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Are There Limits to Collectivism? Culture and Children's Reasoning About Lying to Conceal a Group Transgression

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Abstract

This study explored the effects of collectivism on lying to conceal a group transgression. Seven-, 9-, and 11-year-old US and Chinese children ($N = 374$) were asked to evaluate stories in which protagonists either lied or told the truth about their group's transgression and were then asked about either the protagonist's motivations or justification for their own evaluations. Previous research suggests that children in collectivist societies such as China find lying for one's group to be more acceptable than do children from individualistic societies such as the United States. The current study provides evidence that this is not always the case: Chinese children in this study viewed lies told to conceal a group's transgressions *less* favourably than did US children. An examination of children's reasoning about protagonists' motivations for lying indicated that children in both countries focused on an impact to self when discussing motivations for protagonists to lie for their group. Overall, results suggest that children living in collectivist societies do not always focus on the needs of the group.

Keywords

collectivism; reasoning; social cognition; individualism; deception

From a very early age, children are taught that lies are bad and telling the truth is good. As children get older, they learn that while lie-telling in general is to be avoided, some lies are more acceptable than others and that situational context matters. For instance, they learn that it is not morally appropriate to lie to conceal a transgression such as taking someone else's candy, cheating at a game of chess, breaking a neighbor's window, or ruining a library book. However, it may be more acceptable to lie when truth-telling comes into conflict with another culturally supported value such as politeness (see Heyman, Sweet, & Lee, 2009). In such a context a 'white lie' may be told to spare another's feelings. The contexts in which lie-telling becomes more acceptable involve conflict with other socially supported values, and these may vary across cultures. In this study we explore the potential conflict between truth-telling and cultural values of collectivism or individualism by examining children's reasoning about a group member lying or telling the truth to either conceal or reveal the group's transgression.

Historically research on children's evaluations of lie-telling and truth-telling as well as the development of children's reasoning in these contexts has focused on the Western perspective (e.g. Bussey, 1992; Peterson, Peterson, & Seeto, 1983; Piaget, 1965; Strichartz & Burton,

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1990). More recently, researchers have become interested in the potential that cultural differences in levels of collectivism and individualism may impact children's reasoning and beliefs about lying or telling the truth (e.g. Fu, Xu, Cameron, Heyman, & Lee, 2007; Lee, Xu, Fu, Cameron, & Chen, 2001). Hofstede (1980, 1991) defined individualism as a cultural value of personal autonomy, personal success and goals, and a predominant focus on the individual. Individual needs are considered to be the most important, and an individual's self-concept, self-esteem, and values are based upon personal accomplishments and not group achievements or group harmony (see also Triandis, 1994, 1995). Individualism implies that judgment, reasoning, attributions and causal inference are generally oriented toward the person, and what is good for the individual, rather than the situation or social context (Oyserman, Coon, & Kimmelmeier, 2002; Triandis, 1994, 1995). The United States and Canada are considered to be particularly individualistic in their focus and socialization practices (Oyserman *et al.*, 2002).

In contrast, collectivism emphasizes the group, one's duty to the group over individual rights or concerns, and group loyalty, unity and harmony (Hofstede, 1980, 1991). Hofstede (1991) defined collectivist societies as those 'in which people from birth onwards are integrated into strong, cohesive in groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty' (p. 51). In collectivist societies, personal identity is based on group harmony and achievements, not personal accomplishments (see also Triandis, 1994 see also Triandis, 1995). According to Oyserman *et al.* (2002), collectivism advocates sacrifice for the common good and maintaining harmonious relationships with other group members as well as a focus away from the self or individual needs, desires, and accomplishments. Collectivism implies that within-group social context and social roles are the important factors in an individual's judgments, attributions, reasoning, and person perception (Oyserman *et al.*, 2002; Triandis, 1994, 1995). In their meta-analytic review of 50 countries, Oyserman *et al.* (2002) found adults raised in China to be the most collectivist in nature, perhaps due to China's historical, political, and religious roots in Confucianism, Buddhism, and Taoism, as well as the current communist government.

