
Children's Reasoning about Lie-telling and Truth-telling in Politeness Contexts

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Abstract

Children's reasoning about lying and truth-telling was examined among participants ages 7–11 (total N = 181) with reference to conflicts between being honest and protecting the feelings of others. In Study 1, participants showed different patterns of evaluation and motivational inference in politeness contexts vs. transgression contexts: in politeness contexts, they rated lie-telling more favorably and were far more likely to assume that motives were prosocial. In Study 2, participants evaluated lie-telling more positively and truth-telling more negatively in politeness contexts, especially when they focused on the implications of the statements for others instead of whether the statements were true or false.

Keywords: deception; verbal communication; judgment; social cognition

Introduction

Teaching children to distinguish between right and wrong is a major focus of socialization, and as part of this process, children are taught that truth-telling is good and lie-telling is bad (Kohlberg, 1964; Piaget, 1932/1965). However, children are likely to face challenges as they seek to apply this concept to specific social situations. One important challenge occurs when truth-telling comes into conflict with other values such as avoiding harm to others (Lewis, 1993). For example, if a child were to receive a gift that she does not want, to truthfully admit her feelings about it would risk hurting the feelings of the gift giver. The focus of this article is how children reason about situations in which the values of truth-telling and politeness come into conflict.

Children's reasoning about whether lying is ever acceptable can be viewed within a general framework of moral development, given that honesty is an important topic in discussions about morality (Perkins & Turiel, 2007). Early work on moral development has focused on development with reference to invariant stages (Kohlberg, 1964; Piaget, 1932/1965). For example, Piaget (1932/1965) argued that around the age of 10, children shift from a heteronomous morality stage in which they view rules as moral absolutes to an autonomous morality stage in which they appreciate that rules can sometimes be challenged or violated in order to benefit people, and that judgments of what is right or wrong should be focused more on intentions than on objective outcomes.

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More recently, research examining children's moral reasoning has focused on the tendency to make distinctions between different types of rules and different social contexts (Smetana, 1985; also see Smetana, 2006). This research provides strong evidence that across a range of ages, children tend to differentiate between moral reasoning (which involves issues of welfare, justice, and rights) and other kinds of social reasoning. One key distinction is between moral transgressions, such as hurting others physically or psychologically, and social conventional transgressions, such as dressing inappropriately or using inappropriate table manners. Children and adolescents tend to judge moral transgressions, but not social conventional transgressions, as wrong across social contexts, even in the absence of explicit rules (Turiel, 2002). Children and adolescents also make distinctions between reasoning about the moral and social conventional domains and the personal domain, which involves actions that are of importance primarily to the individual who engages in them (Nucci, 1981, 2001; see Turiel, 2002).

Children's tendency to apply context-specific reasoning to social situations extends to judgments about lying and truth-telling. Perkins and Turiel (2007) found that although adolescents judged lying to be wrong 'in general' and perceived lying to cover up misdeeds to be clearly wrong, they judged lie-telling as acceptable under a number of circumstances. For example, they considered deception of parents as acceptable in response to parental directives that would restrict personal activities or involve moral transgressions.

Other research suggests that younger children, like older children, do not view all lies as reprehensible and make distinctions among different types of lies. Even early elementary school children sometimes find lying to be acceptable in politeness contexts, which occur when there is an opportunity to tell a 'white lie' in order to be polite (see Walper & Valtin, 1992). White lies have been defined as intentional distortions of the truth without malicious intent (Bok, 1978) and usually involve preferences and social relations (Bussey, 1999). In a typical white lie context (Cole, 1986; Saarni, 1984), an individual is given an undesirable gift and is asked if he or she likes it. This situation presents a dilemma because a false claim to like the gift would be inconsistent with socialization messages about the importance of truth-telling, but an honest response may be inconsistent with norms of avoiding harm to others.

There are a number of reasons to investigate how children reason about lie-telling and truth-telling in politeness contexts. Firstly, it speaks to debates within linguistics and philosophy concerning the acceptability of lie-telling when motives are prosocial (see Bok, 1978). For example, Kant (1797/1949) argued that lying is always morally problematic because it undermines meaningful verbal discourse whereas utilitarians such as Mill (1869) argued that the moral implications of lying are context dependent, so lying is wrong only when it has negative consequences (see also Robinson, 1996; Solomon, 1993). Secondly, children's reasoning about white lies has implications for understanding socialization processes. Such an understanding could inform efforts to teach moral reasoning (Peterson, Peterson, & Seeto, 1983) and has implications for how children deal with contradictory socialization forces. Finally, children's reasoning about white lies speaks to their conceptions of lying more broadly. For example, understanding normative development in reasoning about lying has important legal implications, and research on this topic could inform efforts to refine legal definitions of children's competency to testify (Goodman, 1984; Lyon, 2000; Talwar, Lee, Bala, & Lindsay, 2004).

The present work builds upon prior research on reasoning about politeness during the elementary school years (Bussey, 1999; Peterson et al., 1983; Walper & Valtin, 1992) by investigating lie-telling and truth-telling among 7–11-year-olds in contexts in which telling the truth can cause hurt feelings. When investigating this topic, it is important to ensure that the youngest participants understand the relevant social expectations. There is substantial evidence that such an understanding is firmly in place before the age of seven. After receiving a disappointing gift, school-aged children typically manage their emotional expressions so as to appear happier than they really are, and such displays are more common among girls than among boys (Cole, 1986; Saarni, 1984). Cole (1986) demonstrated that children as young as the age of three are sometimes capable of spontaneous control of their disappointed emotional expressions in such circumstances. There is also evidence that young children's capacity to provide deceptive information in politeness contexts extends beyond non-verbal communication. Talwar and her colleagues (Talwar & Lee, 2002; Talwar, Murphy, & Lee, 2007) found that from three years of age onward, children readily told white lies to adults when commenting on an unusual facial mark or when receiving undesirable gifts.

