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## Lying and Truth-Telling in Children: From Concept to Action

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Although there has been extensive research on children's moral knowledge about lying and truth-telling and their actual lie- or truth-telling behaviors, research to examine the relation between these two is extremely rare. This study examined one hundred and twenty 7-, 9-, and 11-year-olds' moral understanding of lies and their actual lying behaviors in a politeness situation. Results revealed that as age increased, children increasingly evaluated others' lying in politeness situations less negatively and were more inclined to tell lies in such situations themselves. Contrary to previous findings, children's sociomoral knowledge about lying was significantly related to their actual behaviors, particularly when children's rationales underlying their moral judgments were consistent with their motives for actual lie- or truth-telling in the politeness situation.

Lying is a common social phenomenon. It occurs regularly in various social contexts for a multitude of purposes. For children, there are two types of lies that are of great importance during their socialization. One type is the lies that violate moral rules as they are typically told to benefit oneself at the expense of others. As a result of the antisocial nature of this type of lie, it is universally discouraged by children's caregivers and teachers from a very early age. The other type of lies are those that are told with an intention to help, not harm, another individual (e.g., faking liking an undesirable gift in front of a gift-giver) and are thus prosocial in nature. Although philosophers and theologians have long debated about whether prosocial lies should be morally sanctioned (Bok, 1978), in everyday practice, such lies are told frequently (DePaulo & Bell, 1996; DePaulo & Kashy, 1998) and often entail positive values (Nyberg, 1993). Some theorists such as Sweetser (1987) have even suggested that in

some situations prosocial lies are not only socially acceptable but also are not lies at all.

There has been extensive research on the development of lying that dates back to the beginning of developmental psychology (e.g., Binet, 1896; Darwin, 1877; Piaget, 1932). This long-standing interest in this topic is a result of the fact that lying can serve as a window into many aspects of children's developing minds, for example, intelligence (Binet, 1896; Lewis, 1993), theory of mind (Chandler, Fritz, & Hala, 1989; Leekam, 1993; Peskin, 1992; Peterson, 1995; Peterson, Peterson, & Seeto, 1983; Polak & Harris, 1999; Sodian, 1991; Talwar, Gordon, & Lee, 2007), moral understanding (Piaget, 1932), personality and character formation (Hartshorne & May, 1928), and children's competence as witnesses in the courts of law (Goodman et al., 2006; Lyon, 2000; Strichartz & Burton, 1990; Talwar, Lee, Bala, & Lindsay, 2002, 2004; for a review, see Lee, 2000).

### *Research on Antisocial Lying*

To date, most studies have focused on the development of antisocial lies and can be divided into

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two major streams. One stream investigates children's conceptions and moral judgments of antisocial lies. Extensive research has revealed that children from very early on are taught explicitly or implicitly about the negative moral implications associated with antisocial lies. They are also strongly discouraged from telling this type of lie (Cameron, Chen, & Lee, 2001; Wilson, Smith, & Ross, 2003). Perhaps for this reason, the conceptual understanding of antisocial type of lies emerges as early as 3 years of age (Siegal & Peterson, 1998; Talwar et al., 2002). With regard to children's moral judgments of lying, evidence shows that even preschoolers understand that antisocial lies entail negative moral implications (Bussey, 1992, 1999; Talwar et al., 2002).

The other stream of research, pioneered by Binet (1896), Darwin (1877), and Hartshorne and May (1928), examines children's lying behavior for trickery, personal protection, or benefit (Chandler et al., 1989; Lewis, Stanger, & Sullivan, 1989; Peskin, 1992; Polak & Harris, 1999; Talwar & Lee, 2002a). It has been found that even preschoolers tell lies with intent to deceive (Chandler et al., 1989; Peskin, 1992). Young child lie-tellers are generally skilled in masking their nonverbal behaviors (e.g., making eye contact while lying; Lewis et al., 1989; Talwar & Lee, 2002a) but poor at concealing their deception in their verbal statements (e.g., blurting out the name of a toy that they claimed not to have peeked at; Polak & Harris, 1999; Talwar & Lee, 2002a, 2008; Talwar, Gordon, et al., 2007).

### *Research on Prosocial Lying*

In contrast to the extensive literature on antisocial lying, there is very limited research on the development of lie-telling for politeness purposes. Research on this issue should offer a unique perspective for understanding social development in children owing to the multifaceted nature of prosocial lie-telling. More specifically, to take an appropriate action in a politeness situation, one must assess, and reason about, both moral and social conventional rules regarding interpersonal interaction. Turiel and his colleagues (Helwig & Turiel, 2002; Nucci & Turiel, 2000; Smetana & Turiel, 2003; Turiel, 2002) have found that moral and social conventional rules are distinctive domains in the realm of social life and social thought. Moral rules are concerned with what is right and what is wrong as well as regulating how individuals ought to behave toward each other based on the principles of welfare and justice. In contrast, social conventional

rules are concerned with uniformities that define social expectations regarding appropriate behaviors within a specific society and serve functions of social coordination. Typically, these rules deal with individuals' social thoughts and actions in their respective domains. For example, moral rules prohibit killing of another human being, whereas social conventional rules may require one to dress properly at a formal social gathering.

Politeness, however, cuts across both domains. In the politeness situation, one must assess, and reason about, the applicability of various moral and social conventional rules to take a morally and socially appropriate action. More significantly, the politeness situation brings to the fore the inherent contradictions in the rule system in either the moral or social conventional domains, respectively. In the moral domain, the concern for others' well-being and the need to avoid harm should motivate one to tell a prosocial lie (e.g., "I really like your gift" or "You look great in that dress") rather than telling the blunt truth (e.g., "I do not like your gift" or "You look fat in that dress"). However, lying, or making a false statement with an intent to deceive, has long been considered to be a serious moral transgression by philosophers and theologians, such as St. Augustine (1952), Kant (1949), and Bok (1978), because lying impinges on the lie recipient's right to information and freedom of choice (Grice, 1980; Krupfer, 1982). Children have also been socialized to take this view of lying from very early on in life (Cameron et al., 2001; Wilson et al., 2003).

In the social-conventional domain, there are also contradictory rules concerning interpersonal communication, particularly in the case of politeness are clearly demonstrated. On one hand, Grice (1980) suggested that one of the most fundamental conventions governing interpersonal communication is the Maxim of Quality. This maxim requires speakers to inform, not misinform, their communicative partners, which is commonly assumed to be the case when individuals enter into a conversation. Prosocial lies clearly flout this maxim. On the other hand, Lakoff (1973) proposed that interpersonal communications must also adhere to the Rule of Politeness that requires speakers to be amicable to their communicative partners. In the politeness situation, this rule calls for individuals to not tell the blunt truth to establish or maintain an amicable relationship with another.