Although both collectivist and individualist cultures generally encourage honesty and discourage lying, the different cultural values supported by each may relate to different types of lies supported as more socially acceptable. This has been demonstrated in situations relating to modesty, where children from China view lies told to preserve one's sense of modesty more favorably than do children from Canada or the United States. A typically used scenario in this case involves a do-gooder who decides to either reveal or conceal the good deed. For example, a child cleans the play area inside while other children are outside playing at recess. The teacher notices, thanks the person who took the time to clean and asks who did it. Even as early as age 7, children in China believed lies told to preserve individual modesty were more acceptable and less negative than lies told to conceal a transgression, whereas Canadian and US children did not (Fu, Lee, Cameron, & Xu, 2001; Lee, Cameron, Xu, Fu, & Board, 1997; Lee *et al.*, 2001). Chinese children tended to rate individuals who lied and said they had not performed a good deed more favorably, while Canadian children tended to do the opposite, considering those who told the truth about their good deeds more positively. Heyman, Sweet, Xu, Fu, and Lee (2009) asked 7-, 9-, and 11-year-olds children from the United States and China to evaluate lies told to hide a good deed and truths told to take credit for a good deed. Children from China evaluated the lies more positively and the truths more negatively than did children from the United States.

Observed cultural differences in beliefs about lying in modesty situations fit the collectivist and individualist ideals suggested by Hofstede (1980, 1991), Oyserman *et al.* (2002) and Triandis (1994, 1995). Newly emerging evidence from studies investigating the acceptability of lying for one's group as opposed to an individual also provide support for these ideals (Fu,

Evans, Wang, & Lee, 2008; Fu *et al.*, 2007). Fu *et al.* (2007) told 7-, 9-, and 11-year-olds Chinese and Euro-Canadian children stories which pitted a story protagonist's desires/interests against a group's desire for success; some children were asked if the protagonist should lie to benefit the group or lie to benefit him/herself and some children were told stories where the protagonist *did* lie to benefit either him/herself or the collective. Younger Chinese children were more likely to suggest that protagonists should lie for their own benefit than were older Chinese children, while older Chinese children were more likely to suggest that the protagonist should lie for group benefit. The Chinese children asked to evaluate the protagonist's decision to lie demonstrated a similar pattern: not only were older Chinese children less likely to characterize the lie told for the group as a lie but also Chinese children in all age groups considered the lie told to benefit the protagonist to be worse than the lie told to protect the group. In contrast, Canadian children tended to do the opposite, considering individuals' interests to be more important than the group's interests. This cross-cultural interaction was stronger in the older age groups in this study. Fu *et al.* (2008) further showed that Chinese children's moral choices and decisions were significantly correlated with their own collective-benefiting behaviours in real life situations.

A consistent pattern has emerged from this research: children from a collectivist society such as China favour the group over an individual, relative to the individualist tendency in Canada to favor the individual over the group. In these studies, the scenarios involved a choice between helping a group and helping an individual. Study children were asked to make a choice as if they were the story character or were asked to evaluate lies and truths the story character told to benefit one more than the other. It should be noted that in these previous studies, then, cultural values of collectivism/individualism were related to the acceptability of telling a lie, but in a fairly neutral situation: is it better to support one's friend/oneself or one's group? When considered separately, both of these options are socially acceptable choices. The question remains, then, as to how far these cross-cultural patterns will generalize. The current study explores the effects of collectivism/individualism in situations that would be considered negative in both types of cultures: situations where a transgression has been committed. In such situations, both collectivist and individualistic societies would consider lying to conceal a transgression to be an anti-social behaviour and therefore wrong. Given this, would children from a collectivist society still be more likely to support lying to conceal a group's transgression than would children from an individualistic society? Would they evaluate such a lie more positively than would children from individualistic cultures?

Previous findings and writings about collectivistic societies might suggest an affirmative answer to these questions, but several researchers have argued that there are limits to collectivism, and that those in collectivistic societies sometimes act, feel, or think more pro-individually than the definition of collectivism would suggest (Bond, 2002; Helwig, Arnold, Tan, & Boyd, 2003; Lau, 1992; Neff, 2001; Oyserman *et al.*, 2002; Schwartz, 1990; Takano & Osaka, 1999; Turiel, 2002; Turiel, Hildebrandt, & Wainryb, 1991; Wainryb, 1997; Wainryb & Turiel, 1994). It is possible that the extreme negative view of committing a transgression and then lying about it, held by both types of societies, may supersede any cultural values of collectivism or individualism.