Another consideration in selecting the youngest age group involved the verbal demands of the procedure, in which children were presented with scenarios and asked to make open-ended responses. Our pilot testing suggested that only by the age of seven were children able to clearly and consistently explain the scenarios back to us and provide coherent responses to our open-ended questions.

In each of two studies, an experimenter read participants a set of illustrated stories in which a child protagonist either lies or tells the truth to a teacher. In the politeness contexts, which were of primary interest, a teacher gives a gift to a child protagonist and asks what he or she thinks of it. In the lie-telling story the protagonist falsely claims to like the gift, and in the truth-telling story the protagonist admits his or her negative feelings about it. In each story, participants were asked to make evaluative ratings of what the protagonist said.

We chose adults as the target of lie-telling and truth-telling because it seems likely that it is adults rather than children who serve as the primary socializers about white lies. The spontaneous telling of white lies has been more clearly documented in the literature with adults than with children (e.g., Cole, 1986; Talwar & Lee, 2002; Talwar et al., 2007). We decided that the adults should be described as teachers rather than parents because children may feel so comfortable around their parents that they would feel no need to be polite in such contexts.

To examine whether children's patterns of reasoning within politeness situations would extend to reasoning about lying more generally, participants were also asked to reason about lies in transgression contexts in which a child protagonist intentionally damages a library book and is asked about it by a teacher. In the lie-telling scenarios the protagonist denies the transgression, and in truth-telling scenarios the protagonist admits to it. This situation provides a clear contrast with the politeness context because in a transgression context, children are more likely to receive clear messages about lying being wrong, and telling the truth is unlikely to conflict with other important social values.

Previous research (Bussey, 1999; Peterson et al., 1983; Walper & Valtin, 1992) has shown that elementary school children consider lie-telling more acceptable and truth-telling less acceptable in politeness contexts as compared to transgression contexts. We expected to replicate these findings. We were also interested in whether there might be

age-related changes in children's evaluations. Studies by Bussey (1999) and by Peterson et al. (1983) found no such differences across the elementary school years. However, Walper and Valtin (1992) found that 10-year-olds made significantly more positive evaluations of white lies than did 6- and 8-year-olds. Walper and Valtin (1992) argued that over time, children learn to identify the social contexts in which honesty norms need to be qualified and that the factor most likely to account for this change is 'the development of role-taking skills which allow one to infer and take into consideration the needs and wants of interacting individuals and to coordinate different perspectives' (p. 249).

In response to each story, participants were asked to evaluate a protagonist's true or false statement, and then to respond to an open-ended question. In Study 1, the open-ended question concerned the protagonist's motivation for lying or telling the truth. The question of motives is of particular importance in light of evidence that when individuals reason about lie-telling scenarios they often do not draw the motivational inferences that researchers expect them to, and that children's evaluations are affected by information about the speaker's intentions (Peterson, 1995). A number of researchers have pointed out that possible motivations for lying or otherwise hiding one's feelings can vary widely (Camden, Motley, & Wilson, 1984; Miller & Tesser, 1988; Saarni & von Salisch, 1993) and that lie-telling in politeness contexts can potentially be motivated by self-interest as well as concern for the welfare of others (Gnepp & Hess, 1986). For example, one might claim to like an undesirable gift to further a personal agenda, as would be the case if a child wanted to avoid getting into trouble, or to promote the interests of others, as would be the case if a child wanted to avoid hurting the feelings of the gift giver.

We predicted that children would tend to focus on the impact on others when inferring motivations for lying in politeness contexts. Consistent with this possibility is evidence suggesting that school-aged children clearly understand that lying in politeness contexts can serve to protect the feelings of others (Broomfield, Robinson, & Robinson, 2002; Gnepp & Hess, 1986; Walper & Valtin, 1992). For example, in Walper and Valtin's (1992) study of elementary school children's reasoning about white lies, the authors noted, 'almost without exception all the children understood the motive behind the lie. Even those who at first said that they did not know, said, in the course of the interview, that the truth would have been unpleasant for the addressee' (p. 235). Similarly, Broomfield et al. (2002) found that children who expected others to falsely claim to like a disappointing gift almost always referred to the gift giver when explaining their responses. However, it has not been clearly established that children of this age consider the potential impact on others to be the most salient motive for lying in this context. For example, children may understand that false statements can protect people's feelings but assume that the primary motivation concerns self-interest. This possibility is important to evaluate in light of evidence that elementary school children are aware of the potential benefits of emphasizing or distorting one's emotional responses in social contexts (Zeman & Shipman, 1996).

We were also interested in potential age-related changes in children's assumptions about what motivates people to lie in politeness contexts. During this period, children are likely to experience a range of situations in which there is pressure to regulate their emotional expression in the presence of others (see Saarni & von Salisch, 1993). In addition, at these ages, children are developing a sophisticated understanding of mental life. For example, between the ages of 6 and 11, children show a substantial increase

in their understanding of motives relating to social desirability (Heyman, Fu, & Lee, 2007; Heyman & Legare, 2005). This greater understanding of mental life may facilitate children's ability to reason about the relation between motives and verbal behavior (see also Broomfield et al., 2002, concerning the possibility that second-order beliefs facilitate reasoning in politeness contexts).

In Study 2, participants were asked to provide explanations for their evaluative ratings. Because politeness situations present a conflict for children who are attempting to be both honest and respectful of the feelings of others (see Lewis, 1993), we sought to examine whether children would focus on honesty, the feelings of others, or other factors as they judged the appropriateness of lie-telling and truth-telling. We hypothesized that children who focused on whether the protagonist had been honest would view telling the truth as good and lying as bad. We expected the opposite pattern for children who focused on the impact of the statement on the gift giver: lie-telling would be judged relatively favorably and truth-telling relatively unfavorably. Such a result would suggest that the relatively neutral evaluations of lie-telling and truth-telling in politeness contexts that have been seen in previous studies do not reflect random patterns of responding, and that it might be possible to predict children's moral judgments in politeness contexts based on the aspect of the situation they find most salient.

