of receptive vocabulary. In this task, children see arrays of four pictures, hear the name of one of them and have to point to the appropriate picture. The task is arranged in blocks of 12 words (with increasingly difficult vocabulary), and in its standard administration, formal basal and ceiling rules dictate where testing begins and ends. In the current study, an abbreviated version was used to reduce the administration time (Skwarchuk, Sowinski, & LeFevre, 2014). All children started at Set 3 (the start point for 5-year-olds) and stopped when they committed eight or more errors in a set, or at the end of Set 11 (whichever came first). Children's raw scores were used.

Results

Separate analyses were conducted for each dependent measure: identification, moral judgment, and punishment. A priori power analyses were conducted in order to determine the appropriate sample size to detect main effects and interactions, with medium effect sizes (*d* of .5) at an alpha of .05, and power of .8. The results of these analyses showed that 88 participants were required to meet these criteria, and therefore, our sample size of 99 participants was sufficient. There were three, fully counterbalanced orders embedded in the story questions: the order of the question types (identification vs. moral judgment and punishment first), the order of the lie/truth questions, and the order of the good/bad questions. The result was eight between-subjects orders, with between 10 and 15 children per cell. Due to the small sample size within each cell, we could not reliably test for the order of all three factors together. Since there is only evidence of an effect of the order of question type in the literature (e.g., Wimmer et al., 1985), we only considered this factor in our analyses, though others have included this factor and have not found an effect (e.g., Bussey, 1992, 1999). Preliminary analyses were conducted for each dependent measure including question order (between-subjects), age (between-subjects), context (misdeed or politeness, within-subjects), and statement type (lie or truth, within-subjects) in mixed-design analyses of variance (ANOVAs) and found no main effects or interactions involving the order factor for any of the dependent measures; as such, order was not included in any of the analyses.

The final analyses consisted of separate mixed ANOVAs for each of the dependent measures with age (4- vs. 5-year-olds) as a between-subjects factor, and context (misdeed vs. politeness) and statement type (lie vs. truth) as within-subjects factors. Significant effects were followed by planned comparisons of the relevant means (when justified). Given that children were required to correctly answer three comprehension questions for their scores to be included for a given story, the number of children in each cell varies slightly. No more than four children were excluded per story, and never more than one child per cell.

Identification

A 2 (age) × 2 (context) × 2 (statement) mixed ANOVA was performed on children's identification of lies and truths. For each story, children received a score of 1 for correct identification of the speaker's statement (chance was 25%). There were eight stories in total, two of each: lie about a misdeed, truth about a misdeed, polite lie, and impolite truth. Therefore, scores ranged from 0 to 2 in each cell with chance performance at 0.5.

As hypothesized, a main effect of context was found, $F(1, 96) = 7.84$, $p = .006$, $\eta_p^2 = .076$. Collapsing across statement type (scores out of 4), children were more accurate in identifying lies and truths in misdeed contexts ($M = 2.73$, $SD = 1.40$) than in politeness ones ($M = 2.46$, $SD = 1.48$). A main effect of statement was qualified by a statement by age interaction, $F(1, 96) = 5.61$, $p = .020$, $\eta_p^2 = .055$. As shown in Figure 1, collapsing across the two contexts (scores out of 4), 4-year-olds correctly identified statements as lies or truths about half the time ($M = 2.35$, $SD = 1.49$ and $M = 2.0$, $SD = 1.50$, respectively), while 5-year-olds did so about three quarters of the time ($M = 2.98$, $SD = 1.42$ and $M = 3.22$, $SD = 1.24$, respectively). Consistent with our predictions, 5-year-olds significantly outperformed 4-year-olds in the identification of lies, $t(97) = -2.12$, $p = .036$, $d = .44$, and truths, $t(97) = -4.35$, $p = .0001$, $d = .89$, and this difference was greater for truths, driving the interaction (which we had not predicted). Also consistent with our hypotheses, children's accuracy was greater than chance performance (Table 1). We found no differences for identifying lies versus truths in either age group.