The present study, then, was designed to investigate whether or not there are limits to the acceptability of lying to benefit one's group in a collectivist society. In our scenarios, individual desires were not pitted against group desires. Instead, the moral value of truth-telling was pitted against the societal value of individualism/collectivism in situations where a group had clearly committed a transgression. Study children were told stories in which groups of children cheated to achieve success for the group, and then an individual within that group either lied to conceal the cheating or told the truth and confessed to it. We investigated cross-cultural differences by comparing children between 7 and 11 years of age from China to children from the United

States. This age range was chosen because previous research has demonstrated that substantial social-cognitive development occurs during this age range (including an understanding of social acceptability as a factor in lie-telling and reasoning about lie-telling) and to facilitate comparisons with other cross-cultural research on reasoning about lying and truth-telling (e.g. Bussey, 1999; DePaulo & Bell, 1996; DePaulo & Kashy, 1998; Fu *et al.*, 2001, 2007, 2008; Heyman *et al.*, 2009; Lee & Ross, 1997; Lee *et al.*, 1997, 2001; Sweetser, 1987; Talwar, Gordon, & Lee, 2007; Talwar, Murphy, & Lee, 2006; Talwar & Lee, 2002).

Study children were first asked to evaluate the valence of the decision to lie or tell the truth. Our goal was to determine if there would be cross-cultural differences in evaluations of lies and truths (in keeping with Fu *et al.*, 2007, 2008) or if the context of the situation would outweigh the effects of collectivism or individualism (in keeping with Helwig *et al.*, 2003). We were also interested in determining if the age-related increases in culture-specific socialization found in previous studies would be replicated with our study.

Study children were then asked open-ended questions about their evaluations of the story character's decision. Children were either asked to justify their own evaluations of the protagonists' actions *or* asked about the protagonist's reason or motive for lying or telling the truth. We were interested in potential cross-cultural and age-related differences in responses to the justification and motivation questions, as well. If children were to respond based on cultural values of collectivism or individualism, then we would expect Chinese children to be more likely to mention other-oriented explanations for both justification and motivation questions and we would expect this tendency to become stronger with age. Conversely, US children should provide more individual-oriented explanations and these should increase in frequency with age. We also explored whether or not children's responses to these justification and motivation questions were predictive of their evaluations of how good/bad the lies or truths told were and if this relationship differed according to age or culture.

METHOD

Participants

A total of 374 children participated in both the United States and the People's Republic of China. In China, 193 children (96 male, 97 female) participated: 64 children in a 7-year-old age group ($M = 7.43$ years, $S.D. = 0.34$, range 6.83–7.92 years), 64 children in a 9-year-old age group ($M = 9.57$, $S.D. = 0.32$, range 8.88–9.92 years), and 65 children in an 11-year-old age group ($M = 11.53$, $S.D. = 0.32$, range 10.84–12.25 years). Chinese children were Han Chinese in an eastern Chinese city, and were recruited from public schools. In the US, 181 children (84 male, 97 female) participated: 71 children in a 7-year-old age group ($M = 7.56$ years, $S.D. = 0.39$, range 6.80–8.24 years), 61 children in a 9-year-old age group ($M = 9.47$, $S.D. = 0.45$, range 8.79–10.23 years), and 49 children in an 11-year-old age group ($M = 11.29$, $S.D. = 0.37$, range 10.80–12.20 years). The US children were recruited from public elementary schools; 54% of US children were Caucasian, 23% Hispanic American, 9% African-American and 7% Asian-American. The remaining 7% were unknown.

Procedure

An experimenter read two short stories to participants and then asked participants several questions about each story. These two stories were interspersed with several other, unrelated stories as part of a broader study of the development of moral reasoning. The stories were illustrated with coloured line drawings, and the experimenter read the stories aloud to each child.

Before hearing the stories, participants were told, ‘Today, I’m going to tell you about some kids who do some things and say some things. I want you to listen carefully because I’m going to ask you some questions about what they say. The questions are only about what the kids say, not what they do, okay? So, for instance, sometimes people do things like eating or drawing and sometimes people say things just like I am saying things to you right now. So the questions I am going to ask you are only about what they say. Is that okay with you?’ This was done to ensure that study children were reasoning about what the story protagonists *said*, and not about what they *did*, which meant reasoning about whether or not the protagonist told a lie and *not* about the fact that a transgression was committed.