Study 1

The goal of Study 1 was to determine how 7–11-year-old children would reason about the motives of individuals who make true or false statements. We were particularly interested in whether children would infer that individuals who tell lies in politeness contexts are motivated by a concern for others and whether children's inferences about the protagonist's motivation would be sensitive to the situational context or to the truthfulness of the statement. Understanding how children reason about motives for lie-telling and truth-telling is important in light of evidence that motives carry a great deal of inductive potential for children as they reason about people, such as when predicting how people will feel and act in new situations (Heyman & Gelman, 1998).

Method

Participants. Participants were 103 children (50 boys and 53 girls) in a 7-year-old group ($N = 38$, $M = 7$ years 7 months, range 6 years 10 months to 8 years 2 months), a 9-year-old group ($N = 35$, $M = 9$ years 5 months, range 8 years 10 months to 10 years 2 months), and an 11-year-old group ($N = 30$, $M = 11$ years 2 months, range 10 years 10 months to 12 years 0 month). Participants were recruited from elementary schools with children from diverse economic backgrounds. The sample was 58.3 percent White, 11.7 percent Asian American, 15.5 percent Hispanic American, 3.9 percent African American, and 10.7 percent unknown. The participants were recruited from several schools located in the southwestern USA, and participation rates ranged from about 40 percent to about 70 percent across schools. The socioeconomic status (SES) of students' families varied across schools, from a school in which approximately 60 percent of students received free or reduced-price lunches to a school in which no children received free or reduced-price lunches, and the principal reported that median family income was approximately \$80 000.

Procedure. An experimenter read four short stories to participants in one of two randomly determined orders as part of a study of the development of moral reasoning. The stories were illustrated with colored line drawings.

Before hearing the stories, participants were told, 'Today, I'm going to tell you about some kids who do some things and say some things. I want you to listen carefully because I'm going to ask you some questions about what they say. The questions are only about what the kids say, not what they do, okay? So, for instance, sometimes people do things like eating or drawing and sometimes people say things just like I am saying things to you right now. So the questions I am going to ask you are only about what they say. Is that okay with you?'

The two stories that were of primary theoretical interest described *politeness situations* in which a child protagonist received an undesirable gift from a teacher. In one story the gift was an apple that was too sour, and in the other story it was a slice of cake that was too dry. In each story, the protagonist was described as disliking the gift, and the teacher directly asked the protagonist what he or she thought of the gift. For each participant, one of the two stories (involving either the apple or the cake; counterbalanced across participants) concluded with the protagonist honestly reporting that he or she did not like the gift, and the other ended with the protagonist falsely claiming to like the gift.

Two additional stories were included for comparison purposes and described *transgression situations* in which a child damaged a library book. For each participant, one of the two stories (which involved either drawing on the book or tearing out pages; counterbalanced across participants) concluded with the protagonist honestly reporting that he or she had damaged the book, and the other story ended with the protagonist falsely denying having damaged the book.

Each story was tested in a preliminary study with a different group of participants to address the possibility that children might not always consider intentionally providing inaccurate information to be a lie if the intent is seen as prosocial (see Sweetser, 1987). Results of the preliminary study indicated that children in the targeted age groups are indeed likely to understand the conflict between being polite and telling the truth that is posed in politeness contexts, and that they do not simply avoid the question by defining truthfulness as the most prosocial action to take. Further details about the preliminary study are presented in the Appendix.

Evaluative ratings. After hearing each story, participants were asked to make *evaluative ratings* of the protagonist's statement. Participants were asked whether they thought the response was 'good or bad' using a 7-point scale that has been used in prior research with children of similar ages (e.g., Fu, Xu, Cameron, Heyman, & Lee, 2007). The scale included the following response options: 'very, very good' (represented by three stars, scored as 3), 'very good' (represented by two stars, scored as 2), or 'good' (represented by one star, scored as 1), 'neither good nor bad' (represented by a blank circle, scored as 0), 'bad' (represented by one X, scored as -1), 'very bad' (represented by two Xs, scored as -2), and 'very very bad' (represented by three Xs, scored as -3). Participants were taught how to interpret and make use of this scale prior to the study. For example, they were asked, 'if you thought that something someone said was "very bad" which choice would you point to?'

Motivational inferences. After making their evaluative rating, participants were asked to make a *motivational inference* concerning the protagonist's motive for

making the statement. For example, in the version of the story in which a protagonist (e.g., 'Mark') lied about liking an apple given to him by a teacher, participants were asked, 'Why did Mark say "yes, I like the apple?"' Children's responses were recorded verbatim, and they were not prompted to provide further information.

Coding of Open-ended Responses. Children's responses to the motivational inferences measure were coded independently by two coders.¹ The response categories appear below, along with examples of responses participants made.

Veracity. Responses were coded into this category if they were simple statements about telling the truth, telling a lie, or the factual evidence for the claim. Examples are 'she lied', 'it was truthful', 'she really doesn't like it and doesn't want to lie', and 'he really did tear out the pages'.

Impact on others. This category included references to the impact on individuals other than the protagonist. Examples are 'he didn't want to hurt the teacher's feelings', 'he didn't want to embarrass his teacher', 'someone else might get in trouble', and 'she is afraid it will make him feel bad'.