Moral Judgment

A second 2 (age) × 2 (context) × 2 (statement) mixed ANOVA was performed on children's moral judgments. For each story, children's judgments ranged from a score of −2 (*'a lot' bad*) to +2 (*'a lot' good*); summed scores ranged from −4 to +4 in each cell.

Main effects of context and statement were qualified by a significant context by statement interaction, $F(1, 96) = 11.57$, $p = .001$, $\eta_p^2 = .108$, and a significant Statement × Age interaction,

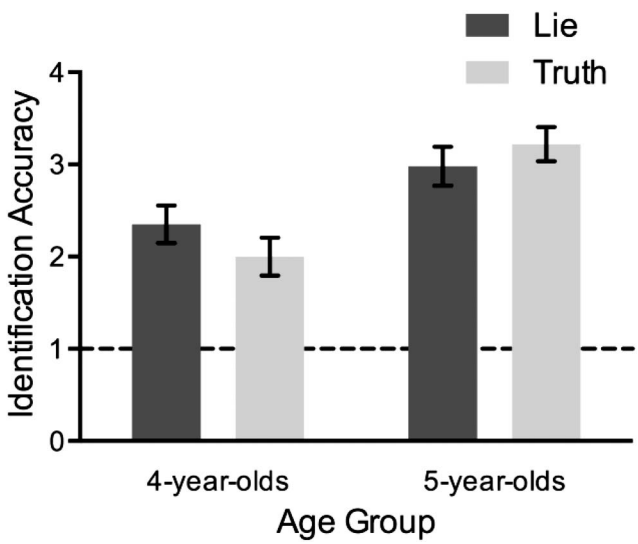

Figure 1. Four- and 5-year-olds' identification accuracy for lies and truths. Statement × Age interaction, scores collapsed across context. Chance (25%) is marked with the dashed line.

Table 1
Comparisons Between Children's Identification Accuracy, by Statement and Context, to Chance Performance (.5 or 25%)

Story type	Mean accuracy (out of 2)	Comparison to chance
Lie—misdeed	1.43	$t(98) = 11.50$, $p = .0001$
Truth—misdeed	1.31	$t(99) = 9.91$, $p = .0001$
Lie—politeness	1.22	$t(99) = 8.21$, $p = .0001$
Truth—politeness	1.24	$t(99) = 8.86$, $p = .0001$

$F(1, 96) = 17.99$, $p = .0001$, $\eta_p^2 = .158$. Following the Context × Statement interaction (Figure 2), planned comparisons revealed that, as predicted, lies about misdeeds ($M = -1.78$, $SD = 2.44$) were rated more negatively than truths about misdeeds ($M = 0.22$, $SD = 2.69$), $t(97) = -5.91$, $p = .0001$, $d = .78$, and politeness lies ($M = -0.25$, $SD = 2.60$) were rated more negatively than impolite truths ($M = 0.51$, $SD = 2.17$), $t(98) = -2.52$, $p = .014$, $d = .11$. Also consistent with our hypotheses, lies about misdeeds were rated more negatively than polite lies, $t(97) = -6.01$, $p = .0001$, $d = .61$, and truths about misdeeds and impolite truths did not differ, $t(98) = -1.09$, $p = .276$. The interaction was driven by the greater discrepancy between lies and truths about misdeeds than between politeness ones.

Comparisons following the Statement × Age interaction (collapsed across context, scores from −8 to + 8) indicated that these findings were driven by the 5-year-olds (Figure 3). Though 4-year-olds did not differentially rate lies and truths (rating both somewhat negatively), $t(53) = -1.39$, $p = .171$, 5-year-olds did, $t(44) = -6.75$, $p = .0001$, $d = .21$, rating lies negatively ($M = -2.91$, $SD = 3.73$) and truths positively ($M = 2.11$, $SD = 3.96$). We did not predict that 4-year-olds would fail to differentiate between lies and truths in their moral judgments. As expected, 5-year-olds' moral judgments of lies were more negative than 4-year-olds' ($M = -1.26$, $SD = 4.73$), though this contrast was only approaching significance, $t(97) = -3.05$, $p = .06$, $d = .39$, and 5-year-olds' ratings of truths were significantly more positive than 4-year-olds' ($M = -0.37$, $SD = 4.73$), $t(97) = -3.05$, $p = .003$, $d = .43$.

