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## Cross-Cultural Differences in Children's Choices, Categorizations, and Evaluations of Truths and Lies

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### Abstract

This study examined cross-cultural differences and similarities in children's moral understanding of individual- or collective-oriented lies and truths. Seven-, 9-, and 11-year-old Canadian and Chinese children were read stories about story characters facing moral dilemmas about whether to lie or tell the truth to help a group but harm an individual or vice versa. Participants chose to lie or to tell the truth as if they were the character (Experiments 1 and 2) and categorized and evaluated the story characters' truthful and untruthful statements (Experiments 3 and 4). Most children in both cultures labeled lies as lies and truths as truths. The major cultural differences lay in choices and moral evaluations. Chinese children chose lying to help a collective but harm an individual, and they rated it less negatively than lying with opposite consequences. Chinese children rated truth telling to help an individual but harm a group less positively than the alternative. Canadian children did the opposite. These findings suggest that cross-cultural differences in emphasis on groups versus individuals affect children's choices and moral judgments about truth and deception.

### Keywords

cross-cultural; deception; individualism; collectivism; moral development

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Children around the world are socialized to adhere to the moral and social value systems of their culture and to do what is seen as right and not what is considered wrong. In many cases, the values of a culture are consistent with each other. They promote a coherent set of morally and socially acceptable behaviors. However, it is not unusual that in some situations certain cultural values collide with each other, and in such a circumstance, a moral—social dilemma

might arise. One such dilemma is whether to tell a lie that may help a group or an individual or to speak the truth that might have the opposite effect.

The question of what a lie is and whether it is wrong to lie has been a subject of intense debate among Western philosophers and theologians throughout history. There are numerous schools of thought on the issue that generally fall on a continuum. At one extreme, philosophers such as St. Augustine (1952), Kant (1949), and Bok (1978) assumed that lying necessarily involves a speaker who knowingly makes a false statement with the intent to deceive. As long as a statement fits this description, it is a lie regardless of the context in which it is uttered. Also, these theorists held a deontological view of the moral implication of lying: Lying is intrinsically wrong and has a constant disvalue regardless of context. Lies must under all but the most circumscribed of circumstances be eschewed. Kant's view is the most extreme. He believed that one should tell the truth to a would-be murderer about the whereabouts of his intended victim because the possible loss of life still does not outweigh the negativity of lying. Modern deontological theorists propose three main reasons for lying to be intrinsically wrong: First, lying violates contractual commitments between interlocutors who expect each other to tell the truth. Second, lies limit a lie recipient's freedom of choice, potentially leading to misinformed decisions. Third, lying creates belief system conflicts, which can negatively affect a lie teller's mental well-being (Krupfer, 1982). Henceforth, we refer to this perspective on lying and its moral implications as the *absolutist position*.

In contrast, the *utilitarian perspective*, pioneered by Bentham (1843) and Mill (1869) and further developed by speech act theorists such as Austin (1962) and Sweetser (1987), suggests that the concept of lying and its moral implications are context dependent. Whether a false statement knowingly told to deceive is a lie and whether a lie is morally reprehensible depend on its purpose. Traditional utilitarians argued that if a falsehood enhances happiness or avoids pain, it should not be considered a lie, nor should it be deemed to have negative values. Modern utilitarian theorists, although no longer so hedonistic, nonetheless believe that conceptions of lying and their moral implications are defined by social conventions. In some situations in which social conventions discourage falsehoods and assume interlocutors to adhere to the so-called Maxim of Quality (to inform, not misinform; Grice, 1989), untruthful statements are defined as lies and entail a negative value. In some other situations (e.g., when social conventions call for politeness to spare another's feelings), a deliberately false statement is not considered a lie (Sweetser, 1987). Furthermore, such falsehoods are sanctioned and even encouraged (Keenan, 1976; Lee, 2000), thus taking on a positive valence.

Long-standing philosophical debates notwithstanding, limited empirical evidence exists as to whether either theoretical absolutist or utilitarian views of lying are shared by the general population. The limited phenomenological, behavioral, and anthropological research on deceit (e.g., Brown, 1998; DePaulo & Kashy, 1998; Ekman, 1985; Keenan, 1976) suggests that many adults in Western as well as Eastern cultures not only subscribe to the utilitarian view but also practice it in everyday life. In the present study, we aimed to test the hypothesis that, like adults, children also hold a utilitarian view of lying and its moral implications, and their utilitarian view develops with age as children become increasingly socialized to cultural norms. Furthermore, because of differences in cultural practices, children's moral conceptions of lying may vary depending on their cultural upbringing.

The idea that different social milieu levy different sanctions on children's moral conceptions of lying has also received some, albeit limited, empirical confirmation. For example, Lee and Ross (1997) found that Canadian adolescents were more reluctant to label an untruthful statement told to help a listener as a lie than an untruthful statement intended to harm that listener. Siegal, Surian, Nemeroff, and Peterson (2000) reported that Catholic Italian children did not regard untruthful statements blessed by a priest to be lies. Bussey (1999) foundations

that Australian preschool and school-age children rated politeness white lies less negatively than antisocial and trickery lies. These findings suggest that Western children and adults conceptualize untruthful statements differently depending on the social contexts in which they are uttered, and they also endorse the positive value of lying in certain social contexts.

Children in non-Western cultures differentially view lying in different social contexts, and their views about lying in certain situations may differ from those of their Western counterparts. Lee and his colleagues have consistently found that Chinese and Canadian children and adults differ in moral judgments of lying in modesty situations (Fu, Lee, Cameron, & Xu, 2001; Lee, Cameron, Xu, Fu, & Board, 1997; Lee, Xu, Fu, Cameron, & Chen, 2001): Chinese children gave negative ratings to individuals who told the truth about their own good deed and positive ratings to those who lied about them, whereas Canadian participants did the opposite, suggesting that the ratings of the Chinese children reflect the influence of a Chinese cultural emphasis on self-effacement and modesty (Bond, 1986). In contrast, the ratings of the Canadian participants reflect a Canadian cultural appreciation of promoting self-confidence and self-esteem, somewhat similar to that of American children (Wang & Leichtman, 2000).

Lee and his collaborators further suggested that this cross-cultural effect is rooted in those societies' differential emphasis on the relative importance of groups versus individuals regarding social interaction in general and communication in particular (Fu et al., 2001; Lee et al., 1997, 2001). They suggested that, although both the Canadian and Chinese cultures encourage honesty and discourage lying, the goals for interpersonal information exchange and related conventions are dramatically different in these two countries. Western societies such as Canada emphasize the importance of individual rights to information and freedom of choice. Adhering to Grice's (1989) Maxim of Quality, or ensuring information accuracy, is expected in most situations. One exception is the situation in which truthful information may harm another individual's feeling. In this situation, lying is sometimes condoned or practiced (Bussey, 1999; DePaulo & Bell, 1996; DePaulo & Kashy, 1998; Lee & Ross, 1997; Sweetser, 1987).

In Chinese society, the Western egalitarian notion of the free flow of information does not hold. The principle of veracity is based neither solely on information accuracy nor on whether truthful information may harm another individual's feeling. Rather, the focus is on whether a verbal statement facilitates social cohesiveness and fulfills collective goals (Bond, 1986). When a truthful statement harms group cohesiveness, truth telling is no longer viewed as morally preferable and is discouraged, and lying is condoned (Lee et al., 1997, 2001). Thus, this culture has different rules concerning which type of information should be imparted truthfully and which should not. Specifically, cross-cultural differences emerge when a collective's or an individual's interests collide with the need to be truthful (i.e., Grice's Maxim of Quality). It has been suggested that the Chinese culture tends to give priority to the goal and interest of a group over an individual, whereas the Western cultures tend to give priority to individuals' interests and rights (Bond, 1986). Thus, individuals in Chinese society are thought more likely to condone untruthful statements told to help a collective and condemn lies benefiting individuals, whereas those in the West are expected to do the reverse.

However, no empirical study has directly tested this general hypothesis. Existing cross-cultural studies (e.g., Fu et al., 2001; Lee et al., 1997, 2001) have revealed that Chinese children (9 years and older) and adults condone lying only by individuals to minimize their own achievements or good deeds. Although this finding can be construed as reflecting Chinese participants' concern for the well-being of a group because publicizing one individual's good deeds or achievements may potentially harm group harmony, it provides only indirect support to the above hypothesis.

If a society's emphasis on groups versus individuals in communications indeed has a direct impact on children's acquisition of the concepts and moral values regarding lies and truths, one should expect that children in the Chinese culture would be inclined to evaluate lying more positively when it serves communitarian goals than when it serves individual goals. The opposite could be expected for children in a Western society. Evidence concerning these issues is significant not only for the continuing theoretical debate regarding the universality or cultural specificity of moral development (Boyes & Walker, 1988; Eckensberger & Zimba, 1996; Helwig, Arnold, Tan, & Boyd, 2003; Ma, 1988; Nucci, 2001; Turiel, 2002; Walker & Moran, 1991; Yau & Smetana, 2003) but also for understanding how macrocharacteristics of a culture affect children's acquisition of social conventions and moral values (Nucci, 2001; Triandis, 1995; Turiel, 2002; Yau & Smetana, 2003).