The existing evidence suggests that many adults have little difficulty in resolving the conflicts evoked by the politeness situation. Typically, they allow that the need to be polite and to avoid

hurting others overrides the need to be truthful. For this reason, adults not only endorse prosocial lies (Lee & Ross, 1997) but tell them regularly (DePaulo & Bell, 1996; DePaulo & Kashy, 1998). In contrast, for children, the politeness situation poses a challenge to children who are still in the process of acquiring moral and social-conventional rules of their society. Resolving conflicts between these rules places additional demands on them. Although the politeness situation may be a challenge for developing children, it offers a naturalistic opportunity for developmental researchers to understand whether children are capable of making strategic trade-offs when facing social situations where rules are in conflict as well as how they select and apply rules adaptively in different social situations.

To date, there are only three studies that have examined children's actual behavior in a politeness situation. Talwar and Lee (2002b) used a Reverse Rouge task in which the experimenter had a conspicuous mark of lipstick on the nose. The child was asked to take a picture of the experimenter, but before the picture was taken, the experimenter asked, "Do I look okay for the picture?" Results showed that 89% of children between 3 and 7 years of age stated that the experimenter looked okay. However, when the experimenter left, children told another adult that the experimenter actually did not look okay. Thus, the researchers concluded that young children can tell prosocial lies in a politeness situation. However, because children were not probed about why they told such a lie, it is unclear whether the children in the study considered the contradictory rules evoked by the situation when deciding to lie. Furthermore, among the children who lied, it was unclear as to whether they told lies to spare the feelings of the experimenter (a prosocial lie) or to avoid potential negative consequences if the truth was told (a self-protective lie).

In another study (Fu & Lee, 2007), Chinese children aged between 3 and 6 years were asked to rate pictures that were poorly drawn by confederates. Most children, except for the youngest ones, gave the drawings more positive ratings in front of the confederates than when the confederates were absent. Thus, like Western children, Chinese preschoolers appeared also to refrain from telling the blunt truth to others (i.e., the pictures were poorly drawn). However, because the children were not probed about their motivation for inflating their ratings, it is not clear whether they did so for the benefit of the confederate (e.g., sparing the feelings of the confederate) or for themselves (e.g., avoiding negative consequences if the truth was told).

In the third study, Talwar, Murphy, and Lee (2007) used a disappointing gift paradigm to examine children's prosocial lie-telling. Children played a game where they were promised a gift from a gift basket that contained a range of different toys and gifts. After the task, children received an undesirable gift of soap instead of a toy and were questioned by the gift-giver about whether they liked the gift. In this situation, children had to reconcile their desire for a better gift with the competing social and moral requirement to be polite. When asked if they liked the gift, the majority of children told the gift-giver untruthfully that they liked the disappointing gift, despite having told their parents that they did not like the gift. School-aged children were more likely to lie than were preschool children. However, this study also did not systematically probe children's justifications for their lies. Thus, it is again not clear whether some children were more motivated to lie for self-protection (e.g., avoiding negative responses from the gift-giver if the truth was told) or to be polite and protect the gift-giver's feelings.

In contrast to the paucity of research on children's actual prosocial lie-telling behaviors, there is some, albeit limited, research on children's conceptual understanding of prosocial lies. With regard to children's concept of prosocial lies, Lee and Ross (1997) found that adolescents aged between 12 and 14 years and college students were less inclined to classify untruthful statements as lies when told with the intent to help another individual than when told to harm. Their results confirmed Sweetser's (1987) theoretical contention that untruthful statements deliberately told to help another individual and to be polite may not be considered lies. In contrast, Bussey (1999) reported that most children aged between 4 and 11 years classify all types of untruthful statements as lies regardless of their anti- or prosocial nature. This finding suggests a possible developmental change in terms of the concept of prosocial lies during adolescence.

With regard to moral judgments, Bussey (1999) found that children during preschool and elementary school years tended to give negative ratings to prosocial lies. Nevertheless, beginning from 4 years of age, their ratings of prosocial lies were not as negative as those given to trickery or antisocial lies. Broomfield, Robinson, and Robinson (2002) further found that children aged between 4 and 9 years would suggest that a story character should tell a lie about liking an unwanted gift to make the giver believe the gift was liked. The children also judged that the gift-giver would be happy when hearing

the lie. The results of Broomfield et al. (2002) were replicated in China (Zeng, 2004). However, Walper and Valtin (1992) found that children only began to give prosocial lies positive evaluations at the end of the elementary school years. These findings taken together suggest that children's conceptual understanding of prosocial lies begins in preschool years and develops throughout the childhood. They appear to be able to consider the contradictory rules evoked by the politeness situation when evaluating prosocial lies, but only in late childhood do children appear to allow the need to be polite and avoid hurting another's feelings override the need to be truthful. It should be noted that this conclusion is tentative because these studies did not probe children about the underlying rationales for their evaluations.

No studies have examined the relation between children's conceptions of prosocial lie-telling and their actual lying behavior. Research on the general relation between children's social and moral conceptions and their actual behaviors is of significant importance because the ultimate purpose of socialization is to ensure that children not only know morally what is right or wrong and conventionally what is appropriate or inappropriate, but that they also act accordingly. Existing studies with children and adults concerning Kohlbergian moral dilemmas as well as antisocial lying have shown either weak or no linkages between individuals' moral knowledge and moral action (Arnold, 1989; Blasi, 1980; Talwar et al., 2002, 2004; Thoma & Rest, 1986). Multiple theories have provided a variety of explanations as to why individuals fail to act according to their conceptual knowledge about moral or social rules (Arsenio & Lemerise, 2004; Crick & Dodge, 1994; Huesmann, 1998; Rest, 1986; Walker, 2002), including situations involving aggression (Crick & Dodge, 1994; Huesmann, 1998) or prosocial behaviors (e.g., Rest, 1986). A major factor contributing to this disconnection is the difference in the interpretation of hypothetical situations used to assess moral and social *knowledge* and interpretations of actual situations that call for morally and socially appropriate *behavior*. This is particularly true for situations where contradictory moral and social rules may apply. For example, in a politeness situation, individuals may interpret the need to be polite and to avoid hurting another to be the primary concern and thus advocate hypothetically that one should tell a prosocial lie in such a situation. However, when encountering the same situation in reality, they may interpret the situation to require only for the fulfillment of the need to be

truthful and thus tell the truth. Alternatively, individuals could interpret the hypothetical situation to be concerned with the need to be truthful but the real-life situation to be concerned with the need to be polite and to avoid hurting another. In both cases, a disconnection between conceptual knowledge and action results.

Thus, to examine empirically the relation between children's *conceptual knowledge* about prosocial lie-telling and their *actual* lying behavior, two methodological measures must be taken. First, one must examine children's interpretations of hypothetical politeness stories that are used to assess their understanding of prosocial lie-telling. Second, one must also obtain children's interpretations of their own actions in the politeness situation. Such methodological measures were not taken in the previous studies, which leaves gaps in our knowledge about: (a) the age at which children begin to understand the politeness situation to be a situation where one needs to consider the need to be truthful and the need to be polite and avoid hurting another, (b) the age at which they begin to tell lies for prosocial reasons, and most importantly, (c) whether children's conceptual understanding of prosocial lie-telling is related to their actual behaviors in the politeness situation. This study was conducted to bridge the gap in the literature and to address these three important questions.