The two stories described situations in which a group of children, including the story protagonist, committed a transgression in order to win a competition. In one scenario, the protagonist was part of a team engaged in a tug-of-war competition at school. The protagonist’s team was losing, and so got help from some additional friends to win. In the other scenario, the protagonist was part of a team engaged in a drawing competition at school. The protagonist’s team really wanted to win so they got help from some additional older students. In both scenarios, the group won after committing the transgression. At the end of each story, the protagonist was asked by a teacher if the group had won on their own or if they had been helped. The protagonist either told the truth and admitted that the group had cheated or lied to conceal the cheating behaviour. Participants heard both stories, one with the lie ending and one with the truthful ending. Half of the participants heard the lie ending to the tug-of-war story and the truthful ending to the picture story, and half heard the reverse. Within each of these groups, the order in which the stories were told was counterbalanced to control for potential order effects.

After hearing each story, participants were asked to evaluate the protagonist’s verbal response; that is, what he/she said in response to the teacher’s question. Children were asked whether they thought the response was ‘good or bad’ using a 7-point scale that has been used in prior research among children of similar ages (e.g., Fu *et al.*, 2007; Heyman *et al.*, 2009). The scale included the following response options: ‘very, very good’ (represented by three stars, scored as 3), ‘very good’ (represented by two stars, scored as 2), or ‘good’ (represented by two stars, scored as 1), ‘neither good nor bad’ (represented by a blank circle, scored as 0), ‘bad’ (represented by one X, scored as -1), ‘very bad’ (represented by two X’s, scored as -2), and ‘very, very bad’ (represented by three X’s, scored as -3). Participants were trained to interpret and use this scale prior to the study. For example, they were asked, ‘if you thought that something someone said was ‘very bad’ which choice would you point to?’

Once children had answered the evaluation question, they were then asked one of two open-ended questions: they were either asked a *motivation* question, which concerned the protagonist’s motive for his/her statement, or they were asked a *justification* question, in which they were asked to explain their own evaluations of what the protagonist had said. The type of open-ended question was between-subjects and randomly assigned; for example, children in the motivation condition were asked about the protagonist’s motivations after evaluations of both stories.

For the motivation question, participants were asked *why the story protagonist had lied or told the truth* for each story. For example, in the version of the story in which a protagonist (e.g. ‘Mary’) lied about her group getting help from friends to win the tug-of-war competition, participants were asked ‘Why did Mary say ‘no, no one else helped us’?’ For the justification question, participants were asked *why they had decided upon the particular evaluations they provided* for each story. For example, in the version of the story in which a protagonist (Mary) lied about her group getting help to win the tug-of-war competition, a participant who responded that Mary’s response was very bad was asked, ‘Why do you think what Mary said

was very bad?’ Children’s responses were recorded verbatim, and no further prompts for more information were provided.

Coding of Open-Ended Questions

Responses were then coded independently by two coders. Although the justification question addressed a different concept than the open-ended motivation question, participants generated responses that related to the same general underlying themes. For this reason, a single coding system was developed to code both justification and motivation questions, with the key distinction of theoretical interest being whether children focused on self interest or the interest of others. Cohen’s Kappas averaged 0.93 for the motivation question and 0.82 for the justification question. Response categories with examples appear below.

Truth/Lie Focus—Responses coded into this category comprised simple statements about telling the truth or telling a lie, with no further comments or social judgments. Examples are ‘she lied’, ‘because it was dishonest’, ‘it was truthful’, and ‘she told what was true’.

Facts—Responses were coded into this category if they only contained references to the stated facts of the situation. Examples are ‘didn’t draw by themselves, others helped’, ‘they won the tug-of-war’, ‘in fact older students drew it’, and ‘her friends did help her’.

Impact on others—This category included references to the impact on individuals other than the protagonist. Examples are ‘she wanted her teacher to know the truth’, ‘she wanted them (the group) to win’, ‘she might have wanted the kids to help her to get a treat’, and ‘she didn’t want the team to get in trouble’.

Impact on self—This category included references to how the response would impact the protagonist. Examples are ‘she wanted to win’, ‘she didn’t want to get in trouble’, ‘was afraid of teacher calling parents’, and ‘was afraid of teacher criticizing her’.