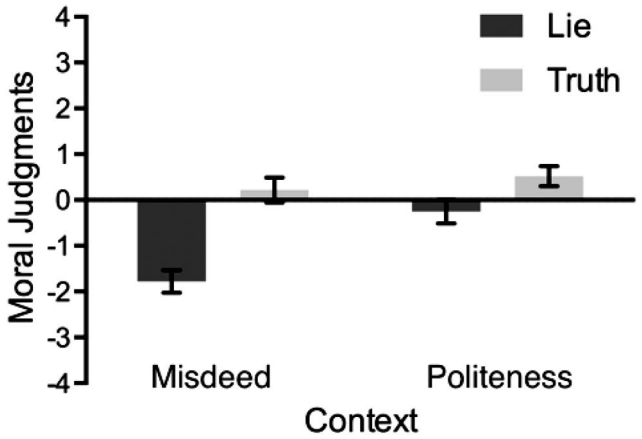

Figure 2. Children's moral judgments of lies and truths in misdeed and politeness contexts. Context × Statement interaction, collapsed across age.

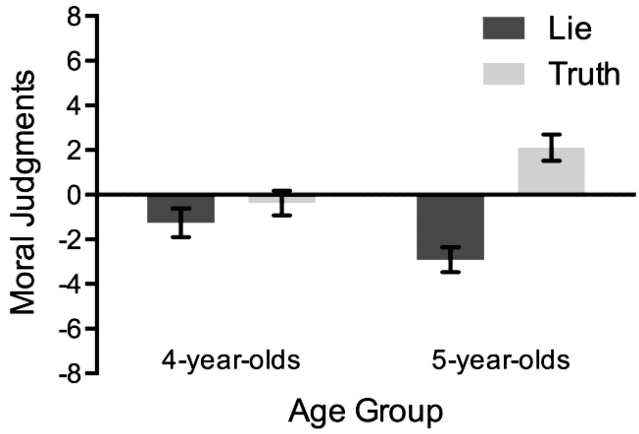

Figure 3. Four- and 5-year-olds' moral judgments of lies and truths. Statement × Age interaction, scores collapsed across Context.

Punishment

A third 2 (age) × 2 (context) × 2 (statement) mixed ANOVA was performed on children's assignment of punishment. For each story, children's punishment assignments ranged from 0 (*no trouble*) to +2 (*'a lot' of trouble*); summed scores ranged from 0 to 4 in each cell.

The findings for punishment paralleled those for moral judgments. Main effects of context and statement were qualified by a significant Context × Statement interaction, $F(1, 96) = 6.11$, $p = .015$, $\eta_p^2 = .015$, and a significant Statement × Age interaction, $F(1, 96) = 10.36$, $p = .002$, $\eta_p^2 = .097$. Following the Context × Statement interaction (Figure 4), planned comparisons again revealed that, as predicted, children assigned more punishment to lies about misdeeds ($M = 2.18$, $SD = 1.60$) than truths about misdeeds ($M = 1.34$, $SD = 1.54$), $t(97) = 4.53$, $p = .0001$, $d = .53$, and to politeness lies ($M = 1.52$, $SD = 1.57$) than impolite truths ($M = 1.15$, $SD = 1.23$), $t(98) = 2.52$, $p = .027$, $d = .26$. Also consistent with our hypotheses, lies about misdeeds were