In the present study, we assessed 7-, 9-, and 11-year-old Chinese children's conceptual understanding of prosocial lie-telling and blunt truth-telling in a politeness situation. The three age groups were chosen because existing studies have shown that children's conceptual knowledge about prosocial lie-telling appears to undergo systematic changes during this period (e.g., Broomfield et al., 2002; Bussey, 1999; Walper & Valtin, 1992; Zeng, 2004). Also, this developmental trend appears to be similar between Western and Chinese children (see Broomfield et al., 2002; Zeng, 2004). The Chinese children were read stories in which story characters encounter politeness situations (e.g., receiving an undesirable gift). The story characters either made truthful or untruthful statements. Children were asked to classify the statements as lies or truths. Also, they were asked to evaluate the statements either positively or negatively and to justify their ratings. Children were also asked to respond to control stories in which a story character receives a desirable gift and likes it and tells the truth or lie about it. The use of these control stories was to ensure that children's categorizations and moral judgments of lie- or truth-telling about undesirable

gifts would not be simply responses to truthful and untruthful statements in general.

Furthermore, we placed the children in a real-life situation where they themselves must decide whether to tell the truth or lie. In this situation, children were given an undesirable gift and then asked by the gift-giver whether they liked the gift. This method was a modified version of the undesirable gift paradigm pioneered by Saarni (1984) and Cole (1986) to examine children's expressive display rule use, and adapted for examining children's lie-telling by Talwar, Murphy, et al. (2007). The undesirable gift situation was chosen because this is a situation that occurs commonly in children's lives (e.g., receiving a poorly fitting knitted sweater from grandparents as a birthday gift), and children are socialized from early on to dissemble their true feeling of disliking in such situations. Indeed, from 4 years of age, children are already able to dissemble their nonverbal (Cole, 1986; Saarni, 1984) or verbal behaviors (Talwar, Murphy, et al., 2007) to appear pleased about receiving an undesirable gift.

Given the previous findings, we expected children in our study would also dissemble verbally and tell the gift-giver a prosocial lie that they liked the undesirable gift. This tendency to lie would increase with age. With regard to children's concept of prosocial lie-telling, based on the results of Bussey (1999) and Lee and Ross (1997), we predicted that children in general would classify untruthful statements told for prosocial purposes as lies and this tendency would decrease with age. With regard to children's evaluations of prosocial lie-telling, based on the results of Bussey (1999) and Walper and Valtin (1992), as age increased, children would be more inclined to rate prosocial lies less negatively than lies told for nonprosocial reasons. Also, with increased age, children would increasingly weigh the relative importance of being truthful versus being polite and avoiding hurting another when making evaluations and use the latter rather than the former to justify their ratings. Finally and most importantly, a significant relation between children's conceptions of prosocial lies and their actual behavior was expected. We hypothesized that this possible relation can be established when children's motives for their actions are consistent with the rationales underlying their moral judgments. For this reason, after children in this study told either the truth or a lie, they were asked about the reasons for their actions. We expected that the relation between children's conceptual understanding of prosocial lie-telling and their actual behavior would be stronger when

the concerns for politeness and avoidance of hurting others motivated both their evaluations and their actions.

## Method

### *Participants*

A total of 120 Chinese children participated: forty 7-year-olds ( $M = 7.30$  years,  $SD = 0.19$ ; 20 boys), forty 9-year-olds ( $M = 9.18$  years,  $SD = 0.14$ ; 20 boys), and forty 11-year-olds ( $M = 11.21$  years,  $SD = 0.13$ ; 20 boys). The children were recruited from a large elementary school of close to 1,000 students in a southeastern city in P.R. China (population: 10 million). The school was chosen because it was highly representative of an elementary school in the city in terms of its ethnic composition as well as parental income, occupation, and educational levels according to the school records. Student admission to the school was determined by the location of the neighborhood where the children and their family lived rather than other criteria (e.g., parental professional standing, job affiliation, or the child's scores of entrance examination). The neighborhood from which the children came was highly diverse in terms of parental income, occupation, and educational levels. The children were Han Chinese, which represents 98% of the population in the city and 90% of the P.R. China population. We did not measure the socioeconomic status of the participants' family because no reliable and accurate measures were available. The children were selected from their classes based on the following factors: guardian consent, home classroom teacher's consent, the children's own verbal assent, and the requirement to balance the numbers for boys and girls per age group.

### *Materials and Procedures*

Children were seen individually in a quiet room in their school. They participated in two sessions: One session examined whether children would tell a prosocial lie (undesirable gift procedure), and the other assessed children's conceptual understanding of lies and truths in politeness situations (moral story procedure). The two sessions were separated by 10 days and counterbalanced between subjects. Half of the children participated in the undesirable gift procedure first followed by the moral story procedure, and the other half did the opposite.

*Moral story procedure.* Experimenter 1 introduced herself as a student teacher from a local university

and read children four stories accompanied by pictures. Before beginning the stories, children were first trained about how to use a 7-point Likert scale. The positive, neutral, and negative ratings were symbolized by red stars, a circle, and black crosses as follows: very very good (three stars), very good (two stars), good (one star), neither good nor bad (a circle), bad (one cross), very bad (two crosses), and very very bad (three crosses). Children's verbal responses were then converted into a 7-point numeric scale from -3 to 3 with 3 representing *very very good*, 0 representing *neither good nor bad*, and -3 representing *very very bad*.

In the stories, a child protagonist interacted with a teacher from the school. The stories were modified from those used in the previous studies on prosocial lie-telling (Bussey, 1992; Lee & Ross, 1997; Walper & Valtin, 1992). In one story, a child receives a gift that he dislikes but tells his teacher, the gift-giver, that he likes the gift (the prosocial lie-telling story). In the second story, a child receives an undesirable gift and tells the teacher the truth (the blunt truth-telling story). In the third story, a child receives a desirable gift but states falsely that she does not like the gift (the control lie-telling story). In the fourth story, a child receives a desirable gift and states truthfully that she likes the gift (the control truth-telling story). Existing studies (e.g., Bussey, 1992; Talwar et al., 2002) have consistently shown that children from preschool years tend to rate lying depicted in the control lie-telling story very negatively and truth-telling in the control truth-telling story very positively. Children's ratings for these two stories thus could be used to be compared to their ratings for the prosocial lie-telling and blunt truth-telling stories, respectively. The presentation of the stories was counterbalanced across subjects. The moral story procedure lasted about 10 min.

The actual stories are described in the following.