Social Rule Statements—Responses were coded into this category if they involved general statements about the appropriateness of what the protagonist did, should have done, or should not have done, without any reference to the consequences for story characters. Examples are ‘it’s bad to lie’, ‘She didn’t have to lie’, ‘was very brave and honest to admit the mistake,’ and ‘Should answer honestly’.

RESULTS

Evaluations

Study children were asked to evaluate a protagonist’s verbal actions in two stories involving groups of children. Evaluations were quantified according to a 7-point scale, where -3 = very, very bad, 0 = neither bad nor good, and 3 = very, very good.

The main question tested in this study was whether or not children in China would evaluate lies and truths differently than would children in the United States, and whether or not these differences would be age-related. The potential for gender differences was also considered. As such, a 2 (Country = US, China) $\times 3$ (Age = 7, 9, 11 years of age) $\times 2$ (Gender = female, male) $\times 2$ (Decision = tell truth or lie) ANOVA was conducted, with country, age, and gender as between-subject factors and the story protagonist’s decision to lie or tell the truth as a within-subjects factor. Appropriate post-hoc pair-wise comparisons were made using Tukey–Kramer tests to preserve a family-wise α of 0.05.

A significant main effect of Country emerged, $F(1, 362) = 16.40, p < 0.001, \eta_p^2 = 0.04$, along with a significant age effect, $F(2, 362) = 3.38, p = 0.04, \eta_p^2 = 0.02$. The within-subjects Decision effect was also significant, $F(1, 362) = 1055.56, p < 0.001, \eta_p^2 = 0.75$. Significant interactions between Decision and Country and Decision and Age emerged, $F(1, 362) = 50.59, p < 0.001, \eta_p^2 = 0.12$ and $F(2, 362) = 4.41, p = 0.01, \eta_p^2 = 0.02$, respectively. These were all qualified by a three-factor interaction between Country, Age, and Decision, $F(2, 362) = 6.48, p < 0.002, \eta_p^2 = 0.04$. This interaction is depicted in Figure 1. Children from China evaluated lies told by the protagonist (which would help the group by keeping them from getting in trouble) more negatively than did children from the US at 7 and 9 years ($p < 0.001$ for both), but these differences disappeared at 11 years. Children from China also evaluated truths told by the protagonist (which would harm the group by getting them in trouble) more positively than did children from the US at 7 years ($p = 0.04$), although this difference was not evident at 9 or 11 years. Within each country, age-related differences were observed only for lies evaluated by children from the United States; while evaluations did not differ between 7 and 9 years, evaluations made by the 11-year-old were significantly more negative than those of 7- and 9-year-old ($p < 0.01$ for both). Chinese children's evaluations of lie-telling did not differ significantly across age groups; neither Chinese nor US children's evaluations of truth-telling differed across age groups.

The Justification Question: Why did you Provide this Evaluation?

Likelihood ratio χ^2 tests were conducted to determine if United States children provided significantly different patterns of coded justification responses than did Chinese children in stories ending with a lie or stories ending with the truth. Likelihood ratio χ^2 tests were also conducted within each story ending type and within each country, to determine if coded justification responses differed as a function of age group.

Lie-ending stories—Relative frequencies of children's coded justification responses to stories ending with a lie are depicted in the top portion of Figure 2. Coded responses for stories ending with a lie did differ across country, $\chi^2_{(5)} = 17.47, p < 0.01, \phi = 0.31$. The majority of children in both countries justified their evaluations by referring to the fact that a lie was told (56.41% US, 57.29% China). In addition, US children were more likely to cite the facts or actions of the situation in response to the justification question (17.95%) than were Chinese children (3.13%). Chinese children, however, were more likely to refer to social rules when justifying their evaluations than were US children (32.29% China, 15.38% US). Few children in either country (US: 1.28% and China: 0%) justified their evaluations by referring to a concern for the impact of the protagonist's actions on others. Frequencies of children's coded justification responses to the lie-ending stories are broken down by age and country in the top half of Table 1. Coded responses to the justification question did not significantly differ as a function of age group in either the United States or China.