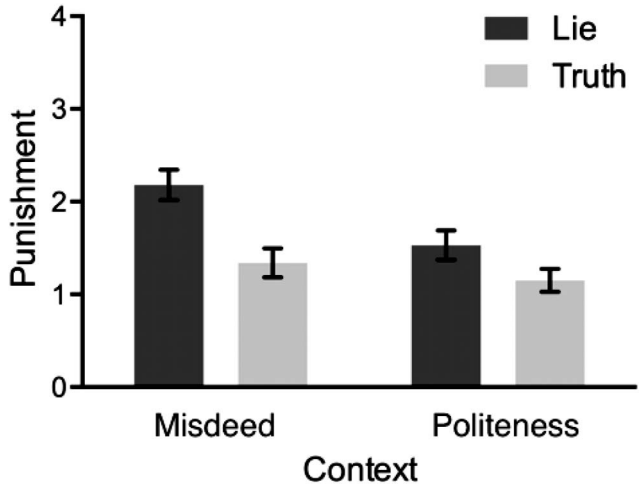

Figure 4. Children's punishment of lies and truths in misdeed and politeness contexts. Context × Statement interaction, collapsed across age.

assigned more punishment than politeness lies, $t(97) = 4.43$, $p = .0001$, $d = .40$, though again, truths about misdeeds and impolite truths did not differ, $t(98) = 1.27$, $p = .208$. Consistent with the findings for moral judgments, the interaction resulted from the greater difference between punishment of misdeed lies and truths than politeness ones.

These findings were again driven by the 5-year-olds (Figure 5). Following the Statement × Age interaction (collapsing across context, scores from 0 to 8), 4-year-olds did not differentially assign punishment to lies and truths, $t(53) = 1.03$, $p = .306$, though 5-year-olds did, $t(44) = 5.40$, $p = .0001$, $d = .95$, assigning more punishment to lies ($M = 4.02$, $SD = 2.61$) than truths ($M = 1.82$, $SD = 2.00$). Though 5-year-olds did not assign more punishment to lies than 4-year-olds ($M = 3.41$, $SD = 3.01$), $t(97) = -1.08$, $p = .285$, they assigned less punishment to truths than 4-year-olds ($M = 3.02$, $SD = 2.66$), $t(97) = 2.49$, $p = .015$, $d = .51$.

Relations to First- and Second-Order False-Belief

To test our second set of hypotheses, we conducted a multivariate analysis of variance on children's identification, moral judgment, and punishment of lies and truths (collapsed across contexts), with children's first- and second-order false-belief understanding as factors, in addition to age (in months), receptive vocabulary, and memory (Table 2 for descriptive statistics). Both age (in months), $F(6, 86) = 2.55$, $p = .026$, $\eta_p^2 = .151$, and receptive vocabulary, $F(6, 86) = 3.34$, $p = .005$, $\eta_p^2 = .189$, were significant factors in children's performance in the omnibus tests and were retained in the model as controls. Forward digit span was not a significant factor and was therefore dropped from the final model.

Because we were interested in testing specific a priori predictions concerning the contribution of first- and second-order false-belief understanding to individual dependent measures, we examined the between-subjects effects rather than the multivariate omnibus F tests. First, the results supported our predictions that children's first-order false-belief understanding contributed to their identification of both lies, $F(1, 93) = 16.91$, $p = .0001$, $\eta_p^2 = .154$, and truths, $F(1, 93) = 21.13$, $p = .0001$, $\eta_p^2 = .185$. Children with higher first-order false-belief scores were more accurate in identifying statements as both lies and truths than children with lower scores. Second, the results also supported our predictions that children's second-order false-belief understanding contributed to both their moral judgments of lies, $F(1, 93) = 4.79$, $p = .031$, $\eta_p^2 = .049$, and their punishment of lies, $F(1, 93) = 4.89$, $p = .030$, $\eta_p^2 = .050$. Children with higher second-order false-belief scores morally judged speakers who told lies more negatively, and assigned them more punishment, than did children with lower scores. Importantly, children's second-order false-belief understanding was not related to their moral judgments or punishments of truths, also consistent with our predictions ($ps > .05$).