1. *Prosocial lie-telling story*: This is Ming Ming. He did very well in a math competition. His teacher gave him a pencil box as a gift. But Ming Ming already had many pencil boxes at home. He did not want any more of this kind of pencil box. So Ming Ming didn't like the gift his teacher gave him. The teacher asked him: "Do you like the pencil box?" Ming Ming said: "Yes, I like it very much."
2. *Blunt truth-telling story*: The final exam was finished and Xiao Qiang did very well. The teacher gave a book to Xiao Qiang as a gift when she distributed the grade report. When

Xiao Qiang received the book, she found she already had this book at home. She already knew the book very well and wanted to read a new book. So Xiao Qiang didn't like the gift that the teacher gave to her. The teacher asked Xiao Qiang, "Do you like the book?" Xiao Qiang answered, "No, I don't like it."

3. *Control lie-telling story*: The teacher knew that many students in the class would celebrate their birthdays. Today is Xiao Hao's birthday. So she gave Xiao Hao an eraser as a birthday gift. Xiao Hao received the eraser and thought it looked cute. He liked the eraser. The teacher asked Xiao Hao, "Do you like the gift?" Xiao Hao said to the teacher, "No, I don't like the eraser."
4. *Control truth-telling story*: The teacher brought some landscape color pictures from home as a gift to give to the students in the class. Li Li thought these pictures were beautiful. Li Li was a representative of the class and went to the office to turn in the students' homework after class. The teacher wanted to know if the students liked the pictures. She had asked many of her students, but hadn't asked Li Li. So the teacher stopped Li Li and asked, "Do you like the picture I give you?" Li Li said, "Yes, I like it."

After being told each of the stories, the participants were asked the following questions: (a) Question 1 (categorization question): "Is what XXX (the name of the protagonist) said a lie or not a lie?" (If the participant replied "not a lie," they were asked "Is what XXX said the truth or not truth?"); (b) Question 2 (moral evaluation question): "Is what XXX said very very good, very good, good, neither good nor not bad, bad, very bad, or very very bad?" Children were asked to indicate their responses on the Likert scale they had been trained on. Finally, children were asked to justify their ratings (rating justification question): "Why do you think it is XXX (the child's rating)?"

The coding system of children's justifications was developed in the following manner. First, the potential types of responses were obtained based on the reports and discussions of the several existing studies (Bussey, 1999; Peterson et al., 1983; Walper & Valtin, 1992). Second, all types of responses provided by participants were reviewed by the research team members to obtain additional types of responses if any existed. Third, because participants did not provide a diverse array of justifications,

the final coding system only contained the following types of response categories. The first type referred the need to be polite and protect another person's feelings as justification (politeness justification; e.g., "It is not polite if I say I don't like it" or "It would not be nice" or "It would be embarrassing"). The second type made reference to the need to be truthful (honesty justification; e.g., "He didn't like it" or "You should tell the truth"). The third type made reference to both politeness and honesty justifications (both justifications; e.g., "Saying liking it will make the teacher feel better, but it is lying"). We also created an "other" category for responses (e.g., "I don't know") that did not fall into one of the three categories. Two graduate students who were naïve to the hypotheses of the study were trained to code children's responses according to these categories.

*Undesirable gift procedure.* In the procedure, children were seen individually by Experimenter 2 in a quiet room in their school. The child's teacher introduced the experimenter as a student teacher from a local university. The experimenter brought children to a quiet room in their school. She told the participants that they were going to take two memory tests. If they did well on both tests, they would receive a gift selected from a gift box. Children were shown each item from the box. They were ball-point pens, stickers, coloring books, flash cards, and pencils. Pilot testing showed that school-aged children liked the attractive and colorful pens, stickers, and coloring books, but disliked the plain-looking flash cards and pencils. Children were asked which item they would like to receive as a gift and which they would not like to receive (the Gift Preference Assessment). Consistent with the findings of the pilot study, no child liked the flash cards and pencils. Upon identifying the liked and disliked gift items, children were told that they would receive the gift item they liked the most if they passed the tests. Then, the experimenter administered a short-term memory test (a subtizing task) in which a number of pencils were shown briefly and children were asked to report how many pencils they saw. To ensure all children succeed in the test, the number of pencils shown was smaller than what would be expected to be remembered by children at the same age as the participants, which was determined by pilot testing. After all participants passed the test, they were praised. The experimenter told the children that she just remembered that she had to finish unspecified business and had to leave the room for a few minutes. Their own teacher would have to administer

the second test and give them the gift if they also passed the second test.

After the participants' own teacher entered the room, the experimenter left. The teacher administered a digit span test similar to the subscale in Wechsler Intelligence Scale for Children, Fourth Edition (WISC). Based on the norms of the WISC, only those test items that were known to be easy for the participants' age were chosen. After all the participants passed the second test, the teacher said to the children: "You did very well on both tests, so I am going to give you a gift." She pointed to the gift items in the gift box and said: "The student teacher bought some of the gifts (pointing to the attractive ones). I bought these gifts (pointing to the unattractive ones). Let me give you the one I bought as a gift." Then, she handed over an unattractive gift to the child. After the child had the opportunity to inspect the gift, the teacher asked: "Do you like the gift I have given to you?" (Liking Question 1).

After the children received the gift and responded to the Liking Question 1, the experimenter returned. The teacher told the experimenter that the children did very well on the second test and therefore received a gift (pointing to the gift). She also informed the experimenter whether the children said that they liked the gift or they did not like the gift. The teacher then made an excuse and left the room. At this point, if children said that they liked the gift, the experimenter asked the children: "I just heard that your teacher said that you told her you liked this gift but you told me earlier that you didn't like the gift. So, do you really like the gift or not?" (Liking Question 2). If the children responded that they did not like the gift, the experimenter asked: "Why did you tell your teacher you liked the gift?" (action justification question). If the children responded directly to their teacher that they did not like the gift, the teacher also informed the experimenter of the children's response. After the teacher left, the experimenter also asked the children to justify their response: "Why did you tell your teacher you didn't like the gift?" After this question, the children were told that they could exchange their gift if they wished to do so. All children opted to do so. They were thanked for their participation in the study. The undesirable gift procedure lasted about 10 min. All experimenters and teachers were women. They were trained about how to carry out the procedures prior to interviewing children. The experimenters were randomly assigned to be Experimenter 1 or 2.

The children's responses to the "why" question were coded according to a coding system developed ad hoc based on the responses because no previous studies had coded such responses. Once the research team members reviewed the responses, it became clear that although children who told the truth consistently made reference to the need to be truthful or made a statement of the fact (e.g., "You should tell the truth" or "I don't like it"), among children who told a lie to conceal their disliking of the undesirable gift, some were not motivated to lie out of prosocial concerns. Thus, the following categories emerged for the children who lied: (a) the prosocial lie-tellers who justified their lying by referring to the need to be polite or to avoid hurting the feelings of their teacher, and (b) nonprosocial lie-tellers who gave a variety of responses unrelated to prosocial concerns such as referring to the need to avoid negative consequences to themselves (e.g., the teacher being angry at them if truth be told) or deserving the gift even though they did not like it, or other miscellaneous responses unrelated to politeness (e.g., "I don't know" or "I can find another use for it"). The same two graduate students were trained to categorize children into three categories: blunt truth-tellers, prosocial lie-tellers, and nonprosocial lie-tellers based on whether the children told the truth or lie and their responses to the "why" question.