Impact on self. This category included references to how the response would impact the protagonist. Examples are 'he didn't want to get in trouble', 'he's telling Mrs. Smith he doesn't like the apple in case she gives him another apple', 'because she didn't want to get embarrassed in front of everyone', and 'he didn't want to live with the guilt and if they found out he did it he'd get in more trouble'.

Some responses did not fall into any of these categories and were coded as *other*. Most of these responses involved general statements about the appropriateness of what the protagonist did, should have done, or should not have done, without any reference to the consequences for story characters (e.g., 'She should take things people share with them and say nothing').

For Study 1, Cohen's Kappas averaged .89 (politeness story, truth = .92; politeness story, lie = .88; transgression story, truth = .90; transgression story, lie = .87).

Results

Evaluative Ratings. Based on findings from prior research, we expected children to make a larger distinction between lying and truth-telling in their evaluative ratings of transgression situations than in their evaluative ratings of politeness situations. We also expected that evaluative ratings might differ according to age or gender. We conducted a 3 (Age: 7, 9, 11) by 2 (gender: male, female) by 2 (situation: politeness, transgression) by 2 (decision: truth, lie) ANOVA, with age and gender as between-subjects factors and situation and decision as within-subjects factors. Significant main effects of situation and decision emerged: $F(1, 97) = 10.43$, $p < .01$, $\eta_p^2 = .10$ and $F(1, 97) = 79.89$, $p < .001$, $\eta_p^2 = .45$, respectively. These main effects were qualified by a significant interaction between situation and decision, $F(1, 97) = 132.39$, $p < .001$, $\eta_p^2 = .58$, which is depicted in Figure 1. Children made more neutral evaluative ratings of politeness situation stories and more extreme evaluative ratings of transgression situation stories, with significantly larger differences for transgression stories than for politeness stories. Specifically, in the transgression situation, children evaluated telling a lie ($M = -1.76$, $SD = 1.20$) negatively and telling the truth ($M = +1.37$, $SD = 1.55$)

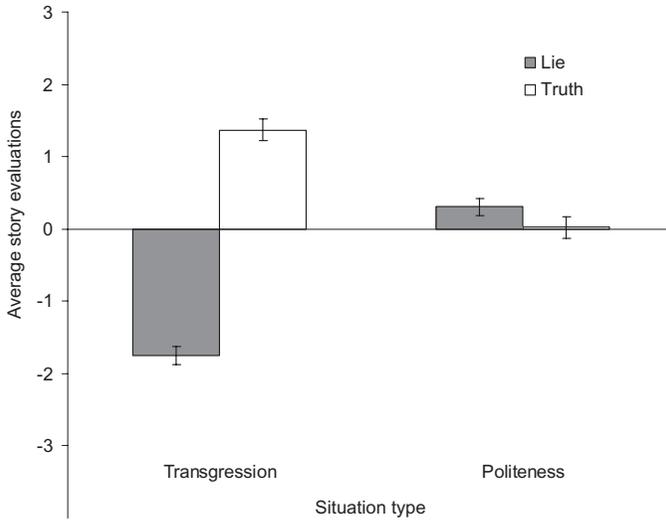


Figure 1. Average Evaluations by Situation Type and Lie Decision in Study 1 (very, very bad = -3; very, very good = 3).

Table 1. Responses to the Motivational Inferences Measure in Study 1, by Coded Group

Coded group	Transgression situation		Politeness situation	
	Told lie	Told truth	Told lie	Told truth
N	103	102	103	103
Veracity	12 (11.65%)	27 (26.47%)	15 (14.56%)	69 (66.99%)
Impact on others	0	7 (6.86%)	78 (75.73%)	5 (4.85%)
Impact on self	89 (86.41%)	62 (60.78%)	4 (3.88%)	15 (14.56%)
Other	1 (.97%)	6 (5.88%)	5 (4.85%)	14 (13.60%)
Multiple codes	1 (.97%)	0	1 (.97%)	0

positively. In the politeness situation, however, children judged lying ($M = +.30$, $SD = 1.34$) and telling the truth ($M = +.02$, $SD = 1.57$) to be equally neutral.

A significant gender by situation by decision interaction emerged, $F(1, 97) = 6.29$, $p < .05$, $\eta_p^2 = .06$. For the politeness situation story in which the protagonist told a lie, boys ($M = +.62$, $SD = 1.23$) viewed the white lie more positively than girls did ($M = .0$, $SD = 1.39$). No other main effects or interactions were statistically significant.

Motivational Inferences. Frequencies of children’s coded responses to the *motivational inference* question are shown in Table 1. The ‘other’ and ‘multiple codes’ groups are listed in the table for descriptive purposes, but they were not central to the study hypotheses and were therefore not included in subsequent analyses. Chi-square analyses were conducted for each of the four story types to determine if observed frequencies differed from a chance pattern of responding. Observed frequencies differed

significantly from chance patterns in all four stories (transgression situation, lie: $\chi^2_{(1)} = 58.70, p < .001$; transgression situation, truth: $\chi^2_{(2)} = 48.44, p < .001$; politeness situation, lie: $\chi^2_{(2)} = 98.62, p < .001$; and politeness situation, truth: $\chi^2_{(2)} = 79.91, p < .001$). Likelihood ratio chi-square analyses were also conducted to determine whether frequencies of coded responses differed according to child age. Age was not related to coded response types for the transgression stories or for the politeness story in which the truth was told. Motivational inferences did differ significantly across age groups in the politeness story in which a lie was told, $\chi^2_{(4)} = 23.92, p < .001$, such that the likelihood of referring to an impact on others increased with age.