Truth-ending stories—Relative frequencies corresponding to the truth-ending stories are presented in the bottom portion of Figure 2. Coded justification responses for stories ending with the truth also differed across country, $\chi^2_{(5)} = 28.13, p < 0.001, \phi = 0.38$. Although children in both countries were most likely to justify their evaluations by referring to the fact that the truth was told, more Chinese children than US children used this justification (65.63% China, 52.56% US). Chinese children were also more likely to mention social rules as justifications (30.21% China, 15.38% US), but United States children were more likely to refer to the facts/actions of the story itself (14.10% US, 2.08% China) or an impact on the protagonist/ self (11.54% US, 1.04% China). Few children in either country (US: 3.85% and China: 1.04%)

justified their evaluations by referring to a concern for the impact of the protagonist's actions on others.

Frequencies of children's coded justification responses to the truth-ending stories broken down by age and country are also presented in the bottom half of Table 1. Coded justifications for evaluations of truth-ending stories differed across age groups in the United States,

$\chi^2_{(10)}=23.84, p<0.01, \phi = 0.51$. The most frequently occurring justification across all the age groups was the response that the protagonist told the truth. Older children were less likely to cite the facts of the situation as justification for their responses (7-year-olds 24.2%; 9-year-olds 11.5%; 11-year-olds 0%) and more likely to cite social rules as justifications (7-year-olds 6.1%; 9-year-olds 15.4%; 11-year-olds 31.6%). Coded responses to the justification question did not significantly differ as a function of age group in China.

Justification Responses as Predictors of Story Evaluations

Children who provided different evaluations may also have systematically provided different justifications for their evaluations. This relation, if it were to exist, might also differ across country, age, and/or gender of participants. To test this possibility, a 2 (Country = US, China) $\times$ 3 (Age = 7, 9, 11 years of age) $\times$ 2 (Gender = female, male) $\times$ Justification Response ANOVA was conducted separately for stories with lie endings and stories with truth-telling endings. To preserve statistical integrity, only coded responses provided by 10 or more children were included in each analysis. The Justification Response factor had 4 levels for both the lie and truth ending stories: truth/lie focus, focus on the facts/ actions of the story itself, impact on self/protagonist, and social rule statements. When appropriate, post-hoc pair-wise comparisons were made using Tukey–Kramer tests to preserve a family-wise α of 0.05.

Lie-ending stories—Justification Responses were not predictive of story evaluations when stories ended with a lie, at least as a main effect. Justification Responses *did* interact with Country, $F(4, 130) = 7.37, p<0.001, \eta^2_p=0.18$. This interaction is depicted in the top portion of Figure 3. Of those children referring to the fact that a lie was told as justification for their evaluations, Chinese children rated the lie more negatively than did US children ($p<0.001$). This was also marginally the case for children who referred to the facts/actions of the story itself, $p = 0.09$. Although there were no significant differences in relations between Justification Response and evaluations within the sample of Chinese children, United States children using either social rules or the fact that a lie was told as justifications for their evaluations judged the lie more negatively than did children using the facts/actions of the story as justification, $p<0.001$ and $p = 0.05$.

Truth-ending stories—Justification Responses were predictive of story evaluations when stories ended with the truth, $F(3, 133) = 3.60, p = 0.02, \eta^2_p=0.08$. This relation is depicted in the bottom portion of Figure 3. While there were no country differences in terms of the association between children's evaluations and their justifications of those evaluations, children who said that the truth was told in response to the justification question provided more positive evaluations than did children referring to social rules. No other main effects or interactions achieved statistical significance.

The Motivation Question: Why did the Story Protagonist Lie/Tell the Truth?

Likelihood ratio χ^2 tests were conducted to determine if US children provided significantly different patterns of coded motivation responses than did Chinese children in stories ending with a lie or stories ending with the truth. Likelihood ratio χ^2 tests were also conducted within each story ending type and within each country, to determine if coded motivation responses differed as a function of age group.

Lie-ending stories—Relative frequencies of children's coded motivation responses to stories ending with a lie are depicted in the top portion of Figure 4. Coded motivation responses for stories ending with a lie did differ across country, $\chi^2_{(5)}=12.33$, $p=0.03$, $\phi=0.23$. For stories ending with a lie, the majority of children in both countries said that the protagonist had lied due to concern for an impact on self (66.99% US, 81.44% China). However, significantly more Chinese children provided responses in this category than did US children. In addition, US children were much more likely to cite the facts or actions of the situation in response to the motivation question (14.56%) than were Chinese children (4.12%). Few children in either country (US: 6.8% and China: 4.12%) said that the protagonist had told the lie because of concern for the impact on others, and even fewer cited social rules as the protagonist's motivation for telling the lie (US: 0.97% and China: 1.03%).