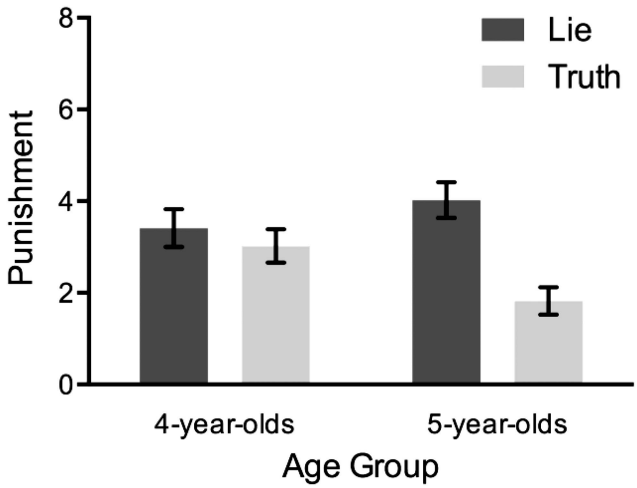

Figure 5. Four- and 5-year-olds' punishment of lies and truths. Statement × Age interaction, scores collapsed across context.

Discussion

The first goal of this research was to extend previous findings on preschoolers' identification and moral understanding of misdeed and politeness lies and truths, using measures that were designed to better assess preschoolers' abilities. Consistent with previous work, we found that both 4- and 5-year-olds were above chance in their identification of lies and truths and that they were more accurate in identifying lies and truths in misdeed contexts than politeness ones (e.g., Bussey, 1999). By comparing the performance of 4- and 5-year-olds, we were also able to capture significant developments in children's identification accuracy within the preschool period. The developmental gains in children's identification accuracy, as we predicted, likely relate to improvements in ToM understanding—a point we return to below.

Notably, 4-year-olds' accuracy in our study was lower than reported in the literature (for details, see Bussey, 1999; Popliger et al., 2011; Talwar & Lee, 2008). The lower identification accuracy we found is likely due to the more stringent method we employed. For each story, between 18 and 27 children identified statements as both lies and truths, or as neither lies nor truths, and were counted as incorrect (an average of around 20%). It seems likely that these children were either responding randomly, or that they failed to fully understand the terms *lie* and *truth*. Given the 50% likelihood of accurately identifying a statement by chance alone using the typical forced-choice scales, the rates reported in the literature may be an overestimate of children's understanding. By requiring a correct answer to both questions, we required that children understand the mutual exclusivity of the terms. Additionally, we screened out more children who may have responded randomly by lowering chance performance to 25% per story. We believe that our method provided us with a much more confident estimate of children's understanding of the terms lie and truth than previous research has provided.

On the contrary, it has been suggested that asking children the lie and truth questions separately is akin to repeated questioning, which may prompt children to change their initial responses (Ceci & Friedman, 2000). If this were the case in the present study, it could result in a few different patterns of responses. One possibility is that children may respond *yes* or *no* to both questions. For example, if a child first answered *yes* that a statement made was a lie, and was then asked the truth question (suggesting to him that his first response was incorrect and that the statement is not a lie), his subsequent changed answer to the truth question would also be

Table 2
Descriptive Statistics

Variable	Full sample		4-year-olds		5-year-olds	
	N	*M* (*SD*)	*N*	*M* (*SD*)	*N*	*M* (*SD*)
Age (in months)	99	58.6 (6.54)	54	53.54 (3.74)	45	64.62 (3.16)
First-order false-belief (out of 3)	99	2.08 (1.08)	54	1.78 (1.14)	45	2.44 (.87)
Second-order false-belief (out of 1)	99	.32 (.47)	54	.28 (.45)	45	.38 (.49)
Forward digit span (max of 10)	98	6.36 (1.55)	54	6.06 (1.52)	44	6.72 (1.51)
PPVT—III	94	71.28 (16.94)	53	63.89 (14.56)	41	80.85 (15.01)

Note. PPVT—III = Peabody Picture Vocabulary Task—Third Edition.

yes. As noted, we observed this pattern of responding approximately 20% of the time for any given story. It is possible that this explanation accounts for the behavior of these children, and we are therefore underestimating performance in cases where an initially correct answer to the first question was discounted by a subsequently incorrect answer to the second question. However, since it was not the case that the same children responded in this way across stories, this kind of reasoning likely only affected children's performance on stories where they were less confident of their answers to begin with.