## Results

In the following, we will first report results about children's knowledge of lie- and truth-telling as assessed by the moral story procedure, followed by results about children's actual lie- or truth-telling behavior in the undesirable gift procedure, and finally results about the relations between children's knowledge and behavior. Preliminary analyses revealed that the order of the moral story procedure and undesirable gift procedure and the sex of participants did not significantly affect the results of this study. Thus, the data for these two factors were combined for the subsequent analyses.

### Moral Story Procedure

Children's classifications of the statements made by the story characters as lies or truth or neither (i.e., their responses to the categorization question) were analyzed using multiple chi-square analyses. Neither the age group nor the story type effect was significant. Overall, 98% of the children categorized

prosocial lies as lies, and 100% categorized the untruthful statements in the control lie-telling story as lies. Also, 98% categorized the blunt truths as the truth, and 100% categorized the truthful statement in the control truth-telling story as the truth.

Figure 1 shows the means and standard errors of 7-, 9-, and 11-year-olds' moral evaluations of the truthful or untruthful statements made by the story characters (i.e., their responses to the moral evaluation question). An omnibus 2 (truthfulness: truth vs. lie)  $\times$  2 (setting: prosocial vs. control)  $\times$  3 (age: 7, 9, and 11 years) analysis of variance (ANOVA) was performed on the moral evaluation data for the truth- and lie-telling stories.

Age, truthfulness, and setting main effects were significant,  $F(2, 117) = 3.12, p < .05, \eta^2 = .05$ ;  $F(1, 117) = 264.82, p < .0001, \eta^2 = .69$ ; and  $F(2, 117) = 14.25, p < .0001, \eta^2 = .11$ , respectively. Children overall gave positive ratings to truth-telling and negative ratings to lie-telling. Also, children's ratings changed with age and setting. The mean effects were qualified by significant Age  $\times$  Truthfulness and Truthfulness  $\times$  Setting interactions,  $F(2, 117) = 3.57, p < .05, \eta^2 = .06$ , and  $F(1, 117) = 106.95, p < .0001, \eta^2 = .49$ , respectively. These effects were qualified by a significant Age  $\times$  Truthfulness  $\times$  Setting interaction,  $F(2, 117) = 5.15, p < .001, \eta^2 = .08$ . Simple effect tests with Sidak adjustments for multiple comparisons were performed to examine the significant three-way interaction. This effect was because of the fact that 7-year-olds were significantly different from 9- and 11-year-olds, whereas the two older groups' ratings of blunt truth-telling did not differ from each other. Seven-year-olds

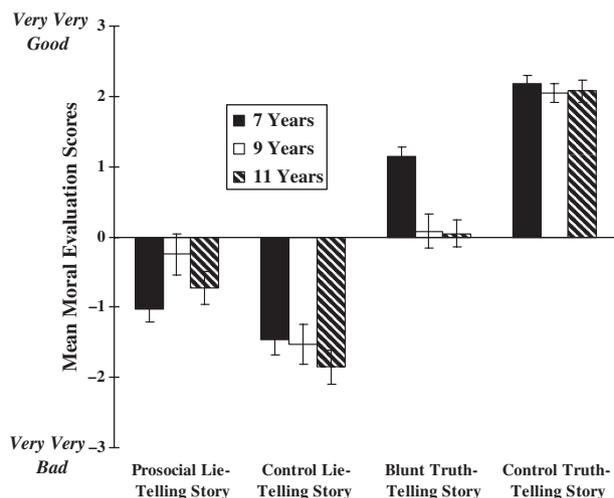


Figure 1. Means and standard errors of children's positive and negative evaluations of the story characters' statements by age.

gave significantly more positive ratings to blunt truth-telling than older children. In contrast, no age differences were found for control truth- and lie-telling and prosocial lie-telling. Overall, they gave very positive ratings to control truth-telling and very negative ratings to control lie-telling. They gave significantly less negative ratings to prosocial lie-telling than control lie-telling.

With regard to children's justifications of their evaluations, overall, participants did not provide a diverse array of justifications. For the control lie- and truth-telling stories in which the protagonist receives a desirable gift, all children justified their ratings to the former by referring to the negativity of dishonesty and the latter by referring to the positivity of honesty (the interrater reliability was 100%). Owing to the ceiling effect, the explanation data were not analyzed further. For the prosocial lie-telling and blunt truth-telling stories, the interrater reliability was also high,  $\kappa_s = .93$  and  $.85$ , respectively. The children's justifications fell into three types of responses: politeness justification, honesty justification, and both justification (see Table 1). No children gave "I don't know" responses.

A multinomial logistic regression analysis was performed with the age as the predictor and the type of justifications (politeness, honest, and both) for the prosocial lie-telling story as the predicted. The model (i.e., the age effect) was significant,  $\chi^2(4, N = 120) = 19.41, p < .01$ , Nagelkerk  $R^2 = .17$ . A priori comparisons with the honesty justification type as the reference for the predicted variable category and 7-year-olds as the reference for the predictor variable category were performed. As shown in Table 1, 9- and 11-year-olds used significantly more the "both" justification for their moral evaluations than did the 7-year-olds,  $\beta = 1.82, Wald = 6.18, p < .01$ , odds ratio = 9.90, and  $\beta = 2.28, Wald =$

13.02,  $p < .001$ , odds ratio = 9.80, respectively. Thus, 9-year-olds were 6.18 times, and 11-year-olds were 9.8 times, more likely to use the both justification than 7-year-olds. No significant age differences were found for the politeness justification.

Another multinomial logistic regression analysis was performed with the age as the predictor and the type of justifications (politeness, honesty, and both) for the blunt truth-telling story as the predicted. The model (i.e., the age effect) was significant,  $\chi^2(4, N = 120) = 24.68, p < .001$ , Nagelkerk  $R^2 = .21$ . A priori comparisons with the honesty response type as the reference for the predicted variable category and 7-year-olds as the reference for the predictor variable category were performed. As shown in Table 1, 11-year-olds, but not 9-year-olds, used significantly more of both justifications for their moral evaluations than did the 7-year-olds,  $\beta = 2.53, Wald = 15.02, p < .001$ , odds ratio = 12.55. In contrast, no significant age differences were found for the politeness justification.

Two hierarchical linear regression analyses were performed with children's moral evaluation scores of prosocial lies and blunt truths as the predicted variable and age entered first as a predictor followed by the type of justifications, which was dummy coded as Predictor 1 (both vs. the other two responses) and Predictor 2 (honesty vs. the other two responses). After partialing out the effect of age, the type of justifications was significantly related to children's moral evaluation scores for prosocial lies and blunt truths,  $F_{\text{change}}(2, 116) = 30.67, R^2_{\text{change}} = .34, p < .001$ , and  $F_{\text{change}}(2, 116) = 15.69, R^2_{\text{change}} = .20, p < .001$ , respectively. Regardless of age, those children who used the both response to justify their ratings tended to give positive ratings to prosocial lies ( $M = 0.45, SD = 1.54$ ) and negative ratings to blunt truths ( $M = -0.49, SD = 1.27$ ). Those children who used the politeness response to justify their ratings gave moderately negative ratings to both prosocial lies ( $M = -0.30, SD = 1.81$ ) and blunt truths ( $M = -0.10, SD = 1.38$ ). In contrast, those children who used the honesty response to justify their ratings gave highly negative ratings to prosocial lies ( $M = -1.53, SD = 0.81$ ) but highly positive ratings to blunt truths ( $M = 1.31, SD = 1.50$ ).