In the present study, we responded to this theoretical question as well as to the absence of relevant empirical evidence in the literature. We examined how Chinese and Euro-Canadian children respond to moral dilemmas in which truths or lies differentially affect groups versus individuals. The choice of these two cultures was based on both the extant developmental cross-cultural literature on the development of lying (e.g., Fu et al., 2001; Lee et al., 1997, 2001) and the extensive adult work on cross-cultural differences in emphasis on individuals versus groups (Oyserman, Coon, & Kemmelmeier, 2002). It is well established that Chinese adults (particularly in the People's Republic of China) place great emphasis on group interests because of China's historical, political, and religious roots in Confucianism, Buddhism, Taoism, and, more recently, the uniquely Chinese version of socialist communism (Lee, 2000). In contrast, Canadian adults (Euro-Canadians in particular), despite their exposure to Canada's multiethnic and cultural environment, by and large, hold Western values that emphasize individual rights and freedom of choice (see Oyserman et al., 2002). This difference affords ideal contexts for investigating the impact of differential cultural values on the formation of the moral conception of lying in children.

Four experiments were conducted. In Experiments 1 and 2, we adapted the moral dilemma paradigm pioneered by Piaget (1932/1965) for the present purpose. Chinese and Canadian children between 7 and 11 years of age were presented with hypothetical scenarios in which collective goals were pitted against individual interests. The age range was chosen because (a) existing non—cross-cultural research has suggested that the 7–11 age range represents the period in which children's understanding of the concept of lying and truth telling and their moral implications undergoes the most dramatic development, and (b) earlier cross-cultural studies have shown that Canadian and Chinese children differ in their moral conceptions of modesty-related truth telling or lying, and this difference emerges at 7 years of age and increases to the near adult level at 11 years (Fu et al., 2001; Lee et al., 1997, 2001). Thus, similar cross-cultural differences might emerge at these ages in terms of lying or truth telling for a collective or an individual, although these differences may widen further in adolescence and beyond. To avoid differences in story contexts that might confound possible cross-cultural differences, we followed the suggestions of such cultural psychologists as Berry (1994), García Coll and Magnuson (1999), and Shweder (1991) and used a derived ethic approach (Berry, 1994). were generated scenarios of events that commonly occur in both Chinese and Canadian schools. Children were asked whether they, when facing such a dilemma, might choose to lie or tell the truth to harm a group but help a friend (Experiment 1) or oneself (Experiment 2), or help a group but harm a friend or oneself. In Experiments 3 and 4, using the same moral dilemmas as in Experiments 1 and 2, we asked children to classify and evaluate individuals who tell the truth or lie to help a collective as opposed to harming a friend (Experiment 3) or oneself (Experiment 4) and vice versa.

## Experiment 1

In this experiment, children were asked to decide whether they would lie or tell the truth to help either a friend (but disadvantage a collective) or a collective (but harm a friend). On the basis of theoretical analyses of the differences between Chinese and Canadian cultures, we expected Chinese children to be more inclined than Canadian children to choose the lying alternative that benefits a collective, whereas they would be more inclined to tell the truth if it helps a collective. In contrast, Canadian children would be more inclined to choose alternatives that benefit a friend over a group. Also, this cross-cultural difference should increase with age, reflecting increasing impacts of moral socialization as well as developmental maturation.

### Method

**Participants**—In the People’s Republic of China, 67 children participated: 22 children age 7 years ( $M = 7.56$  years,  $SD = 0.31$ ; 13 boys), 23 children age 9 years ( $M = 9.63$  years,  $SD = 0.32$ ; 9 boys), and 22 children age 11 years ( $M = 11.70$  years,  $SD = 0.35$ ; 11 boys). They, as well as all the Chinese children in the subsequent experiments, were Han Chinese in an eastern Chinese city in which close to 100% of the population is Han Chinese. The participants in this and the subsequent experiments were recruited from public schools serving families with socioeconomic circumstances similar to families in Canada that fall into working or middle-income categories. In Canada, 60 children participated: 20 children age 7 years ( $M = 7.28$  years,  $SD = 0.41$ ; 11 boys), 20 children age 9 years ( $M = 9.22$  years,  $SD = 0.23$ ; 12 boys), and 20 children age 11 years ( $M = 11.39$  years,  $SD = 0.32$ ; 10 boys). They, as well as all the Canadian children in the subsequent experiments, were Euro-Canadians in a medium-sized eastern Canadian city in which 97% of the population is Euro-Canadian. They were recruited from public schools serving largely working and middle-income families. Although the Chinese and Canadian cities differ in absolute population size (5 million vs. 120,000), both cities are considered medium-sized cities within their respective contexts. They are also both provincial industrial and economic centers. Information was not obtained regarding each participant’s parental education, occupation, or family income.

**Materials and procedures**—Children were seen individually and read four scenarios in which a story character faces a dilemma of either telling the truth or a lie that either helps a friend but harms a group at the same time or helps a group but harms a friend (see Appendix A). Children were asked what they would do if they were the story character. The following is an example of a story in which lying may help a friend but at the same time may harm a group (the Spelling story):

Here is Susan. Susan’s class had to choose some of their classmates to represent the class in a spelling competition at their school. Susan’s friend, Mike, couldn’t spell very well, but he really wanted to be in the competition, so he asked Susan to pick him. Susan thought to herself, (A) “If I pick Mike, our class will not do well at the spelling competition, but Mike is my friend, and if I don’t pick him, he will be very upset,” or (B) “Mike is my friend, and if I don’t pick him, he will be very upset, but if I do pick Mike, our class will not do well at the spelling competition.” [Statements A and B were counterbalanced between participants.] When Susan’s teacher asked her who she was going to pick. . . .

Children were then asked, “If you were Susan, what would you do? Would you help your friend Mike and tell your teacher that you pick Mike because he can spell very well, or would you help your class and tell your teacher that you don’t pick Mike because he does not spell well?” The order of the two alternatives was counterbalanced between participants. In two of the four stories, the choice of lying was associated with helping a friend but harming a collective (the Spelling and Running stories). In the other two stories, the choice of lying was associated with

helping a collective but harming a friend (the Choir and Basketball stories). Children were asked why they made their particular decisions. The order of the four stories was predetermined according to a randomization table. Children were randomly assigned to one of two orders.

Children's choices of lying or truth telling for each story were recorded. Then, their responses to the two stories with the choice of lying benefiting a friend (the Spelling and Running stories) were combined to derive a lying-for-friend score, and their responses to the other two stories with the option to lie for a collective (the Choir and Basketball stories) were also combined to derive a lying-for-collective score. The two scores ranged from 0 to 2 as follows: 0 = *the child always chose the truthful alternative*; 1 = *the child chose the lie alternative once*; 2 = *the child always chose the lie choice*.

## Results and Discussion

Preliminary analyses revealed no significant effect of sex or order. The data for both sexes and orders were combined for the subsequent analyses (the same is true for the results of Experiments 2, 3, and 4).

Figure 1 shows the means and standard errors of the lying-for-friend scores and lying-for-collective scores for each age group in each country. A 2 (countries)  $\times$  3 (age groups)  $\times$  2 (beneficiaries: friend vs. collective) repeated measures analysis of variance (ANOVA) with the last variable as a repeated measure was performed on the lying-for-friend and lying-for-collective scores. Age, beneficiary, and the interaction between age and beneficiary were significant,  $F(1, 121) = 3.60, p < .05, \eta^2 = .06$ ;  $F(1, 121) = 6.64, p < .05, \eta^2 = .05$ ; and  $F(2, 121) = 3.56, p < .05, \eta^2 = .06$ , respectively. The critical interaction between beneficiary and country was also significant,  $F(1, 121) = 28.92, p < .001, \eta^2 = .19$ . Post hoc  $t$  tests ( $\alpha = .05$ ) compared the scores between Chinese and Canadian children, which revealed that Canadian children were more inclined to lie for a friend than a collective,  $t(125) = 3.23, p < .001$ , whereas Chinese children preferred the opposite,  $t(125) = 4.99, p < .001$ . There was a trend in subgroup differences revealed in the three-way interaction,  $F(2, 121) = 2.47, p = .09$ . Chinese children became slightly less inclined to lie for a friend as age increased, whereas their lie-for-collective scores were similar at all ages. Canadian children, regardless of age, were more inclined to lie for a friend than for a collective.

Consistent with our predictions, children's choices of lie- and truth-telling alternatives in the present experiment were determined by the children's country of origin, their recipient choice, and age. When facing a dilemma of lying that benefits a collective versus truth telling that helps a friend, Chinese children were more inclined than Canadian children to choose the lie-telling alternative. By contrast, Canadian children chose the truth-telling alternative under the same circumstances. The opposite was true when Chinese and Canadian children were faced with a dilemma in which lying would benefit a friend but truth telling would benefit a collective. This cross-cultural difference was slightly more pronounced among older than younger children.

## Experiment 2

The results of Experiment 1 suggest that children's choice to lie or tell the truth is influenced by the culture in which they are socialized. Canadian and Chinese children place different emphases on group versus individual goals when considering whether to communicate truthfully. However, it should be noted that the Canadian children's choice of lying to benefit a friend while harming a collective does not necessarily entirely reflect their emphasis on protecting the interests of an individual because their choices might reflect concerns about interpersonal relationships and, thus, could be construed as group-oriented. Canadian and Chinese children might all have collectivist orientations but differ in their valuations of the

relative importance of different constituents of a group. Whereas Chinese children value a group as a whole more than individual members, Canadian children do the opposite. To address this issue, we conducted Experiment 2 using the same procedure as in Experiment 1 except that the goal of a collective was pitted against that of the story character herself or himself. Children were asked to choose either lying or truth telling that would either help or harm a collective versus the individual if they were the story character. If Canadian children are indeed more individual-oriented and place a greater emphasis on an individual's goals over those of a group, they would be more inclined to choose the alternative that benefits themselves but harms a group. The converse should be true for Chinese children.