As can be seen from Table 1, when protagonists told lies in politeness situations, three-fourths of the children referred to the impact on others whereas less than 5 percent focused on the impact on the self. While at least 60 percent of children in each age group referred to the impact on others, the significant age effect also indicated that responses in this category increased with age (60 percent of 7-year-olds, 84.38 percent of 9-year-olds, and 100 percent of 11-year-olds gave responses classified in this category). It is also interesting to note that all of the responses ($N = 4$) that referred to the impact on the self were generated by the youngest age group. Children's inferred motivations in the truth-telling politeness situation showed a very different pattern: a focus on veracity was more frequent than all other categories combined.

In the transgression situations, children tended to make very different inferences about the motivation of protagonists: references to the impact on the self were more common than all other categories combined for both the lie-telling and the truth-telling contexts. In the lie-telling situation, the vast majority of children assumed that the lie was told to avoid getting into trouble. In the truth-telling situation, these self-oriented statements often consisted of motives to avoid getting in trouble for lying and to avoid guilt or other negative feelings associated with lie-telling.

Discussion

Analyses of the evaluative rating measure suggest that children made a clearer distinction between lying and truth-telling in the transgression situations than in the politeness situations. These findings are consistent with prior research (Bussey, 1999; Peterson et al., 1983) and provide further evidence that children differentiate between different types of lies when making moral evaluations. The lack of age effects also replicates the findings of Bussey (1999) and of Peterson et al. (1983). However, there were age effects in children's inferred motives, with older children more likely than younger children to focus on the impact on others when reasoning about a protagonist's motives for lying in politeness contexts. Nevertheless, even for youngest children, responses referring to the impact on others predominated, and references to the impact on the self were rare.

It is interesting to note that in politeness contexts, 15 percent of participants mentioned self-interest motives for telling the truth. Again, although researchers have identified reasons it might be in children's self-interest to lie in such contexts (Saarni & von Salisch, 1993; Zeman & Shipman, 1996), there has been little emphasis on the ways in which telling the truth might hold positive implications for the self. For children who responded in that way, the primary concern appeared to be with the impact of the teacher's future behavior toward the protagonist. For example, a typical response in this category was, 'If he doesn't like it and if he said he did like it, his teacher might give him another, and he didn't want another one'.

Study 2

Study 2 focused on how children would explain evaluative ratings. Although many studies on children's reasoning about lying have included evaluative ratings, few have systematically examined which factors children focus on when making such ratings. One question was whether children would see the same issues as salient when they are making evaluative ratings vs. when they are making inferences about motives. For example, participants in Study 1 tended to explain motives for lying in politeness contexts in relation to the interests of others, and we wanted to examine whether children would also view the interests of others to be most salient when they explained their evaluative ratings. A related question was whether the types of information that children view as most relevant when making evaluative ratings would differ as a function of truthfulness of the statement, and the situational context (i.e., politeness vs. transgression).

Another question concerned whether the evaluative ratings would be associated with any individual differences that might be seen in the explanations. We expected that children who focused on concerns about others would rate lie-telling in politeness contexts more favorably than would children who focused on the truthfulness of the statement.

Method

Participants. Participants were 78 children (34 boys and 44 girls) in a 7-year-old group ($N = 33$, $M = 7$ years 6 months, range 6 years 10 months to 8 years 1 month), a 9-year-old group ($N = 26$, $M = 9$ years 6 months, range 8 years 9 months to 10 years 2 months), and an 11-year-old group ($N = 19$, $M = 11$ years 5 months, range 10 years 10 months to 12 years 2 months). Participants were recruited from elementary schools attended by children from diverse economic backgrounds. This sample was 47.4 percent White, 2.6 percent Asian American, 33.3 percent Hispanic American, 15.4 percent African-American, and 1.3 percent Native American or Pacific Islander.

None of the participants had been tested as part of Study 1. Some participants were recruited from different classrooms in the same schools as in Study 1, and others were recruited from different schools in the same districts. As in Study 1, schools varied substantially in the SES background of children's families. The overall rate of participation was about 50 percent.

Procedure. The stories and the general procedure were the same as in Study 1. As in Study 1, participants were asked to make *evaluative ratings* of the protagonists' statements using the same seven-point scale. However, rather than being asked to make a motivational inference about the protagonist's response, participants in Study 2 explained why they had given positive, negative, or neutral ratings of each of the protagonists' true or false statements (see Lee, Xu, Fu, Cameron, & Chen, 2001, concerning these types of explanations in modesty contexts). For example, in the version of the story in which a protagonist (Mark) lied about liking an apple given to him by a teacher, a participant who responded that Mark's response was very bad was asked, 'Why do you think what Mark said was very bad?' Although this addressed a different question than the motivational inferences measure in Study 1, we found that the two studies generated open-ended responses that related to the same general underlying themes, and consequently, the same coding system was used. For Study 2,

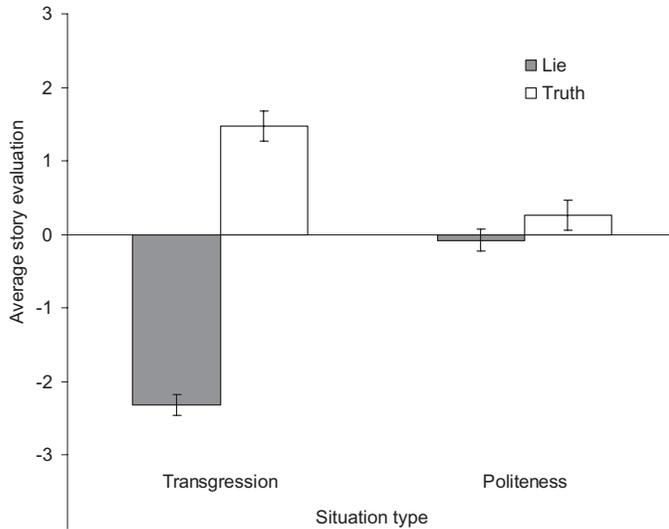


Figure 2. Average Evaluative Ratings by Situation Type and Lie Decision in Study 2 (very, very bad = -3; very, very good = 3).