Table 1  
Percent (Frequency) of Types of Justifications Made by Children at Each Age Group About Their Moral Judgments

	Politeness	Honesty	Both
Prosocial lie-telling			
7 years	20 (8)	70 (28)	10 (4)
9 years	20 (8)	43 (17)	38 (15)
11 years	10 (4)	38 (15)	53 (21)
Blunt truth-telling			
7 years	30 (12)	60 (24)	10 (4)
9 years	33 (23)	48 (19)	20 (8)
11 years	15 (6)	28 (11)	58 (23)

#### *Children's Truth- or Lie-Telling Behaviors in the Undesirable Gift Procedure*

Children were coded as lie-tellers if they responded to their own teacher that they liked the gift she gave them (i.e., the Liking Question 1) but

told the experimenter that they really did not like the gift (i.e., the Liking Question 2). If they responded that they did not like the gift to both questions, they were coded as blunt truth-tellers. Forty percent of 7-year-olds, 50% of 9-year-olds, and 60% of 11-year-olds were categorized as lie-tellers. A binary logistic regression analysis was performed with the age as the predictor and the child behavior (lie-telling vs. blunt truth-telling) as the predicted. The model (i.e., the age effect) was significant,  $\chi^2(2, N = 120) = 10.72, p < .001$ , Nagelkerk  $R^2 = .12$ . A priori comparisons with the 7-year-olds as the reference showed that 11-year-olds, but not 9-year-olds, differed significantly from 7-year-olds in terms of their tendency to tell a lie in the politeness situation,  $\beta = 1.62$ , Wald = 9.02,  $p < .05$ , odds ratio = 5.17 (11-year-olds were statistically 5.17 times more likely to lie than 7-year-olds).

With regard to children's responses to the question as to why they told the truth or lied, among the truth-tellers, their responses were highly similar. All of them either cited that they must tell the truth or simply said that they just did not like the gift. They were all coded as blunt truth-tellers by the two independent coders. Among the lie-tellers, one group of children were coded as prosocial lie-tellers because they justified their lying by referring to the need to be polite or the potential negative impact of their statement on the lie recipient if truth was told. Another group of lie-tellers (12 children in total) justified their lies by referring to the need to avoid negative consequences to themselves (e.g., the teacher being angry at them if truth be told). Yet another group of lie-tellers stated that they deserved the gift even though they did not like it (5 children in total). Another group (5 children in total) simply said: "I don't know." The rest gave miscellaneous responses unrelated to politeness (e.g., "I can find another use for it"). These children who gave these nonprosocial justifications were coded as nonprosocial lie-tellers. The intercoder reliability was high,  $\kappa = .88$ . Figure 2 shows the percentages of the three groups of children per age group.

A multinomial logistic regression analysis was performed with age as the predictor and the child behavior (blunt truth-telling, prosocial lie-telling, and nonprosocial lie-telling) as the predicted. The model (i.e., the age effect) was significant,  $\chi^2(4, N = 120) = 11.27, p < .05$ , Nagelkerk  $R^2 = .10$ . A priori comparisons were performed with 7-year-olds as the reference for the predictor variable and the blunt truth-tellers as the reference for the predicted variable. As shown in Figure 2, the proportion of

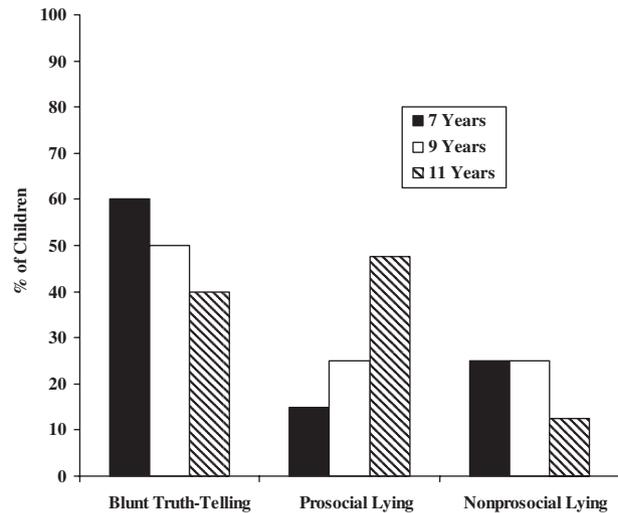


Figure 2. Percentage of prosocial lie-tellers, nonprosocial lie-tellers, and blunt truth-tellers by age.

the children who told a nonprosocial lie did not change with age. However, as age increased, more children told prosocial lies. Among the prosocial lie-tellers, 11- but not 9-year-olds differed significantly from 7-year-olds in terms of their tendency to tell a lie for prosocial purposes,  $\beta = 1.67$ , Wald = 4.13,  $p < .05$ , odds ratio = 4.75. That is, 11-year-olds were statistically 4.75 times more likely than 7-year-olds to tell a prosocial lie.

#### Relations Between Children's Behavior and Moral Judgments

A 3 (age: 7, 9, and 11 years)  $\times$  3 (child behavior: prosocial lie-telling, nonprosocial lie-telling, and blunt truth-telling) ANOVA was performed on children's moral evaluation scores of the prosocial lie-telling story (see Table 2). Only the child behavior effect was significant,  $F(2, 111) = 3.76, p < .05$ ,  $\eta^2 = .06$ . A priori contrast with prosocial lie-telling as the reference showed that both blunt truth-telling and nonprosocial lie-telling children's moral evaluation scores were significantly more negative than those of the prosocial lie-telling children ( $ps = .025$  and  $.013$ , respectively).