## Method

**Participants**—New groups of children were recruited for this experiment. In the People's Republic of China, 81 children participated: 26 children age 7 years ( $M = 7.34$  years,  $SD = 0.27$ ; 14 boys), 26 children age 9 years ( $M = 9.27$  years,  $SD = 0.47$ ; 12 boys), and 29 children age 11 years ( $M = 11.38$  years,  $SD = 0.39$ ; 16 boys). In Canada, 82 Euro-Canadian children participated: 30 children age 7 years ( $M = 7.42$  years,  $SD = 0.27$ ; 16 boys), 25 children age 9 years ( $M = 9.62$  years,  $SD = 0.25$ ; 10 boys), and 27 children age 11 years ( $M = 11.69$  years,  $SD = 0.33$ ; 11 boys).

**Materials and procedures**—The procedures were similar to those in Experiment 1 except for one modification. Instead of choosing between helping a collective versus helping a friend, in this experiment, the participant was required to choose between helping a collective versus helping himself or herself. The stories in Experiment 1 were modified slightly such that the story lines were natural and meaningful for the participants' contexts (see Appendix B). One additional modification was made. In Experiment 1, the child story character in two stories told a lie or the truth to an adult, and in the other two stories, the recipient was a child. To control for this potential confound, the recipients in the stories of this experiment are all adults. Thus, in the Spelling and Running stories, as before, the choice of lying was associated with helping the self but harming a collective. In the Choir and Basketball stories, the choice of lying was associated with helping a collective but harming the self. The same scoring method as that in Experiment 1 was used except that children were given a score of 1 for each choice of lying to help the self at the expense of a collective. This score is referred to as the lying-for-self score henceforth.

## Results and Discussion

Figure 2 shows the means and standard errors of the lying-for-self scores and lying-for-collective scores for each age group in each country. A 2 (countries)  $\times$  3 (age groups)  $\times$  2 (beneficiaries: self vs. collective) repeated measures ANOVA with the last variable as a repeated measure was performed on the lying-for-self and lying-for-collective scores. The country and beneficiary effects were significant,  $F(1, 157) = 16.25, p < .001, \eta^2 = .09$ , and  $F(1, 157) = 6.25, p < .05, \eta^2 = .04$ , respectively. The interactions between age and beneficiary and between beneficiary and country were also significant,  $F(2, 157) = 10.30, p < .05, \eta^2 = .11$ , and  $F(1, 157) = 142.81, p < .001, \eta^2 = .48$ , respectively, as was the critical three-way interaction,  $F(2, 157) = 10.81, p < .001, \eta^2 = .12$ . Post hoc  $t$  tests (least significant difference,  $\alpha = .05$ ) compared the scores between Chinese and Canadian children for each age group; all tests were significant. For each age group, Canadian children were more inclined to choose lying for the self than for the collective, whereas Chinese children did the opposite. Also, older Chinese children increasingly favored the collective-serving choice and decreasingly favored the self-serving choice, whereas there was no significant age difference in Canadian children's choices.

These results replicate the findings of Experiment 1. Even after the interpersonal relationship procedural confound was eliminated, the Canadian children responded similarly to those of Experiment 1: Regardless of age, Canadian children tended to choose the lying alternative when the decision would benefit an individual at the expense of a collective. They rarely chose the lying alternative that would benefit a collective. Chinese children in both experiments were more inclined to choose the lying alternative if it would benefit a collective, even when it would harm an individual, and less inclined to choose the lying alternative to benefit an individual but harm a group. This differential tendency increased with age.

### Experiment 3

The results from Experiments 1 and 2 taken together suggest that when deciding to lie or tell the truth, Canadian children were more individual-oriented, whereas Chinese children were more group-oriented. It is, however, unclear whether such a cross-cultural difference in moral choice reflects differences in Chinese and Canadian children's moral conceptions of lying and truth telling. For example, it is possible that Chinese children may not consider untruthful statements told to benefit a collective to be lies. In contrast, Canadian children may not consider untruthful statements told to benefit an individual to be lies, and this might lead them to judge them less negatively than untruthful statements told to benefit a group.

These questions were addressed in Experiments 3 and 4. In Experiment 3, we modified the stories used in Experiment 1. Instead of leaving the outcomes open at the end of the stories, children were told that the story character made either a truthful or untruthful statement to benefit a friend or a collective. They were then asked to determine whether the statements were lies or truths (the classification task) and to evaluate the positivity or negativity of the statements (the moral evaluation task). In terms of classifications of truthful and untruthful statements, based on the findings of Bussey (1999) regarding white lies and Lee et al. (2001) regarding lying to be modest, we expected Chinese and Canadian children to label an untruthful statement a lie regardless of whether the lie would help a collective or a friend. Also, no cross-cultural differences were predicted regarding the classification of truthful statements. Regarding moral evaluations, Canadian children were expected to give more positive ratings to story characters' truths or lies to help a friend over a group, whereas Chinese children would do the opposite. Because children become increasingly acculturated to their respective culture's moral rules about interpersonal communication, we predicted that the differential between the moral judgments of Canadian and Chinese children would become more apparent with age.

### Method

**Participants**—A new group of children was recruited for this experiment. In the People's Republic of China, 90 children participated: 30 children age 7 years ( $M = 7.57$  years,  $SD = 0.24$ ; 15 boys), 30 children age 9 years ( $M = 9.63$  years,  $SD = 0.21$ ; 15 boys), and 30 children age 11 years ( $M = 11.54$  years,  $SD = 0.25$ ; 15 boys). In Canada, 65 Euro-Canadian children participated: 18 children age 7 years ( $M = 7.56$  years,  $SD = 0.53$ ; 12 boys), 23 children age 9 years ( $M = 9.47$  years,  $SD = 0.36$ ; 12 boys), and 24 children age 11 years ( $M = 11.23$  years,  $SD = 0.60$ ; 13 boys).

**Materials and procedure**—The materials and procedure were the same as those used in Experiment 1 except that, instead of asking children to elect hypothetically whether they would lie or tell the truth, the story character is said to make a decision himself or herself. The following is an example of a story in which a story character tells a lie to help a friend while at the same time harming a group (the Spelling story):

Here is Susan. Susan's class had to choose some of their classmates to represent the class in a spelling competition at their school. Susan's friend, Mike, couldn't spell

very well, but he really wanted to be in the competition, so he asked Susan to pick him. Susan thought to herself, (A) “If I pick Mike, our class will not do well at the spelling competition, but Mike is my friend, and if I don’t pick him, he will be very upset.” (B) “Mike is my friend, and if I don’t pick him, he will be very upset, but if I do pick Mike, our class will not do well at the spelling competition.” [Statement A and Statement B were counter-balanced between participants.] When Susan’s teacher asked her who she was going to pick, Susan decided to help her friend. She said, “I pick Mike, because Mike can spell very well.”

Children were asked the following: “Is [the story character] telling a lie or the truth or something else?” (the classification question; the truth or lie alternatives were counterbalanced between participants). They were also asked a moral evaluation question: “Is what [the story character] said very very good, very good, good, not good nor bad, bad, very bad, or very very bad?” Children were shown a large card with a 7-point Likert scale with stars representing positive ratings (from three stars representing *very very good* to one star representing *good*), X representing negative ratings (from XXX representing *very very bad* to X representing *bad*), and a blank circle representing *not good nor bad*. The ratings were then converted from -3 (*very very bad*) to 0 (*not bad nor good*) to +3 (*very very good*). Children were trained to use the scale prior to their participation. In addition to the Spelling story, children were read the Running story in which a story character tells the truth to help a group but at the same time harms a friend, the Choir story in which a story character tells a lie to help a group but harms a friend, and the Basketball story in which a story character tells the truth to help a friend but harms a group (see Appendix A). The order of the four stories was predetermined according to a randomization table. Children were randomly assigned to one of two orders.

## Results and Discussion

**Classifications of truthful and untruthful statements**—Table 1 shows the percentage and frequency of children in each age group that classified an untruthful statement as a lie or the truthful statement as the truth. Eight separate chi-square analyses were performed to examine the age effect on children’s classifications in each story for each country. No significant age effects were found for any story in either country. To examine whether Chinese and Canadian children had differential tendencies to classify the truthful and untruthful statements, we performed four separate chi-square analyses for each story (because the age effects were not significant, we combined the data for all three ages). Chinese and Canadian children were no different in their classifications of truthful statements. Regardless of whether a truthful statement could help or harm a collective or an individual, most Chinese and Canadian children labeled them as the truth. Also, Chinese and Canadian children were similar in their classifications of untruthful statements as lies when they were told to help a group. The country effect was significant only for the story in which the story character makes an untruthful statement to help a friend while harming a group,  $\chi^2(1, N = 155) = 11.69$  (with continuity correction),  $p < .01$ : 98% of the Chinese children categorized the untruthful statement as a lie, whereas 80% of the Canadian children did so; a few Canadian children were less inclined than Chinese children to conceptualize untruthful statements made in this situation as lies. Despite this single difference between Canadian and Chinese children, the classification results overall were consistent with our null predictions based on previous studies. These results also suggest that children at all ages did not have difficulty understanding the plot of the stories and appreciated which story involved lying and which did not.