Cohen's Kappas averaged .87 (politeness story, truth = .79; politeness story, lie = .92; transgression story, truth = .81; transgression story, lie = .97).

Results

Evaluative Ratings. As in Study 1, we conducted a 3 (age: 7, 9, 11) by 2 (gender: male, female) by 2 (situation: politeness, transgression) by 2 (decision: truth, lie) ANOVA, with age and gender as between-subjects factors and situation and decision as within-subjects factors. As in Study 1, main effects of situation and decision were significant: $F(1, 72) = 8.04, p < .01, \eta_p^2 = .10$ and $F(1, 72) = 91.78, p < .001, \eta_p^2 = .56$, respectively. Again, these main effects were qualified by a significant interaction between situation and decision, $F(1, 72) = 110.88, p < .001, \eta_p^2 = .61$, which is depicted in Figure 2. On average, children made more neutral evaluative ratings of politeness stories and more extreme evaluative ratings of transgression stories, with significantly larger differences for transgression stories than for politeness stories. In the transgression situation, children evaluated telling a lie ($M = -2.32, SD = 1.03$) negatively and telling the truth ($M = +1.47, SD = 1.73$) positively. In the politeness situation, however, children judged lying ($M = -.08, SD = 1.63$) and telling the truth ($M = +.26, SD = 1.73$) to be equally neutral. No other main effects or interactions were statistically significant.

Explanations. Frequencies of children's coded responses to the *explanation* question are presented in Table 2. The 'other' and 'multiple codes' groups are listed in the table for descriptive purposes, but they were not central to the study hypotheses and were therefore not included in subsequent analyses. Chi-square analyses were conducted for each of the four story types to determine if the patterns of observed frequencies differed from a chance pattern of responding. Observed frequencies differed significantly from chance patterns in all four stories (transgression situation, lie: $\chi^2_{(2)} = 89.93$,

Table 2. Responses to the Explanations Measure in Study 2, by Coded Group

Coded group	Transgression situation		Politeness situation	
	Told lie	Told truth	Told lie	Told truth
N	78	78	78	78
Veracity	54 (69.23%)	60 (76.92%)	38 (48.72%)	43 (55.13%)
Impact on others	2 (2.56%)	2 (2.56%)	16 (20.15%)	11 (14.10%)
Impact on self	3 (3.85%)	5 (6.41%)	0	3 (3.85%)
Other	11 (14.10%)	11 (14.10%)	12 (15.38%)	20 (25.64%)
Multiple codes	8 (10.26%)	0	12 (15.38%)	1 (1.28%)

$p < .001$; transgression situation, truth: $\chi^2_{(2)} = 95.49$, $p < .001$; politeness situation, lie: $\chi^2_{(1)} = 8.96$, $p = .003$; politeness situation, truth: $\chi^2_{(2)} = 47.16$, $p < .001$). Likelihood ratio chi-square analyses were also conducted to determine whether frequencies of coded responses differed according to age; age was not significantly related to coded explanations in any of the stories.

The modal response category for all stories involved reference to the veracity of the statement. In politeness situations, children were more likely to justify their responses in terms of the impact on others than in transgression situations, especially when a lie was told. Finally, children were more likely to provide explanations that fit multiple coding categories in the lie-telling contexts than in the truth-telling contexts.

Relation between Explanations and Evaluative Ratings. Also of interest was whether children who focused on the impact on others might evaluate a protagonist's lies in politeness contexts more positively, and truth-telling more negatively, than would children who did not share this focus. To examine this issue, analyses were conducted to determine whether children's evaluative ratings of the protagonists' statements differed as a function of their answers to the explanation question. To preserve statistical integrity, only coded explanations provided by 10 or more children were included in analysis; these included reference to the veracity of the story or a focus on the impact on others (see Table 2). Children whose explanations were coded into multiple categories were not included in the analysis; because their responses were unstructured, there was no way to determine which categories were more or less important to them. A total of four one-way ANOVAs were conducted, one for each situation type (politeness, transgression) by decision (truth, lie) group. There were no significant main effects of age or gender or any interactions involving the two; therefore, neither will be discussed further.

Evaluative ratings differed as a function of coded explanations only in the politeness stories; lie: $F(1, 48) = 22.77$, $p < .001$, $\eta_p^2 = .20$; truth: $F(1, 48) = 12.03$, $p = .001$, $\eta_p^2 = .32$. Figure 3 depicts average story evaluative ratings for both politeness stories, stratified by explanation group. When a lie was told, children who focused on the impact on others evaluated the white lie significantly more positively than did children who focused on the veracity of the statement. When the truth was told, children who justified their responses by focusing on the veracity of the protagonist's statement evaluated the protagonist's actions significantly more favorably than did children who focused on the protagonist's impact on others.

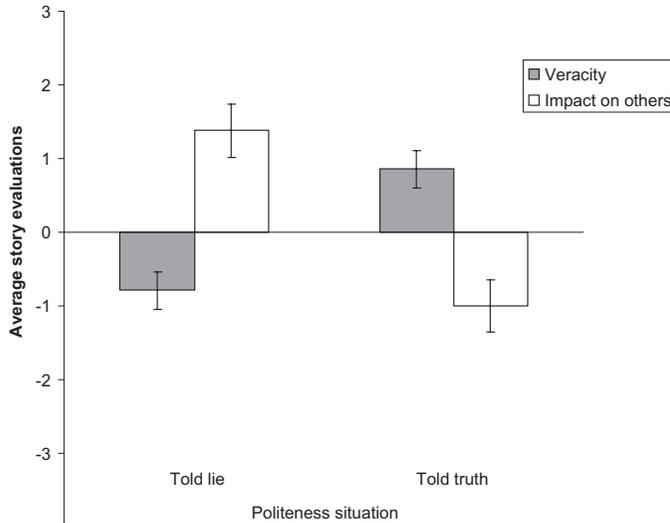


Figure 3. For Politeness Stories in Study 2, the Relation between Children's Evaluative Ratings of Protagonists' Statement (*very, very bad* = -3; *very, very good* = 3) and Their Explanations.