Another 3 (age: 7, 9, and 11 years)  $\times$  3 (child behavior: prosocial lie-telling, nonprosocial lie-telling, and blunt truth-telling) ANOVA was performed on children's moral evaluation scores of the blunt truth-telling story. The effects of both age and child behavior were significant,  $F(2, 111) = 4.78, p < .05$ ,  $\eta^2 = .08$ , and  $F(2, 111) = 8.06, p < .01$ ,  $\eta^2 = .13$ , respectively. For the significant age effect, a priori contrast with 7-year-olds as the reference

Table 2  
Means (Standard Deviations) of Children's Positive or Negative Evaluations of the Story Characters' Statements by Age and Behavioral Type (Minimum Score = -3, Maximum Score = 3)

Behavior type	Prosocial lie-telling story	Control lie-telling story	Blunt truth-telling story	Control truth-telling story
<b>Blunt truth-tellers</b>				
7 years	-1.29 (1.12)	-1.58 (0.72)	1.25 (1.29)	2.13 (0.80)
9 years	-0.25 (1.77)	-1.45 (1.50)	0.40 (1.50)	2.20 (0.77)
11 years	-0.87 (1.09)	-1.75 (1.07)	0.19 (1.56)	2.37 (0.96)
<b>Prosocial lie-tellers</b>				
7 years	0.33 (1.51)	-1.00 (0.63)	0.83 (1.47)	2.17 (0.75)
9 years	0.00 (2.16)	-1.00 (2.00)	-1.10 (1.29)	1.70 (1.16)
11 years	-0.37 (1.50)	-1.68 (1.29)	-0.63 (1.01)	1.68 (1.00)
<b>Nonprosocial lie-tellers</b>				
7 years	-1.20 (0.63)	-1.50 (0.97)	1.10 (1.29)	2.30 (0.68)
9 years	-0.50 (1.90)	-2.20 (0.79)	0.60 (2.22)	2.10 (0.74)
11 years	-1.60 (2.19)	-2.80 (0.45)	2.20 (1.30)	2.60 (0.55)

showed that 11-year-olds', but not 9-year-olds', moral evaluation scores of the blunt truth-telling story were significantly less positive than those of the 7-year-olds ( $p < .05$ ). For the significant child behavior effect, a priori contrast with prosocial lie-telling as the reference showed that both blunt truth-telling and nonprosocial lie-telling children's moral evaluation scores were significantly more positive than those of the prosocial lie-telling children ( $ps < .001$  and  $.01$ , respectively). In other words, those children who told a prosocial lie also tended to view blunt truth-telling in less a positive light than the other two groups of children.

To examine the relation between children's moral evaluation justifications (both, honesty, and politeness) for the prosocial lie-telling story and the child behavior (blunt truth-telling, prosocial lie-telling, and nonprosocial lie-telling), a multinomial logistic regression analysis was performed with the child behavior as the predictor and the type of justifications as the predicted. The model (i.e., the child behavior effect) was significant,  $\chi^2(4, N = 120) = 15.36$ ,  $p < .01$ , Nagelkerk  $R^2 = .14$ . A priori comparisons with prosocial lie-telling as the reference for the predictor and the honesty justifications as the reference for the predicted were performed. Those children who gave the both justification were significantly (8.84 times) more likely to tell prosocial lies than nonprosocial lies,  $\beta = 2.18$ , Wald = 9.02,  $p < .01$ , odds ratio = 8.84, and (3.13 times) more likely to tell prosocial lies than the blunt truth,  $\beta = 1.14$ , Wald = 5.85,  $p < .05$ , odds ratio = 3.13. In other words, children who considered both

the honesty and politeness issues when judging the prosocial lie story were more inclined to tell a prosocial lie than those who focused solely on either honesty or politeness. Consistent with this result, those children who gave the politeness justifications for their moral judgment scores of the prosocial lie-telling story were equally likely to tell prosocial lies, nonprosocial lies, or the blunt truth.

Another multinomial logistic regression analysis was performed with the child behavior as the predictor and the type of justifications for the blunt truth-telling story as the predicted. The model was also significant,  $\chi^2(4, N = 120) = 31.72$ ,  $p < .001$ , Nagelkerk  $R^2 = .26$ . A priori comparisons with prosocial lie-telling as the reference for the predictor and the politeness justifications as the reference for the predicted were performed. Those children who gave the both justification to their moral judgment scores of the blunt truth-telling story were significantly (11.07 times) more likely to tell prosocial lies than nonprosocial lies,  $\beta = 2.41$ , Wald = 10.24,  $p < .01$ , odds ratio = 11.07, and (9.09 times) more likely to tell prosocial lies than the blunt truth,  $\beta = 2.21$ , Wald = 16.40,  $p < .001$ , odds ratio = 9.09. In other words, children who considered both the honesty and politeness issues when judging the blunt truth-telling story were more inclined to tell a prosocial lie than those who only focus on either honesty or politeness. Consistent with this result, those children who gave the politeness justifications to their moral judgment scores of the blunt truth-telling story were equally likely to tell prosocial lies or nonprosocial lies or the blunt truth.

## Discussion

This study examined children's prosocial lie-telling behavior in a politeness situation and its relation to their moral understanding of lie- and truth-telling. Overall, almost all children were able to identify lies and the truth correctly in the story procedure. Contrary to our hypothesis, no age differences were found. Unlike Lee and Ross (1997) who tested participants 12 years and above, but similar to Bussey (1999) who tested younger children, all the children in our study identified untruthful statements told with the intent to help another individual as lies. Our findings taken together with those of Bussey (1999) suggest that young children do not adhere to the suggestion that prosocial untruthful statements may not be lies at all (Sweetser, 1987). However, it may be that as children develop into adolescence

and adulthood their conceptions of prosocial lies change (Lee & Ross, 1997). Future studies are needed to examine this possible developmental shift in the conception of prosocial lies.

The moral evaluation results are consistent with and complement previous findings (Bussey, 1999; Walper & Valtin, 1992) that children's evaluations of prosocial lies become less negative between preschool and elementary school age. Children in this study, who were all elementary school age, gave less negative moral evaluations for prosocial lie-telling than for control lie-telling. They also gave less positive ratings to blunt truth-telling than control truth-telling. In addition, whereas children between 7 and 11 years of age similarly gave negative yet near-neutral ratings to prosocial lies, 7-year-olds were more likely to give positive ratings to blunt truth-telling than 9- and 11-year-olds whose ratings were at the neutral level.

This tendency to rate prosocial lie- and blunt truth-telling around the zero point (neither good nor bad) may reflect children's increasing awareness of the fact that politeness situations involve two contradictory sets of rules that must be weighed against each other. This is demonstrated by children's justifications of their ratings. Older children were significantly more inclined than younger children to raise the issues of honesty and politeness simultaneously when justifying their ratings of prosocial lies and blunt truths. Furthermore, children who recognized both issues to be applicable to the politeness situation were more inclined to let the concern for politeness override the need to be truthful. As shown by the results of the multiple regression analyses, regardless of age, those children who used the both responses to justify their ratings tended to rate prosocial lies positively and blunt truth negatively. In contrast, those who used the politeness justifications rated both prosocial lies and blunt truths moderately negatively, suggesting that they might be ambivalent about whether the concern for politeness should determine the appropriate course of action for the situation. Not surprisingly, children who used the honesty justifications gave prosocial lies highly negative ratings whereas blunt truths were given highly positive ratings.

In terms of children's actual behavior in the politeness situation, 40% of 7-year-olds, 50% of 9-year-olds, and 60% of 11-year-olds told a lie. They told the gift-giver that they liked the undesirable gift but later told the experimenter that they did not really like the gift. The age pattern is generally in line with the findings of Talwar, Murphy, et al.