**Moral evaluations of truthful and untruthful statements**—Table 2 shows the means and standard deviations of Chinese and Canadian children’s moral evaluations of the story character’s truthful or untruthful statements in the four stories. Inspection of the results shows that children in both countries generally gave positive ratings to truth-telling stories and negative ratings to lie-telling stories. Differences between Chinese and Canadian children

emerged within either lie- or truth-telling stories as a function of whether lying or truth telling harms an individual but helps a collective or vice versa. To test these observations, we conducted two separate 2 (countries)  $\times$  3 (age groups)  $\times$  2 (beneficiaries: friend vs. collective) repeated measures ANOVAs with the last factor as repeated measures on children's moral evaluations of truth telling or lying, respectively. An omnibus ANOVA was not run because earlier studies (Lee et al., 1997, 2001) consistently showed that children from 7 years of age onward evaluate lie- and truth-telling stories markedly differently regardless of context. Furthermore, we did not have any a priori hypotheses regarding the difference in moral evaluation between lie- and truth-telling stories.

For the two lie-telling stories, only the crucial Beneficiary  $\times$  Country interaction was significant,  $F(1, 148) = 13.81, p < .001, \eta^2 = .09$ . Post hoc  $t$  tests (least significant difference,  $\alpha = .05$ ) were performed to compare Canadian and Chinese children's two scores. Regarding lying for a friend, Canadian children gave significantly less negative ratings than did Chinese children,  $t(153) = 3.27, p < .01$ . Regarding lying for a collective, Chinese children gave significantly less negative ratings than did Canadian children,  $t(152) = 2.57, p < .05$ .

Regarding truth telling, Country  $\times$  Age and Country  $\times$  Beneficiary interactions were significant,  $F(2, 148) = 6.98, p < .01, \eta^2 = .09$ , and  $F(1, 148) = 28.51, p < .001, \eta^2 = .16$ , respectively. Post hoc  $t$  tests revealed that with regard to truth telling for a friend, Canadian children gave significantly more positive ratings than did Chinese children,  $t(152) = 3.70, p < .01$ . With regard to truth telling for a collective, Chinese children gave significantly more positive ratings than did Canadian children,  $t(152) = 3.80, p < .05$ .

Overall, the evaluation results are consistent with our prediction and in line with the children's choices in Experiment 1 in which Chinese and Canadian children displayed distinctly different tendencies regarding lying and truth telling that help or harm a friend versus a collective. Chinese children gave less negative ratings to lying to help a collective than their Canadian counterparts, whereas Canadian children judged lying to help a friend less negatively than Chinese children. Chinese and Canadian children's moral judgments of truth telling were also in line with our expectations. Chinese children rated truth telling that helps a friend less positively than Canadian children, even though the story character tells the truth.

## Experiment 4

Experiment 4 was identical to Experiment 3 except that children were asked to classify and evaluate truthful and untruthful statements made by story characters that benefited themselves versus a collective. This experiment examined whether the cross-cultural differences in Experiment 3 would replicate after removing the interpersonal relationship confound from the procedure of that experiment.

### Method

**Participants**—New participants were again recruited. In the People's Republic of China, 76 children participated: 26 children age 7 years ( $M = 7.29$  years,  $SD = 0.50$ ; 12 boys), 23 children age 9 years ( $M = 9.44$  years,  $SD = 0.46$ ; 12 boys), and 27 children age 11 years ( $M = 11.53$  years,  $SD = 0.29$ ; 15 boys). In Canada, 98 Euro-Canadian children participated: 36 children age 7 years ( $M = 7.37$  years,  $SD = 0.34$ ; 18 boys), 32 children age 9 years ( $M = 9.51$  years,  $SD = 0.32$ ; 17 boys), and 30 children age 11 years ( $M = 11.45$  years,  $SD = 0.24$ ; 12 boys).

**Materials and procedure**—The materials and procedure were the same as those used in Experiment 3 except that the story character makes a decision to tell the truth or lie for him- or herself versus a collective (see Appendix B). Children were read the four stories: the Spelling story in which a story character tells a lie to help herself but harms her class, the Running story

in which a character tells the truth to help a group but harms herself, the Choir story in which a character tells a lie to help a group but harms himself, and the Basketball story in which a character tells the truth to help himself but harms a group. Children were asked the same classification question and moral evaluation question as in Experiment 3. Also, after children rated the story character's statement, they were asked, "Why do you think what [the story character] said is x [the child's rating]?" (the justification question).

Children gave a variety of responses to the justification question in each of the four stories. Their responses fell into one or more than one of the following categories that were pertinent to the story content: (a) Factual statement: Children justified their ratings by repeating the story content (e.g., "He hurt his arm," "He was supposed to go to the library," "She's not a good speller"). (b) Lie—truth: Children justified their ratings by referring to the fact that the story character was truthful or untruthful (e.g., "He told the truth," "He is lying," "It is dishonest for her to lie," "It is good to tell the truth," "It is wrong to lie to a teacher"). (c) Group interest: Children mentioned the interest of the group in their justifications (e.g., "Should not let the team down," "It would make the class lose face," "He helped the class to win"). (d) Individual interest: Children justified their ratings by referring to how the story characters' statement affected their personal interests (e.g., "It was a good opportunity to improve spelling," "He should protect his arm from more injuries," "Reading is more educational"). Children also frequently used a combination of the above categories to justify their ratings (e.g., "He helped himself over the class," "He lied to help the class," "Because he can run fast and can help the class").

There were also two additional categories of responses. One is the "I don't know" response. No Chinese children gave this response. There were only 5 such responses among the Canadian children (of 392 responses). The other category contained various idiosyncratic responses that were difficult to group ("He cannot be responsible all the time," "If I was her, I would not do it," "Because she was being nice to her teacher"). These responses were rare as well (2 of the 392 Canadian responses and 1 of the 304 Chinese responses).

These justifications were coded by three independent coders. One Chinese—English bilingual coder and one English monolingual coder coded the transcripts of the Canadian children's justifications, and one Chinese monolingual coder and the same Chinese—English bilingual coder coded the transcripts of the Chinese children's justifications. The interrater reliability averaged across the four stories was high (Chinese:  $\kappa = .94$ ; Canadian:  $\kappa = .90$ ).

## Results and Discussion

**Classifications of truthful and untruthful statements**—Table 3 shows the percentage and frequency of children in each age group that classified an untruthful statement as a lie or the truthful statement as the truth. Eight chi-square analyses were performed to examine the age effect on children's classifications in each story for each country. No significant age effects were found for any story in either country. To examine whether Chinese and Canadian children had differential tendencies to classify truthful and untruthful statements, we performed four chi-square analyses for each story (given the lack of age effects, we combined the data for all three ages). The country effect was significant only for the Choir story in which the story character makes an untruthful statement to help a collective while harming himself,  $\chi^2(1, N = 174) = 8.70$  (with continuity correction),  $p < .01$ : 99% of the Canadian children categorized the untruthful statement as a lie, whereas 87% of the Chinese children did so. Chinese children were less inclined than Canadian children to conceptualize untruthful statements made in this situation as lies. However, overall, like the results of Experiment 3, most Canadian and Chinese children did not differ in their classifications of truths and lies. These results also suggest that the children had no difficulty in comprehending the nature of the stories that were told to them.

**Moral evaluations of truthful and untruthful statements**—Table 4 shows the means and standard deviations of Chinese and Canadian children's moral evaluations of the truthful or untruthful statements by the story characters in the four stories. Following the same rationale as in Experiment 2, instead of an omnibus ANOVA, we conducted two separate 2 (countries)  $\times$  3 (age groups)  $\times$  2 (beneficiaries: self vs. collective) repeated measures ANOVAs with the last factor as a repeated measure on moral evaluations. For the lie-telling stories, the country, age, and beneficiary main effects and the Age  $\times$  Beneficiary interaction were significant,  $F(1, 157) = 27.82, p < .001, \eta^2 = .15$ ;  $F(2, 157) = 12.16, p < .001, \eta^2 = .13$ ;  $F(1, 157) = 13.62, p < .001, \eta^2 = .08$ ; and  $F(2, 157) = 3.45, p < .05, \eta^2 = .04$ , respectively. The critical Country  $\times$  Beneficiary and Country  $\times$  Beneficiary  $\times$  Age interactions were also significant,  $F(1, 157) = 86.96, p < .001, \eta^2 = .36$ , and  $F(2, 157) = 4.32, p < .05, \eta^2 = .05$ . Post hoc  $t$  tests (least significant difference,  $\alpha = .05$ ) performed to compare Canadian and Chinese children's scores at each age group revealed lying for self was no different at 7,  $t(55) = 0.18, ns$ , and 9 years of age,  $t(50) = 1.25, ns$ , but was different at 11 years of age,  $t(53) = 2.72, p < .01$ . At 11 years of age, Canadian children gave less negative ratings than Chinese children to the story character who lied to help him- or herself but harm the collective. Regarding lying for a collective, Chinese children at all ages gave significantly less negative ratings than did Canadian children,  $t(59) = 3.83, p < .001$ ;  $t(53) = 6.07, p < .001$ ; and  $t(56) = 8.27, p < .001$ , for 7, 9, and 11 years of age, respectively.