Discussion

Results from analyses of the evaluative rating measure replicated findings from Study 1, which indicated that children made a clearer distinction between lying and truth-telling in transgression situations than in politeness situations, and showed no age-related patterns. Unlike Study 1, however, there was no significant effect of participant gender.

When participants provided explanations for their responses, they most frequently referred to the veracity of the statement in all of the situations. In contrast, responses in this category had been relatively infrequent in Study 1, in which participants had been asked to make motivational inferences rather than to explain their evaluative ratings. This suggests that children have a different focus when they consider the motives for statements than when they consider why statements are good or bad.

Although explanations referring to the veracity of statements were the most common, there was substantial variability in the types of responses, particularly in politeness contexts. Analyses of responses to politeness stories indicated that they systematically related to children's evaluative ratings. Specifically, children who focused on the impact on others in their explanations were more likely to view lie-telling in politeness contexts as 'good' and truth-telling in politeness contexts as 'bad'.

General Discussion

In the present research, participants were asked to reason about a set of politeness stories in which a protagonist received a small gift from a teacher (an apple or a slice of cake) that he or she did not like and either told the teacher the truth about disliking it or falsely claimed to like it. For comparison purposes, transgressions stories were

also presented, in which protagonists damaged library books and either told the teacher the truth about the transgression or falsely denied it.

In both studies, children between the ages of 7 and 11 evaluated lie- and truth-telling very differently in politeness situations as compared to transgression situations (Bussey, 1999; Peterson et al., 1983). In transgression contexts, participants across all ages assessed truth-telling favorably and lie-telling unfavorably. In contrast, in politeness contexts, participants' average ratings for both truth-telling and lie-telling were more neutral. These results replicate prior research demonstrating that children do not consider all lies to be equivalent (Bussey, 1999; Perkins & Turiel, 2007; Peterson et al., 1983; Walper & Valtin, 1992) and are consistent with a wide body of research demonstrating context sensitivity in the way children make evaluative judgments (see Smetana, 2006; Turiel, 2002).

Results of Study 1 indicate that in spite of evidence that children in this age range are aware that lie-telling in politeness contexts often serves their self-interest (Zeman & Shipman, 1996), they rarely focus on this factor when making inferences about the motives of others. Instead, their primary focus is on how the statement will impact others. One might argue that participants viewed the protagonists' concern with the teachers' feelings as motivated by self-interest, given that the teachers' feelings might have implications for how the protagonists would be treated in future interactions. However, at the very least, the present data suggest that children view concern for the feelings of others as a central proximal factor motivating lie-telling behavior in these situations. This may be because by the age of seven, children are already aware of the impact of lying and truth-telling in gift-giving situations (see Broomfield et al., 2002). This early awareness that may result from direct and indirect teaching about this issue is likely to begin in early childhood (see Lewis, 1993). For example, a parent may tell a child to hide negative feelings about undesirable gifts when in the presence of gift givers, or a child might observe a parent expressing positive feelings about a gift when the gift giver is present, and negative feelings later. However, our results also provide evidence that children's beliefs about motives in these contexts are still developing during the elementary school years, as was evident from the age-related change in children's tendency to focus on the impact of others, which constituted 60 percent of responses from the youngest group and 100 percent from the oldest group. This age-related change parallels changes described by Kohlberg (1964) in which children shift from a focus on satisfying one's own needs in Stage 2 to a concern with pleasing others in Stage 3.

In the transgression situations, children made very different types of inferences about the motives of the protagonists than they did in the politeness situations. Notably, regardless of whether protagonists told lies or the truth in transgression situations, participants tended to assume that the statements were motivated by self-interest. Given that even before they reach school age, children often lie about their own transgressions to avoid getting caught (see Lewis, 1993), it is not surprising that participants assumed that individuals who lied about their own transgressions had done so to avoid getting into trouble. Perhaps more surprising is that participants tended to infer self-interest as the most likely motivation for protagonists who told the truth in the transgression contexts, which contrasts with the findings from the politeness contexts. In discussing these motives, some participants mentioned the possibility that protagonists would want to avoid getting into trouble for lying, and others suggested that the protagonists told the truth to avoid feeling bad about lying. These different types of self-interest explanations also raise the point that not all actions that are consistent with one's interests reflect an equally sophisticated moral judgment. It will

be particularly important to further explore children's understanding of anticipated negative social consequences, such as guilt, as potential motivators in lie-telling and truth-telling contexts, given the theoretical importance of emotions in social information processing (see Lemerise & Arsenio, 2000), and evidence that over the elementary school years children become increasingly sophisticated in their understanding of the emotional consequences of moral transgressions (Arsenio & Kramer, 1992).

The results of Study 2 demonstrate that there are individual differences in the factors that children focus on when making evaluative ratings in white lie contexts and that what children focus on systematically relates to how positively or negatively they evaluate lie-telling and truth-telling in these contexts. This result suggests that although children's mean ratings were near the neutral point, it does not indicate that they felt indifferent to lie-telling and truth-telling in general, but instead that some viewed it as more appropriate to tell the truth and others viewed it as more appropriate to lie, and that the preferred option depended upon which aspect of politeness situations they focused on. The clearest pattern was that when participants focused on the truth value of the statements, they evaluated truth-telling more favorably, but when they focused on the emotional impact of the statement they evaluated lie-telling as more favorable.