A second possible pattern of responses is that children may have simply changed their initial response from *yes* to *no*, or vice versa when asked the second lie/truth question—without changing the meaning of their response. That is, if a child first answered *yes* that a statement was a lie, and was then asked the truth question (signaling to her that her first response, *yes*, must have been incorrect), she may respond *no* to this second question. If her initial response was correct she would be given credit for her answers. In effect, this possibility would increase the level of chance to .5 for each set of lie/truth questions and could overestimate performance of children who may have been guessing on the first question. Again, we expect that this only would have affected children's performance if they were unsure about their first response and were guessing, and so believed that the subsequent, "repeated" question was a prompt for them to change their response. Since the question format was consistent across all stories that children heard, it is unlikely that children would have assumed the repeated questioning was meaningful beyond the first few stories.

We also present evidence that preschoolers differentiate between lies and truths in terms of their moral judgments and punishments. Importantly, our findings for moral judgments and punishment tell the very same story (at the group level), providing converging evidence of children's moral reasoning abilities. Overall, children rated lies more negatively and assigned them more punishment than their respective truths in both contexts, and more so in the misdeed context. Though they rated lies about misdeeds more negatively and assigned them more punishment than politeness lies (consistent with Bussey, 1999), they did not differentially judge truths about misdeeds and impolite truths: they rated both truths quite neutrally but assigned both "a little" punishment. The fact that children morally judged the two types of truths somewhat neutrally, but assigned them some punishment makes sense. Though speakers in both cases told the truth (which one would expect to be rated positively), in misdeed contexts they also committed a minor transgression, and in politeness contexts they said something unkind, thus both acts may be seen as deserving some punishment.

The value of including stories in which speakers told truths is that it shows us that children's moral judgments and punishments are about the character's statements, and not just their actions, or whether their statements represented an objective state of reality or a subjective matter of opinion (as reported by Cheung et al., 2015). Within contexts, the speakers' actions are similar whether they tell lies or truths about them, so the differential moral judgments and punishments must result from the statements they made. Between contexts, since speakers who told truths were rated similarly, the differential moral judgments and punishments of lie tellers must reflect the nature of the lies themselves.

In the only other study to compare preschoolers' moral reasoning in misdeed and politeness contexts, Bussey (1999) reported that children (collapsed across age groups) rated truths about misdeeds positively and impolite truths negatively. Our findings were not consistent. Since we allowed children to rate statements as being both good and bad, their overall moral judgments had the possibility of being neutral, which Bussey's 6-point scale did not allow, potentially accounting for this discrepancy. Another difference is that in several of Bussey's politeness stories, the speakers are described as thinking something was awful (dad's new hat), whereas the speakers in our politeness stories held much milder opinions and didn't like or didn't want something (e.g., a backpack). Perhaps impolite truths in Bussey's stories (e.g., "your hat looks awful") were deemed less good than impolite truths in ours (e.g., "no, I do not like your backpack"), driving the differences between our findings. A third possibility is that asking children to rate statements as both good and bad confused them and resulted in ambivalent responding, though we do not believe this to be the case. First, good and bad are not mutually exclusive terms (unlike truth and lie), and children seemed quite comfortable assigning both ratings to characters. Second, at the group level, children's moral judgments were very consistent with their assignment of punishment to the characters, in which only one question was asked. If the moral judgment scales were confusing to children or suggested ambivalence, one would not expect such consistency between these and the punishment findings.