For the truth-telling stories, the ANOVA showed country, age, and beneficiary main effects to be significant,  $F(1, 153) = 94.65, p < .001, \eta^2 = .38$ ;  $F(2, 153) = 5.28, p < .001, \eta^2 = .07$ ; and  $F(1, 153) = 131.5, p < .001, \eta^2 = .46$ , respectively. The Age  $\times$  Country interaction was also significant,  $F(2, 153) = 3.25, p < .05, \eta^2 = .04$ ; as in Experiment 3, the Country  $\times$  Beneficiary effect was significant,  $F(1, 153) = 128.92, p < .001, \eta^2 = .46$ . The critical Country  $\times$  Beneficiary  $\times$  Age interaction, although not significant in Experiment 3, was now significant,  $F(2, 153) = 3.12, p < .05, \eta^2 = .04$ . Post hoc  $t$  tests (least significant difference,  $\alpha = .05$ ) compared Canadian and Chinese children's scores at each age. Regarding truth telling for the self while harming a collective, Chinese children at 7, 9, and 11 years of age gave significantly less positive ratings than did Canadian children:  $t(57) = 8.14, p < .001$ ,  $t(53) = 5.45, p < .001$ , and  $t(56) = 12.68, p < .001$ , respectively. Regarding truth telling for a collective but harming the self, at 7 years of age, Canadian children gave more positive ratings than did Chinese children,  $t(57) = 2.31, p < .001$ . At 11 years of age, Chinese children gave significantly more positive ratings than did Canadian children,  $t(56) = 3.10, p < .001$ , whereas at 9 years of age, Chinese and Canadian children's ratings did not differ.

**Children's responses to the justification question**—Table 4 shows the percentage of children in each country whose justifications fell into one of the four categories (because children's justifications could fall into multiple categories, the total number of justifications do not add to 100%). For each story, we conducted three separate logistic regression analyses. Children's lie—truth, group interest, and individual interest justifications were used as the predicted variables, respectively. Age and country factors and interactions between the two were used as predictors. We followed the general convention of logistic analysis and report here only the best fitting model for each analysis (i.e., the interaction term was excluded from the analysis if it did not account for significant amount of variability).

For the story in which the protagonist lied to help him- or herself but harm a collective, when children's lie—truth justifications were used as the predictor, no factor was significant. The majority of children in China and Canada used this justification (see Table 5). When children's group interest justifications were used as the predictor, the best fitting model included age and country,  $\chi^2(3, N = 175) = 12.70, p < .01$ , Nagelkerke  $R^2 = .11$ , and the age effect was significant, Wald = 8.56,  $p < .05$ . As age increased, children became more likely to use this justification. The country effect was marginally significant, Wald = 3.62,  $p = .057$ . Chinese children were

more likely to use the group interest justification than were Canadian children (see Table 5). When children's individual interest justifications were used as the predictor, the best fitting model included age and country,  $\chi^2(3, N = 175) = 21.88, p < .001$ , Nagelkerke  $R^2 = .16$ , and only the age effect was significant, Wald = 20.11,  $p < .001$ . As age increased, children became more likely to refer to individual interest in their justifications (see Table 5).

For the story in which the protagonist lied to help a collective but harm him- or herself, when children's lie—truth justifications were used as the predictor, no factor was significant. The majority of Chinese and Canadian children used this type of justification (see Table 5). When children's group interest justifications were used as the predictor, the best fitting model included age and country,  $\chi^2(3, N = 175) = 37.79, p < .001$ , Nagelkerke  $R^2 = .30$ , and only the country effect was significant, Wald = 26.40,  $p < .001$ . About 43% of Chinese children used the group interest justification, whereas only about 6% of Canadian children did so (see Table 5). With regard to children's use of the individual interest justifications, no Chinese children used this justification; thus, Chinese children were excluded from the analysis. About 18% of Canadian children used the justification (see Table 5). The age effect was not significant.

For the story in which the protagonist told the truth to help him-or herself but harm a collective, when children's lie—truth justifications were used as the predictor, no factor was significant. Less than one quarter of Chinese and Canadian children used this justification (see Table 5). When children's group interest justifications were used as the predictor, the best fitting model included age, country, and the Age  $\times$  Country interaction,  $\chi^2(5, N = 175) = 13.37, p < .05$ , Nagelkerke  $R^2 = .10$ . Both the age and country effects were significant, Wald = 8.02,  $p < .05$ , and Wald = 4.03,  $p < .05$ , respectively. Also, the Age  $\times$  Country effect was significant, Wald = 9.18,  $p < .05$ . As shown in Table 5, in China, children's use of the group interest justification increased with age, whereas in Canada, the opposite was true. When children's individual interest justifications were used as the predictor, the best fitting model included age and country,  $\chi^2(3, N = 175) = 61.39, p < .001$ , Nagelkerke  $R^2 = .41$ . Only the country effect was significant, Wald = 33.37,  $p < .001$ . Canadian children were more inclined to use individual interest to justify their ratings, whereas only 4 of 76 Chinese children did so (see Table 5).

For the story in which the protagonist told the truth to help a collective but harm him- or herself, when children's lie—truth justifications were used as the predictor, the best fitting model included age and country,  $\chi^2(3, N = 175) = 8.35, p < .05$ , Nagelkerke  $R^2 = .70$ . Only the age effect was significant, Wald = 7.00,  $p < .05$ . As age increased, children became less likely to use this justification. Note that, on average, less than one quarter of Chinese and Canadian children used this justification. When children's group interest justifications were used as the predictor, the best fitting model included age and country,  $\chi^2(3, N = 175) = 20.43, p < .001$ , Nagelkerke  $R^2 = .16$ . The age effect was marginally significant, Wald = 5.58,  $p = .06$ . As age increased, children became more likely to use this justification. The country effect was significant, Wald = 12.51,  $p < .001$ . Chinese children were more likely to use the group interest justification than were Canadian children (see Table 5). With regard to children's individual interest justifications, no Chinese children used this justification; thus, Chinese children were excluded from the analysis. For Canadian children, the model that included only the age factor was significant,  $\chi^2(2, N = 99) = 13.14, p < .001$ , Nagelkerke  $R^2 = .17$ . As age increased, Canadian children became more likely to refer to individual interest in their justifications.

Thus, Experiment 4 replicated and extended the findings of Experiment 3. Similar cross-cultural differences and age trends were observed in terms of moral judgments of truth telling and lying that benefit or harm an individual versus a group, after the removal of the potential interpersonal relationship confound in Experiment 3. Results of children's justifications to their ratings were consistent with those of moral evaluations. They revealed both age- and country-related effects as a function of story type. When the stories involved lying, the majority of

Chinese and Canadian children used the lie—truth justifications about their ratings. In addition to this type of justification, Canadian children were more inclined to use the individual interest justifications, whereas Chinese children were more inclined to use the group interest justifications. These tendencies increased with age and were moderated by whether the protagonist's lie would help an individual but harm a group or vice versa. When the stories involved truth telling, only a small proportion of Chinese and Canadian children used the lie—truth justifications. Chinese children were more likely than Canadian children to use group interest justifications, whereas the Canadian children tended to use individual interest justifications.

## General Discussion

In the present study, we examined Chinese and Canadian children's choices, categorizations, and moral evaluations in situations in which truthful or untruthful communication could affect positively or negatively an individual or a collective. Three major findings were obtained. First, few cross-cultural differences were found in children's categorizations of truths and lies. Regardless of whether a truthful or untruthful statement might negatively affect a friend, oneself, or a collective, most Canadian and Chinese children categorized deceptive statements as lies and factual statements as the truth. Overall, it seems that for most Chinese and Canadian children, a lie remains a lie regardless of whom it helps. This finding is consistent with the results of Lee et al. (2001), who reported that both Canadian and Chinese 7-, 9-, and 11-year-olds categorized untruthful statements of a speaker for modesty purposes as lies despite the fact that Chinese children gave more positive moral evaluations to such untruthful statements than did Canadian children. This finding is also in line with Bussey's (1999) report that Australian children categorized as lies untruthful statements told for interpersonal politeness reasons.

Our findings do not support Sweetser's (1987) contention that the conception of *lie* is determined by the general communicative intention of a speaker, that is, whether the speaker makes an untruthful statement with an intention to harm or to help: Those untruthful statements that serve to harm are lies, and those that serve to help are not. Rather, in the present experiments, lies are lies regardless of communicative intent. Our results do not confirm the findings of Lee and Ross (1997), in which Canadian participants failed to categorize untruthful statements made to help a friend as lies. Nor are they consistent with the results of Fu et al. (2001), who reported that only half of their Chinese participants categorized modesty-motivated untruthful statements as lies. One of the major differences between the present study and those two studies is the age of participants. The oldest age group in the present study was 11 years, whereas participants in the Lee and Ross (1997) study were adolescents and young adults, and those of Fu et al. (2001) were adults. It is possible that further socialization is needed for individuals eventually to develop the perspective that a general communicative intention should play a defining role in determining what sort of untruthful statement might be categorized as a lie.