Limitations and Future Directions

One limitation to the present research is that children were only asked about stories in which protagonists were interacting with teachers. It will be important for future research to determine how these results might generalize to other relationships, in light of evidence that elementary school-aged children's reasoning about what people say about themselves is sensitive to the nature of the intended audience (Banerjee, 2002; Watling & Banerjee, 2007) and that children are aware that individuals can regulate their emotions in different ways when interacting with different people (Zeman & Shipman, 1996). Children may also consider the nature of the relationship between individuals who are communicating within politeness contexts, especially once children appreciate that in close relationships, there tends to be a stronger motivation to protect the feelings of others (see Saarni & von Salisch, 1993).

It should be noted that children's responses to open-ended questions were not probed for further explanations. Such probing could have allowed us to more precisely determine how children were reasoning about these situations, particularly in cases in which participants used broad evaluative terms such as 'nice' or 'bad' without providing more detailed explanations. It also could have allowed us to look more closely at more nuanced age-related changes, including possible changes in the extent to which children make moral evaluations based on how an individual's action affects others that they care about (Kohlberg, 1964). It will also be important for future researchers to explicitly ask children to try to generate multiple responses. It may be that older children would provide a richer mixture of rationales, as they appear to do when explaining non-verbal behavior in these contexts (see Saarni & von Salisch, 1993).

Another direction for future research is to examine how children reason about lie-telling and truth-telling when they are personally involved. For example, one might investigate children's reasoning about whether it would be appropriate for them to lie to others and for others to lie to them. This approach would be useful in light of prior research suggesting that children do not necessarily apply equivalent judgments to

themselves and to others (see Smetana, 2006). For example, children tend to view transgressions that they commit as more acceptable than those committed by others (Slomkowski & Killen, 1992).

A final possibility is to examine children's reasoning about some of the nuances involved in communicating within politeness contexts. In the present research, children were presented with situations in which individuals either told a blunt truth or made an obviously inaccurate statement. It may be that participants' evaluative ratings were affected by their awareness of other possible responses that one might make in these types of situations. Indeed, some participants made reference to alternatives that involved hedging or ambiguity, such as a child who said, 'She should have at least said she didn't really like it, but it's pretty good'. Such responses may be attempts to simultaneously avoid lying overtly and causing hurt feelings, and could reflect early attempts to allow the target of the statement to choose which interpretation he or she wishes to believe (DePaulo & Bell, 1996). This phenomenon could be investigated by asking children to recommend appropriate responses in politeness situations or to evaluate a wider range of possible responses.

Conclusions

The present research shows that 7–11-year-old children tend to focus on the feelings of others when making inferences about what motivates people to tell lies in politeness contexts and that there are individual differences in how children evaluate truth- and lie-telling that relate to whether they tend to focus on the value of truthfulness vs. the value of concern for the feelings of others. The results also point to new directions for future research on children's reasoning in these contexts, including how they think about the longer-term consequences of lie-telling and truth-telling, and the extent to which children of different ages strive to manage conflicts that are caused by the expectation to be both honest and polite.

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Note

1. The coding system was first developed for use in Study 1. The primary coder had extensive experience with coding social cognitive data, and the secondary coder was a trained undergraduate. Both coders were blind to the study hypotheses. Because we were especially interested in whether motivations would focus on self vs. others, we asked the primary coder to start with these categories and then to look for other general themes that emerged, based on a review of approximately 25 percent of the data. The coder worked out the categories reported here, in addition to a detailed set of subcategories (e.g., categories that coded the type of impact to the self or others). The coder coded all of the data and then trained the secondary coder on a small subset (approximately 15 percent) of the data. Because the primary and secondary coder could not reach a high level of reliability on a detailed coding scheme, and because many of the categories were rarely used, subcategories were eliminated. The primary coder then recoded the data and retrained the secondary coder on a small subset of the data. In instances in which responses fit into more than one category, multiple codes were allowed.

Appendix

A total of 94 children (46 boys and 48 girls) participated in a preliminary study designed to assess whether participants would classify lie-telling in politeness contexts as 'lies' and truth-telling in these contexts as 'truth.' Participants included a 7-year-old group ($N = 32$, $M = 7$ years 6 months, range 6 years 11 months to 8 years 2 months), a 9-year-old group ($N = 33$, $M = 9$ year 7 month, range 8 year 9 month to 10 year 2 month), and an 11-year-old group ($N = 29$, $M = 11$ years 4 months, range 10 years 10 months to 12 years 2 months).

Children's classifications of each of the four story conditions are presented in Table A1. As can be seen from the table, children defined providing inaccurate information in politeness situations as lie-telling, and providing accurate information as truth-telling, although they did not consider the distinction between lying and telling the truth to be quite as clear as in the transgression situations. Specifically, in the politeness situation, they identified an inaccurate statement as a lie 84.04% of the time and an accurate statement as the truth 85.11% of the time; in the transgression situation these numbers were 100% and 95.71%, respectively.

Overall, the results of children's classifications are consistent with previous research suggesting that children within this age range make a clear distinction between lie-telling and truth-telling in politeness situations as well as transgression situations (Bussey, 1999; Peterson et al., 1983). This suggests that children in the targeted age range are likely to understand the conflict between being polite and telling the truth that is posed in politeness contexts, and that they do not simply avoid the question by defining truthfulness in terms of the most prosocial action to take.

Table A1. Categorizations of Protagonists' Actions: Frequencies and Percentages of Total Responses

Categorization	Transgression situation		Politeness situation	
	Told lie	Told truth	Told lie	Told truth
Lie	94 (100%)	2 (2.13%)	79 (84.04%)	6 (6.38%)
Truth	0	90 (95.74%)	5 (5.32%)	80 (85.11%)
Something else	0	2 (2.13%)	10 (10.64%)	8 (8.51%)