(2007), who also found a significant increase in lie-telling between 3 and 11 years of age in a similar undesirable gift situation. However, because Talwar, Murphy, et al. did not probe children's motives for lying, the extent to which their children truly told prosocial lies for prosocial purposes was not clear.

Unlike Talwar, Murphy, et al. (2007), this study questioned children's motives for lying. When children were asked about why they had lied to the teacher, a developmental difference emerged between younger and older children. Although most younger lie-tellers were motivated to lie for nonprosocial reasons such as to avoid negative consequences for themselves (e.g., the gift-giver being mad at them), the majority of older lie-tellers were motivated to lie for prosocial reasons such as avoiding hurting the feelings of the gift-giver. These findings suggest that although the tendency for children to tell a lie increases with age in the politeness situation, their motives for telling such lies also change with age, from more self-serving at the younger age to more prosocial at the older age. Thus, the significant age effect seen in this study and perhaps that in Talwar, Murphy, et al. reflects a developmental change in children's tendency to tell a truly prosocially motivated lie.

It should be noted that the rate of lying in this study (50%) was substantially lower than the rate of lying (about 80%) in situations where children tell lies to conceal their own transgression (e.g., Talwar & Lee, 2002a). The exact nature of this discrepancy is unclear. One possibility is that children's tendency to lie may be more significantly influenced by their self-interests than by the need to help others as suggested by Talwar et al. (2004). Consistent with this suggestion, they found that although most children aged between 3 and 11 years refused to lie to conceal their parents' transgression, when their own responsibility for the transgression was absolved, approximately half of the children would lie for their parents. This possibility is also in line with the present finding that more than half of the 11-year-olds and the majority of the younger children told the truth so that they would not miss the opportunity to obtain a desirable gift. Furthermore, even among the children who lied, more than a half of the 7- and 9-year-olds and 20% of the 11-year-olds lied for nonprosocial reasons.

Another major finding of our study is that children's actual lying or truth-telling behaviors in the politeness situation were consistently related to their moral evaluations and justifications of the

prosocial lie-telling or blunt truth-telling stories. Prosocial lie-tellers were more likely to rate others' prosocial lie-telling more positively and blunt truth-telling more negatively than did non-prosocial lie-tellers and blunt truth-tellers. The same children also tended to mention both the politeness and honesty rules when justifying their evaluations of a story character's prosocial lie-telling or blunt truth-telling in a politeness situation. These results suggest that the prosocial lie-tellers were aware of both the need to be polite and to avoid hurting others as well as the need to be truthful. Nevertheless, they decided to be polite and therefore tell a prosocial lie themselves in the situation. These findings are inconsistent with the existing studies with children that involved the Kohlbergian moral dilemmas or antisocial lying. These studies tended to show either weak or no linkages between individuals' moral knowledge and moral action (Arnold, 1989; Blasi, 1980; Talwar et al., 2002, 2004; Thoma & Rest, 1986).

As mentioned earlier, the disconnection was likely because of the mismatch between children's interpretations of the two situations. One places them in an everyday situation in which they must choose an action. The other uses stories to depict a situation about which they must make a moral evaluation. Thus, to avoid this kind of mismatch and to reveal a relation between children's moral knowledge and action, we must directly assess children's interpretations of both the situations. By implementing such a strategy in this study, we were able to identify two different types of lie-tellers: prosocial and nonprosocial lie-tellers. Both types of children lied in the undesirable gift situation but for different reasons. Nonprosocial lie-tellers told a lie either out of fear or could not justify their lies and showed the classic dissociation between moral knowledge and action. They evaluated prosocial lies negatively and blunt truths positively but failed to act according to their moral knowledge. In contrast, prosocial lie-tellers told a lie for politeness purposes and were consistent in their knowledge and action because they not only told prosocial lies in the undesirable gift situation themselves but also evaluated such lies positively and blunt truths negatively.

It should be noted that these children were apparently aware that the concern for both politeness and honesty were applicable to the situation. However, the concern for politeness seemed to play a more significant role in prosocial lie-tellers' decisions to lie than the concern for honesty. Also, the former seemed to override the latter when prosocial lie-tellers made moral evaluations of prosocial lies

and blunt truths. Blunt truth-tellers were also consistent between their moral knowledge and behavior as they evaluated prosocial lie-tellers highly negatively and blunt truth-tellers highly positively, and acted accordingly themselves. Blunt truth-tellers appeared to identify both the undesirable gift situation they themselves encountered and the same situation depicted in the stories as a situation calling for honesty and thus displayed consistency between moral knowledge and action.

The present assessment of children's justifications to their moral judgments and the reports of their motives for their own actions not only highlight the importance of seeking out such information for methodological purposes but also raise a theoretical question about children's interpretative theories of mind and action. Chandler and his colleagues (Chandler, Sokol, & Hallett, 2001; Chandler, Sokol, & Wainryb, 2000) have argued that children's beliefs about rightness (i.e., morality) should be studied together with their beliefs about mental life; the separation of the existing developmental research on the two issues is both incomplete and arbitrary because beliefs about rightness are intimately related to beliefs about mental states such as beliefs and intentions. This approach has received some empirical support. For example, Wainryb, Brehl, and Matwin (2005) examined children's narrative accounts and moral evaluations of their own interpersonal conflicts with others. They found that children gave qualitatively different interpretations when events were viewed from the victim's or perpetrator's perspectives, and hence different moral judgments. Although Wainryb et al. did not directly study children's actual moral behavior, they suggested that "by integrating, within the study of moral development, children's interpretations of the social interactions that are at the basis of moral thinking, this approach brings us a step closer to conceptualizing the study of children's moral behavior" (p. 80).

The findings of this study suggest that this interpretative approach may indeed be fruitful for research on moral development in general and the relation between children's moral judgment and actual action specifically (see also Arsenio & Lemerise, 2004). Although this study revealed a significant relation between children's evaluations of prosocial lies and blunt truths and their actual behavior, the relation was strengthened and clarified when both children's justifications about their evaluations and their own behavior were taken into consideration. In particular, the relation was strengthened when children showed an apprecia-

tion of two different perspectives based on the concerns for honesty and politeness. It should be noted, however, that this study did not explicitly ask about children's interpretations of the story characters' beliefs and intentions in the moral judgment task nor their interpretations of the politeness situation they themselves encountered (e.g., their own beliefs as a lie- or truth-teller and the experimenter as a lie- or truth-recipient). Future studies need to take a genuine interpretative approach to ask these specific questions, which may reveal an even closer relation between children's moral knowledge and behavior than what has been found in this study.

In summary, this study examined school-aged Chinese children's moral understanding of lie- and truth-telling and their actual lying behaviors in a politeness situation. It revealed that children at all ages categorized untruthful statements as lies and truthful statements as the truth regardless of whether they were told for prosocial or nonprosocial purposes. However, as age increased, children became increasingly less negative and more positive about others' lying in politeness situations, and they were more inclined to tell lies in such situations themselves. Contrary to previous findings (e.g., Talwar et al., 2002), children's moral knowledge about lying was significantly related to their actual behaviors.

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