The second major finding is that the cultural environment in which children are socialized plays a significant role in their decisions about whether they might lie and the moral evaluations of lying and truth telling. When Chinese children evaluated truths and lies, they took into consideration whether they were helpful or harmful to a collective. Thus, when the need for truthfulness collided with the goal of a collective, they opted for the enhancement of the collective at the expense of the truth. In addition, when the interests of an individual (a friend or self) collided with the interests of a group, Chinese children opted to sacrifice a friend's or their own interests for the benefit of the group. This group-oriented approach in Chinese children's moral judgments and decisions is highly consistent with Chinese cultural values. There is a general consensus in the literature that the Chinese culture is group-oriented. It

primarily values group harmony over individuality and the social good over personal interests (Bond, 1986; Dien, 1982; Wang & Leichtman, 2000). It impels its members to be closely linked, community-oriented, and duty-bound, and to give priority to the goals of a collective (family or social group) over personal goals. The Chinese children's responses in the present study suggest that those Chinese communitarian values had already been adopted or were in the process of being adopted by children as young as 7 years of age.

Canadian children also displayed tendencies consistent with the value systems of their own culture. Canadian society, despite its increasingly multicultural composition, is relatively individual-oriented. It emphasizes the protection of personal rights, the promotion of individual interests and achievements, and the importance of personal goals (see Oyserman et al., 2002). These individual-oriented values are clearly reflected in the Canadian children's moral judgments and choices of truths and lies in our study. Overall, Canadian children overwhelmingly valued individual interests over group allegiances. They favored communications that protected and enhanced personal interests. Thus, the differential response patterns of the Canadian and Chinese children in our study suggest the important role of culture in children's decisions and moral evaluations of truthful and untruthful communications.

The third major finding is the interaction between age and children's choices and moral judgments of lying and truth telling. As age increased, Chinese children's choices and moral evaluations increasingly favored the interests of a group over truthfulness. Similarly, with age, Canadian children became less stringent in their insistence on being truthful and were more inclined to protect the individual at the expense of honesty. These findings together suggest that enculturation processes may play an important role in children's development of moral distinctions between truthful and untruthful communications. This suggestion is also consistent with the results of Lee and his associates, who repeatedly have found that, as age increases, Chinese and Canadian 7-, 9-, and 11-year-olds become more differentiated in their moral judgments of truthful and untruthful statements about personal prosocial behaviors (e.g., Fu et al., 2001; Lee et al., 1997, 2001). Whereas Canadian children evaluated truth telling about one's own good deed positively and lying about it negatively, Chinese children increasingly gave negative ratings to truth telling and positive ratings to lying about it.

It is perhaps no coincidence that the results of the present study and those of Lee et al. (1997, 2001) are consistent with each other because both sets of studies in fact address two sides of a similar coin. The truth- or lie-telling situations examined in the present study deal with cultural conventions that regulate one's verbal behavior in view of how such behavior may affect others (individuals or groups). The situations examined by Lee and associates dealt with cultural conventions that regulate verbal communication to present the self in an appropriate light before others. In an individual-oriented society, one is expected to maintain a personal profile regarding prosocial deeds and achievements to demonstrate confidence, character, and competence (Cameron, Chen, & Lee, 2001; Triandis, 1995; Wang & Leichtman, 2000). By contrast, in a group-oriented culture like Chinese society, group members are required to be modest, self-effacing, and remain indistinguishable from other members of a group so as to promote group cohesion. Thus, they are expected to conceal their prosocial deeds and to minimize their personal achievements (Bond, 1986; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Su, 1993; Wu, 1996). Similar age patterns in these two sets of data suggest that children are socialized concurrently about their culture's values and conventions in these two respects.

The present findings have important implications for theorizing about moral development in the domain of truthful versus untruthful communications. The children's responses are clearly inconsistent with the deontological view of the moral values and the disvalues of lying. Both Canadian and Chinese children did not hold an absolutist view regarding the moral values of

truth telling and lying. Rather, their views about truthful and untruthful communication were utilitarian and context-dependent. In addition, this context dependence is not a reflection of moral immaturity. In fact, as age increases, children become more inclined to take factors other than truthfulness into consideration when making moral judgments or decisions about truth telling and lying. Perhaps, increased exposure to one's cultural value systems leads children increasingly to view lying as not always wrong. They become willing to sacrifice truthfulness for the collective good (as is the case in China) or to benefit an individual (as is the case in Canada). This pattern of development is generally consistent with the social—cognitive theory of Bandura (1986), who suggested that social—cultural factors influence the development of moral valuation. Through social learning, either explicitly or tacitly, children acquire their culture's moral values about such important issues as lying and truth telling.

The exact cultural processes by which such social learning takes place are yet to be determined empirically with specifically designed ethnographic observations and controlled experiments. Two processes in Chinese children's schools are likely to play an important role in their increased enculturation with the Chinese culture's valuation of collective-oriented lying and truth telling (Hui, 2005; Lu & Gao, 2004; Price, 1992; Qi & Tang, 2004; Wu, 1996). One process involves daily group activities at school. As soon as Chinese children enter elementary school, they immediately become members of various groups at different levels. They are assigned to not only a class but also a subgroup within a class, which typically remains unchanged for the entire elementary school years. Most children are also gradually selected to become a member of a formal political group called the "Young Pioneer Team." Most of the daily school activities, such as morning assembly, academic learning, recess, classroom cleaning, and extracurricular activities, are organized around these formal groupings. On a daily basis, Chinese children must learn to collaborate with members of their group to achieve personal and communitarian goals and to resolve conflicts between their own and group interests. Children are regularly evaluated in terms of not only academic achievements but also their conduct and contribution to the groups at different levels. On the basis of both personal and group achievements, children are selected to become leaders of their groups at different levels (e.g., subgroup leader, class-in-chief). In the case of their Young Pioneer Team, children are rewarded with ranks as well (e.g., small-team leader, large-team leader).

The other process involves formal educational programming. To help children learn the group-oriented values of Chinese society, Chinese schools have a long history of providing formal moral education curricula, which dates back to precommunist years. These curricula are mandated by the central government and taught on a weekly basis, sometimes by specialized teachers. In addition to promoting patriotism, work—study ethic, appreciation of learning, and respect for others, these curricula also advance explicitly collectivist ideas. Children are explicitly taught about the importance of self-sacrifice, humility, and the importance of groups over individuals (e.g., the superiority of *Da Wo* [the big me—the collective] over *Xiao Wo* [small me—the self], the need to *Gu Da Ju, Shi Da Ti* [be mindful of the collective and its interests]). Similar group-oriented ideas are also built into academic courses (e.g., Chinese language courses by teaching stories about heroic figures who exemplify collectivist ideals). It is perhaps because of these processes that the Chinese children in our sample learned to evaluate less negatively lying for the collective than lying for individuals and more positively truth telling for the collective than truth telling for individuals.

In stark contrast to the Chinese schools, the structure of a typical Canadian school, like its counterpart in the United States, is not so tightly organized with systematic and long-term groupings and student communitarian involvement (Martin & Macdonell, 1978; Stevenson & Lee, 1990). Classes are loosely structured, transient groups, and loyalty to a school class is not inculcated. Moral—values education is generally not so heavily integrated in Canadian curricula as it is in China; the home and faith communities of the child tend to be ascribed

significant responsibility in this area. Although children are discouraged from behaving in physically aggressive ways in school, they are at the same time encouraged to assert their rights and present themselves in a forthright and positive manner: They are encouraged to speak out in support of their individual rights. Concern for enhancing children's self-esteem and feelings of self-worth might also result in the promotion of more individualistic attitudes and behaviors. Teachers encourage individual accomplishments and creativity, and what is highlighted in schools is that which makes an individual student unique rather than that which makes a student an integral community member. Cultural literary heroes are characteristically outspoken, independent-minded, and often trailblazers (e.g., *Anne of Green Gables*; Montgomery, 2004). Thus, overall, although encouraged to assume some sense of community membership and social responsibility, Canadian school children are expected also to become increasingly autonomous, achievement oriented, and independent minded as they progress through their school years. Such individual-oriented approaches in the Canadian schools may explain why the Canadian children in our study were concerned less about the interests of a group and more about the interest of an individual than the Chinese children. Nevertheless, as stated earlier, specifically designed ethnographic observations and experimental studies are needed to establish empirically the relationship between the two enculturation processes described and children's moral judgments of individual- and group-oriented lies and truths.

Research is also needed to address another important issue related to the current debate about whether a culture's differential emphasis on the group or individual has an all-encompassing influence on children's understanding of moral, socioconventional, and personal issues. The present finding suggests that Chinese and North American children's choice and judgment of lying or truth telling reflect their respective culture's differential emphasis on groups and individuals (Bond, 1986; Oyserman et al., 2002). Certain recent cross-cultural comparisons between Chinese and North American children's judgments and reasoning about personal issues revealed cross-cultural similarities over differences, and Chinese children appeared to hold values inconsistent with what would be construed as group-oriented. For example, Helwig et al. (2003) found that, similar to their Western counterparts, Chinese adolescents highly valued personal autonomy, democratic rules, and individual rights. Yau and Smetana (2003) reported that Hong Kong Chinese preschoolers, like those in Western countries, already have differentiated understanding of personal choices, moral obligations, and conventional regulations, and the participants grant children a larger "arena of freedom" (p. 654) when deciding personal issues.