As predicted, we found that 5-year-olds made greater distinctions between lies and truths than 4-year-olds in terms of their moral judgments and punishments; though we did not anticipate that it would be because 4-year-olds would make no moral distinctions between lies and truths at all! This finding is inconsistent with previous research involving 4-year-olds (Bussey, 1992, 1999), and again may result from differences in the scales we used

or the stories themselves. Again, other preschool samples in the literature pool across children from a wider age range, and indeed, our findings for the full sample reflect these.

Though 4-year-olds' identification of lies and truths was better than chance in both contexts, their moral judgments and punishments suggest that they do not fully appreciate the differences between them. Thus, understanding that a statement is a lie does not suffice understanding the moral implications of that lie. Five-year-olds, on the contrary, accurately identified lies and truths more often than 4-year-olds, and judged lies more negatively and assigned them more punishment than truths. Five-year-olds further considered the moral implications of the different contexts, judging lies about misdeeds as "worse" and assigning them more punishment than politeness lies, indicating their sensitivity to the different sets of rules and expectations put in place for informational and politeness contexts. The differences we found between 4- and 5-year-olds' performance on these measures demonstrates that important developmental differences exist within the preschool period. When simple, intended lies and truths are considered, children may first become sensitive to the conceptual differences between them (as evidenced by 4-year-olds' greater-than-chance identification accuracy) and then to the moral implications of these statements (shown only by 5-year-olds).

The second goal of this research was to examine the role of first- and second-order false-belief understanding in children's consideration of lies and truths, given that a consideration of mental states is a critical aspect of a developed understanding of lies and truths. Our finding that first-order false-belief understanding contributed to children's ability to identify statements as lies and truths (above and beyond age and receptive vocabulary) supports the theoretical argument that to identify a statement as a lie or the truth one must consider the beliefs of the speaker. This finding parallels research on children's lie telling, supporting the role of ToM in children's broader conception of lies and truths. This finding also suggests that when deciding whether a character's statement is a lie or the truth, 4- and 5-year-olds are considering that character's belief about his statement and not just whether his statement is true or false. Though researchers have previously concluded that preschoolers' consideration of lies and truths is primarily influenced by the factuality of the statements made and not the speaker's mental states (e.g., Lyon et al., 2013; Piaget, 1932/1965; Strichartz & Burton, 1990), the current findings support the role of belief understanding in this ability.

Additionally, our finding that second-order false-belief understanding contributed to children's moral judgments and punishments of lies suggests that when making moral considerations, one engages in higher-order mental state reasoning, coordinating considerations of the speaker's and recipient's mental states. More specifically, one might represent and reflect on what the speaker thinks about the recipient's beliefs (i.e., whether the recipient believes her statement), what the recipient thinks about the speaker's beliefs and intentions (i.e., whether the recipient believes that the speaker is telling a lie or the truth), and the interplay between the two.

These findings may account for the developmental differences we observed with respect to identification and moral judgments of lies and truths. Though 4-year-olds demonstrated modest accuracy in identifying lies and truths, as supported by their developing false-belief understanding, they did not differentiate between them in terms of moral judgments and punishments, presumably due to their less-developed ability to reason about second-order false-beliefs. Five-year-olds, for whom first-order mental state reasoning is well-established, were more accurate in identifying statements as lies and truths, and distinguished between such statements in their moral judgments and punishments, aided by their developing ability to reason about mental states in the second order.

The role of preschoolers' second-order false-belief understanding in their moral reasoning about lies has not been previously explored and the present findings extend work by Cheung et al. (2015) who reported a marginal relation between older children's second-order false-belief understanding and their differential moral judgments of characters who told misdeed versus politeness lies. We did not expect the role of second-order false-belief understanding to differ between contexts, but rather, that it would be important to the moral consideration of lies in each context. We do not believe that second-order false-belief understanding should have a greater involvement when reasoning about the moral implications of a lie in one context or the other, but that a consideration of the speaker's and recipient's representations of one another's mental states is required to reason about the morality of a lie or the truth in both contexts. Future work should explore factors that may be differentially involved when making moral judgments about lies across different social contexts.