There are several possibilities that warrant further empirical research. One is that the influence of group versus individual orientations may be limited to situations in which the interests of individuals and groups are in direct conflict, which was the case in the present study. Another possibility is that a culture's differential emphasis on group versus individual orientations may have a general effect but may manifest itself at different points during the course of development, the earliest in the moral domain, followed by the social conventional domain, and finally in the personal domain (e.g., Nucci & Nucci, 1982; Yau & Smetana, 2003). Yet, another possibility is that a culture's differential emphasis on group versus individual orientations may affect differently children's understanding of moral, socioconventional, and personal issues, with the impact the greatest in the moral domain and the least in the personal domain (Nucci, 2001; Triandis, 1995; Turiel, 2002; Yau & Smetana, 2003). Empirical evidence concerning these possibilities is of important theoretical significance, not only for obtaining a more comprehensive understanding of truthful and untruthful communication in children but also for delineating the impact of cultural factors on the acquisition of general social knowledge.

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## Appendix A

### Stories Used in Experiments 1 and 3

#### Story 1 (the Spelling Story): Lying to Help the Individual, Harm the Collective

Here is Susan. Susan's class had to choose some of their classmates to represent the class in a spelling competition at their school. Susan's friend, Mike, couldn't spell very well, but he really wanted to be in the competition, so he asked Susan to pick him. Susan thought to herself,

- A. "If I pick Mike, our class will not do well at the spelling competition, but Mike is my friend, and if I don't pick him, he will be very upset."
- B. "Mike is my friend, and if I don't pick him, he will be very upset, but if I do pick Mike, our class will not do well at the spelling competition."

*Experiment 1.* When Susan's teacher asked her who she was going to pick, if you were Susan, what would you do? Would you help your friend Mike and tell your teacher that you pick Mike because he can spell very well, or would you help your class and tell your teacher that you don't pick Mike because he does not spell well?

*Experiment 3.* When Susan's teacher asked her who she was going to pick, Susan decided to help her friend. She said, "I pick Mike, because Mike can spell very well."

#### Story 2 (the Choir Story): Lying to Help the Collective, Harm the Individual

Here is Collin. Collin's class had spaces available in the class choir for more singers to represent the class in a singing competition at the school. Collin's friend, Shannon, couldn't sing very well, but she really wanted to be in the choir, so she asked Collin to sign her up for it. Collin thought to himself,

- A. "If I sign Shannon up for the choir, the choir will not do well at the competition, but Shannon is my friend, and if I don't sign her up, she will be very upset."
- B. "Shannon is my friend, and if I don't sign her up for the choir, she will be very upset, but if I do sign Shannon up, the choir will not do well at the competition."

*Experiment 1.* When Shannon asked Collin if he had signed her up for the choir, if you were Collin, what would you do? Would you help your friend Shannon and sign her up for the choir and tell her that you have done so, or would you help your class and not sign her up but tell her that there is no space left?

*Experiment 3.* Although there were still spaces left for more singers, Collin decided to help his class, and he didn't sign Shannon up. When Shannon asked Collin if he had signed her up for the choir, Collin told Shannon, "I couldn't. There were no spaces left."

#### Story 3 (the Basketball Story): Telling the Truth to Help the Individual, Harm the Collective

Here is Nicki. Nicki was close friends with Joshua, who was a member of the school basketball team. Joshua was the team's star player, and his presence on the team was essential to their

success, but Joshua was unhappy because he preferred playing soccer. Nicki found out that there was an opening for a new player on the soccer team. Nicki thought to herself,

- A. “If I tell Joshua about the opening, he will leave our team, and we won’t win our games anymore, but Joshua is my friend, and if I tell him and he joins, then he will be happier.”
- B. “Joshua is my friend, and if I tell him about the opening and he joins, then he will be happier, but if I do tell Joshua, he will leave our team, and we won’t win our games anymore.”

*Experiment 1.* When Joshua asked Nicki if she knew of any new openings on the other teams, if you were Nicki, what would you do? Would you help your friend Joshua and tell him there is an opening on the soccer team, or would you help your basketball team and tell him there is no opening on the soccer team?

*Experiment 3.* When Joshua asked Nicki if she knew of any new openings on the other teams, Nicki decided to help her friend. She told Joshua, “Yes, there is an opening on the soccer team.”

Story 4 (the Running Story): Telling the Truth to Help the Collective, Harm the Individual

Here is Kelly. It was a track and field day at Kelly’s school, and her friend, Jimmy, was the best runner in the class. The class counted on Jimmy to help them win at the running competitions. Just before the first race, Jimmy said to Kelly, “I don’t want to run today, so I’m going to the library to read. Don’t tell anyone.” Kelly thought to herself,

- A. “If I don’t tell on Jimmy, then our class will not do well at the races, but Jimmy is my friend, and if I do tell on him, then he will be unhappy because he will have to run.”
- B. “Jimmy is my friend, and if I do tell on him, then he will be unhappy because he will have to run, but if I don’t tell on Jimmy, then our class will not do well at the races.”

*Experiment 1.* When the teacher asked Kelly where Jimmy was, if you were Kelly, what would you do? Would you help your friend Jimmy and tell your teacher that you don’t know where Jimmy is, or would you help your class and tell your teacher that Jimmy is in the library reading?

*Experiment 3.* When the teacher asked Kelly where Jimmy was, Kelly decided to help her class. She said, “Jimmy’s in the library reading.”

## Appendix B

Stories Used in Experiments 2 and 4

Story 1 (the Spelling Story): Lying to Help the Individual, Harm the Collective

Here is Susan. Susan’s teacher was looking for volunteers to represent the class in a spelling competition at their school. Susan could not spell very well but thought the competition would be a good chance to improve her spelling skills. Susan thought to herself,

- A. “If I volunteer, our class will not do well at the spelling competition, but if I don’t volunteer, I will miss out on the chance to improve my spelling skills.”
- B. “If I don’t volunteer, I will miss out on the chance to improve my spelling skills. But if I do volunteer, our class will not do well at the spelling competition.”

*Experiment 2.* When the teacher asked Susan, “Are you a good speller?” if you were Susan, what would you do? Would you give yourself a good chance to improve your spelling skills

and tell your teacher you are a good speller, or would you help your class and tell your teacher you are not a good speller?

*Experiment 4.* When the teacher asked Susan, “Are you a good speller?” Susan decided to give herself a chance to improve her spelling skills, so she said, “Yes, I am a good speller, I want to volunteer in the competition.”

Story 2 (the Choir Story): Lying to Help the Collective, Harm the Individual

Here is Collin. The school principal went to Collin’s class and picked him and three other kids to represent the class in a singing competition at the school. Collin was excited to sing in the competition, but he could not sing very well, and he thought to himself,

- A. “If I sing in the competition, our class will probably lose. But if I say I feel sick, I won’t have to go in the competition. Then a good singer will take my place, and the class will do better.”
- B. “If I say I feel sick, I won’t have to go in the competition. Then a good singer will take my place, and the class will do better. But if I sing in the competition, our class will probably lose.”

*Experiment 2.* When the principal asked Collin if he was ready for the singing competition, if you were Collin, what would you do? Would you give yourself a chance to sing in the competition and tell your teacher you are a good singer, or would you help your class and tell your teacher you are sick so that a good singer can take your place in the competition?

*Experiment 4.* When the principal asked Collin if he was ready for the singing competition, Collin decided to help his class. Although Collin was not sick, he told his principal, “I am sick today, I cannot sing in the competition.”

Story 3 (the Basketball Story): Telling the Truth to Help the Individual, Harm the Collective

Here is Joshua, who was a member of the school basketball team. Joshua was the team’s star player, and because of him the team always won their games. There was a very important basketball game one evening, but Joshua had hurt his arm and wasn’t sure if he should play. Joshua thought to himself,

- A. “If I don’t play tonight, the basketball team may not win this very important game, but if I do play, I may hurt my arm even more.”
- B. “If I do play, I may hurt my arm even more. But if I don’t play tonight, the basketball team may not win this very important game.”

*Experiment 2.* When the coach asked Joshua, “Are you okay to play tonight?” if you were Joshua, what would you do? Would you take care of your arm and tell your coach that you are not okay to play because you hurt your arm, or would you help your team and tell your coach your arm is fine and you are okay to play?

*Experiment 4.* When the coach asked Joshua, “Are you okay to play tonight?” Joshua decided to take care of his arm and say, “No, I am not okay to play because I hurt my arm.”

Story 4 (the Running Story): Telling the Truth to Help the Collective, Harm the Individual

Here is Jimmy. It was track and field day at Jimmy’s school, and he was the best runner in the class. The class counted on Jimmy to help them win the running competitions. Before the first race, Jimmy was ready to run but didn’t feel like running because he wanted to go to the library to finish an exciting book he was reading. So he thought to himself,

- A. “If I go to the library to read my book, the class will not do well at the races. But if I run in the races, I won’t get to finish reading my exciting book today.”
- B. “If I run in the races, I won’t get to finish reading my exciting book today. But if I go to the library to read my book, the class will not do well at the races.”

*Experiment 2.* When the teacher asked Jimmy if he was ready to run in the race, if you were Jimmy, what would you do? Would you finish reading your exciting book and tell your teacher you are not ready to run in the race because you hurt your legs, or would you help your class and tell your teacher you are ready to run in the race?