Our findings also contribute to our understanding of the role of second-order false-belief understanding in young children's moral reasoning more generally, and is consistent with other recent research. Fu, Xiao, Killen, and Lee (2014) reported a very similar finding for 4- to 7-year-olds' reasoning about characters' intended and unintended transgressions. They found that children's moral judgments of a character who brought about a negative outcome unintentionally (e.g., accidentally throwing out a classmate's cupcake) related to their second-order false-belief understanding, while their moral judgments of a character that brought about a negative outcome intentionally did not. The same children's understanding of the characters' intentions was significantly related to their understanding of the characters' beliefs (i.e., that the character falsely believed he was throwing out trash). Taken together, this indicates that different considerations are brought to bear when making conceptual and moral considerations of other people's behavior. When classifying an individual's action (e.g., the statement made or action performed), one may only need to consider that individual's mental state. However, when considering the moral implications of that action, one must also consider the mental states of those affected by the act (i.e., the "victims" of the lie or the accident, in these examples).

That being said, future research using a more comprehensive assessment of second-order false-belief understanding is warranted to replicate our findings, since we included only one measure in the present study. Further, other aspects of ToM understanding are also likely to play a role in children's identification, moral judgments, and punishments of lies and truths, and especially across contexts. For example, several studies that have asked children to reason from the perspective of a speaker who has the intention to deceive have found relations to a range of ToM abilities, including visual perspective taking (Bigelow & Dugas, 2009) and interpretive ToM (Hsu & Cheung, 2013). These abilities may also be involved in children's conceptual

and moral understanding of lies and truths, perhaps differentially in misdeed or politeness contexts.

Conclusion

The findings presented here make two important contributions to our knowledge about preschoolers' conceptual and moral understanding of lies and truths. First, we have shown that significant developmental changes take place during the preschool period. Though 4-year-olds' identification of lies and truths is developing, they do not appear to understand the moral implications of such statements. Five-year-olds are not only better able to identify statements as lies or truths, but they differentiate between them, and between different kinds of lies, in their moral judgments and punishments. Second, we have also shown that different aspects of belief understanding are involved when making conceptual or moral considerations of lies and truths. Specifically, the ability to identify a statement as a lie or the truth requires first-order false-belief understanding, while making moral considerations of lies relies on second-order false-belief understanding. This is the first study to empirically investigate the role of ToM in preschoolers' identification and moral judgment of lies and truths at all, and the first to suggest that different aspects of children's reasoning about lies may rely on different kinds of belief understanding.

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Appendix

Example Stories

Misdeed Lie

Ethan's (Jenny) dad was helping him get ready for bed. It was time to brush his teeth. His dad went downstairs to get his teddy bear. Ethan left the bathroom without brushing his teeth. Even though he was supposed to, he didn't brush them. When his dad got back, he asked Ethan, "Did you brush your teeth?" Ethan said, "Yes, I did brush my teeth."

Misdeed Truth

Kira (Quinn) and her brother were tidying up. Kira had to put her books away. Her brother went downstairs to put away his ball. Kira didn't put her books away. Even though she was supposed to put them away, she didn't. When she got downstairs, her brother asked Kira, "Did you put your books away?" Kira said, "No, I didn't put my books away."

Politeness Lie

Maya (Simon) and her sister were choosing a game to play. Her sister found a game that she wanted to play and took it off the shelf. They play that game a lot. Maya wanted to play a different game instead. Her sister wanted to play this game, but Maya wanted to play a different one. Her sister asked Maya, "Would you like to play a different game?" Maya said, "No, I don't want to play a different game."

Impolite Truth

Blake (Payton) was having a friend over for a visit. His friend gave him a present to thank him for the visit. It was a teddy bear. Blake already had the very same teddy bear. His friend gave it to him as a present, but Blake already had the same one. His friend asked Blake, "Do you already have the same teddy bear?" Blake said, "Yes, I do have the same teddy bear."

Received December 9, 2017
Revision received October 18, 2018
Accepted October 19, 2018 ■