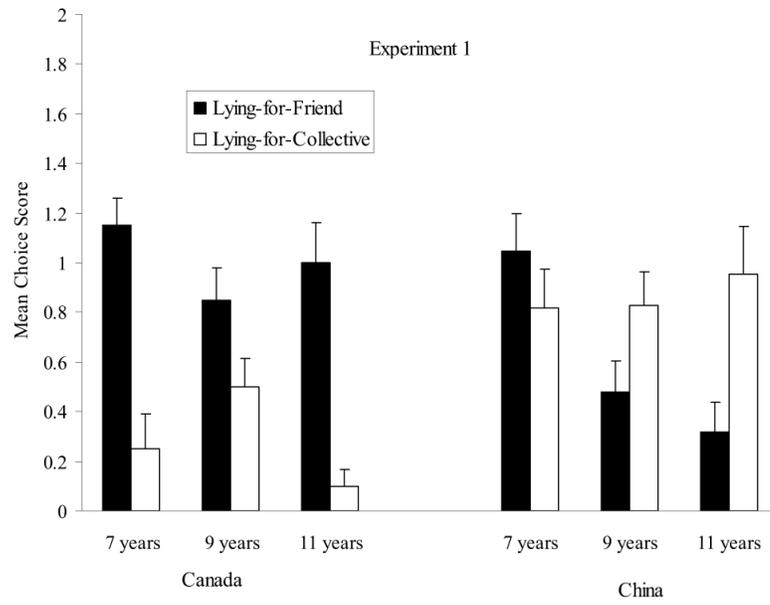
*Experiment 4.* When the teacher asked Jimmy if he was ready to run in the race, instead of telling her he was going to the library to finish his exciting book, Jimmy decided to help his class. So he said, “Yes, I’m ready to run in the race.”

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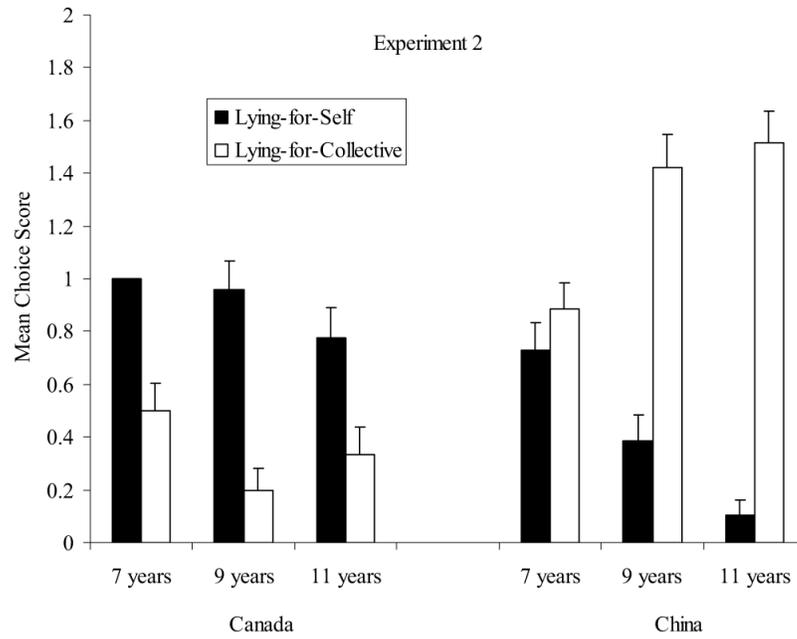
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**Figure 1.** Chinese and Canadian children's mean lying-for-friend and lying-for-collective choice scores and standard errors (represented by error bars) in Experiment 1.



**Figure 2.** Chinese and Canadian children's mean lying-for-self and lying-for-collective choice scores and standard errors (represented by error bars) in Experiment 2.

**Table 1**  
 Percentage and Frequency of Chinese and Canadian Children's Classifications of Story Characters' Truthful or Untruthful Statements  
 in Experiment 3

Story and country	Age (years)					
	7		9		11	
	%	Frequency	%	Frequency	%	Frequency
Story 1: Lie to help friend but harm collective						
China	97	29/30	97	29/30	100	30/30
Canada	72	13/18	87	20/23	79	19/24
Story 2: Lie to help collective but harm friend						
China	97	26/30	100	30/30	100	30/30
Canada	78	14/18	100	23/23	100	24/24
Story 3: Truth to help friend but harm collective						
China	87	26/30	97	29/30	97	29/30
Canada	94	17/18	87	20/23	96	23/24
Story 4: Truth to help collective but harm friend						
China	90	27/30	97	29/30	97	29/30
Canada	78	14/18	83	19/23	92	22/24

**Table 2**  
Means and Standard Deviations of Chinese and Canadian Children's Moral Evaluation Scores in Experiment 3 (Maximum = 3, Minimum = -3)

Story and country	Age (years)					
	7		9		11	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Story 1: Lie to help friend but harm collective						
China	-0.97	1.50	-1.50	1.55	-1.43	1.33
Canada	-0.28	1.36	-0.48	1.08	-0.88	1.26
Story 2: Lie to help collective but harm friend						
China	-0.41	1.72	-0.93	1.86	-0.37	1.65
Canada	-1.00	1.24	-1.22	0.85	-1.33	1.13
Story 3: Truth to help friend but harm collective						
China	0.21	2.06	0.73	2.10	0.40	1.28
Canada	1.83	0.92	1.09	1.04	1.33	1.01
Story 4: Truth to help collective but harm friend						
China	0.83	2.00	2.10	1.21	1.53	1.07
Canada	1.17	1.29	0.70	1.22	0.00	1.47

**Table 3**  
Percentage and Frequency of Chinese and Canadian Children's Classifications of Story Characters' Truthful or Untruthful Statements in Experiment 4

Story and country	Age (years)					
	7		9		11	
	%	Frequency	%	Frequency	%	Frequency
Story 1: Lie to help self but harm collective						
China	96	25/26	100	23/23	96	26/27
Canada	86	31/36	91	29/32	90	27/30
Story 2: Lie to help collective but harm self						
China	96	25/26	83	19/23	82	22/27
Canada	97	35/36	100	32/32	100	30/30
Story 3: Truth to help self but harm collective						
China	92	24/26	83	19/23	96	26/27
Canada	92	33/36	100	32/32	100	32/32
Story 4: Truth to help collective but harm self						
China	96	25/26	96	22/23	96	26/27
Canada	92	33/36	84	27/32	83	25/30

**Table 4**  
Means and Standard Deviations of Chinese and Canadian Children's Moral Evaluation Scores in Experiment 4 (Maximum = 3, Minimum = -3)

Story and country	Age (years)					
	7		9		11	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Story 1: Lie to help self but harm collective						
China	-1.65	0.69	-1.61	1.37	-1.74	1.06
Canada	-1.71	1.44	-1.14	1.33	-0.79	1.50
Story 2: Lie to help collective but harm self						
China	-0.96	1.04	0.39	1.64	0.59	1.15
Canada	-2.17	1.34	-1.88	1.13	-1.55	0.81
Story 3: Truth to help self but harm collective						
China	0.12	1.40	0.13	1.46	-0.26	0.76
Canada	2.42	0.75	1.91	0.96	2.10	0.65
Story 4: Truth to help collective but harm self						
China	2.27	0.67	2.39	0.66	2.37	0.79
Canada	2.67	0.65	2.11	0.85	1.65	0.89

**Table 5**  
Percentage and Frequency of Chinese and Canadian Children's Justifications in the Lie—Truth, Group Interest, and Individual Interest Categories

Story and country	Age (years)			Frequency	%	Frequency	%	Frequency	%
	7	9	11						
Story 1: Lie to help self but harm collective									
Lie—truth									
China	73	19/26	83	19/23	67	18/27			
Canada	64	23/36	59	19/32	65	20/31			
Group interest									
China	19	5/26	17	4/23	37	10/27			
Canada	6	2/36	9	3/32	26	8/31			
Individual interest									
China	15	4/26	17	4/23	63	17/27			
Canada	17	6/36	34	11/32	48	15/31			
Story 2: Lie to help collective but harm self									
Lie—truth									
China	81	21/26	91	21/23	74	20/27			
Canada	81	29/36	69	22/32	74	23/31			
Group interest									
China	39	10/26	30	7/23	59	16/27			
Canada	3	1/36	16	5/32	0	0/31			
Individual interest									
China	0	0/26	0	0/23	0	0/27			
Canada	8	3/36	25	8/32	23	7/31			
Story 3: Truth to help self but harm collective									
Lie—truth									
China	27	7/26	22	5/23	15	4/27			
Canada	36	13/36	22	7/32	16	5/31			
Group interest									
China	31	8/26	48	11/23	52	14/27			
Canada	50	18/36	19	6/32	26	8/31			
Individual interest									
China	0	0/26	0	0/23	15	4/27			
Canada	50	18/36	59	19/32	61	19/31			
Story 4: Truth to help collective but harm self									
Lie—truth									
China	27	7/26	22	5/23	22	6/27			
Canada	33	12/36	13	4/32	3	1/31			
Group interest									
China	85	22/26	87	20/23	89	24/27			
Canada	47	17/36	63	20/32	77	24/31			
Individual interest									
China	0	0/26	0	0/23	0	0/27			
Canada	17	6/36	53	17/32	52	16/31			