Frequencies of children's coded motivation responses to the lie-ending stories are broken down by age and country in the top half of Table 2. In the United States, coded motivation responses to the lie stories differed as a function of age group, $\chi^2_{(10)}=20.12$, $p=0.03$, $\phi=0.44$. Although the majority of children across all age groups referred to an impact on self as the protagonist's primary motivations for telling the lie, older children were more likely to provide this explanation than were younger children (7-year-olds 55.3%; 9-year-olds 68.6%; 11-year-olds 80%). In addition, the 7-year-old children were more likely to talk about the facts of the situation (31.6%) than were the older children (9-year-olds 5.7%; 11-year-olds 3.3%). Coded motivation responses did not significantly differ as a function of age group in China.

Truth-ending stories—Relative frequencies corresponding to the truth-ending stories are presented in the bottom portion of Figure 4. Coded motivation responses for stories ending with the truth also differed across country, $\chi^2_{(5)}=81.27$, $p<0.001$, $\phi=0.61$. The pattern of responses to truth-telling endings looked very different than that of the lie-ending scenarios both within and across countries. When stories ended with the protagonist telling the truth, the majority of US children said that the protagonist focused on an impact to self when deciding to tell the truth (48.54% versus 8.25% China), while the majority of Chinese children said that the protagonist told the truth because it *was* the truth (59.79% versus 10.68% United States). More US children referred to the facts or actions of the story itself than did Chinese children (23.30% versus 7.22%), and more Chinese children thought that the protagonist was focused on social rules in comparison to US children (16.49% versus 8.74%). Few children from either country felt that the protagonist told the truth due to concern for an impact on others (US: 7.77% and China: 6.19%).

Frequencies of children's coded motivation responses to the truth-ending stories broken down by age and country are presented in the bottom half of Table 2. As with stories ending with a lie, coded motivation responses to truth-ending stories differed across age groups in the United States, $\chi^2_{(10)}=24.29$, $p=0.01$, $\phi=0.43$. The majority of children in all age groups reported that the protagonist was motivated to tell the truth because of a concern for the impact on self, and the 11-year-old children were most likely to offer this explanation (7-year-olds 47.4%; 9-year-olds 34.3%; 11-year-olds 66.7%). Younger children (7-year-olds 34.2%; 9-year-olds 25.7%) were more likely than the 11-year-olds (6.7%) to cite the facts of the situation as a motivation to tell the truth, and older children (9-year-olds 17.1%; 11-year-olds 16.7%) were more likely than the 7-year-olds (0%) to say that the protagonist told the truth because it was the truth. Coded motivation responses did not significantly differ as a function of age group in China.

Motivation Responses as Predictors of Story Evaluations

Also of interest was the possibility that responses to the motivation question might differentially predict evaluations of the protagonist's decision to lie or tell the truth, and that

this relationship might differ across country, age, and/or gender of participants. To test this possibility, a 2 (Country = US, China) $\times$ 3 (Age = 7, 9, 11 years of age) $\times$ 2 (Gender = female, male) $\times$ Motivation Response ANOVA was conducted separately for stories with lie endings and stories with truth-telling endings. To preserve statistical integrity, only coded motivation responses provided by 10 or more children were included in each analysis. For the lie-ending stories, the Motivation Response factor had four levels: truth/lie focus, focus on the facts/actions of the story itself, impact on others, and impact on self. For stories ending with the truth, the Motivation Response factor had five levels: truth/lie focus, focus on the facts/actions of the story itself, impact on others, impact on self, and social rule statements. When appropriate, post-hoc pair-wise comparisons were made using Tukey–Kramer tests to preserve a family-wise α of 0.05.

Lie-ending stories—Motivation Responses were significantly predictive of evaluations, $F(3, 159) = 10.10, p < 0.001, \eta_p^2 = 0.16$. There was also a significant Motivation Response by Country interaction, $F(4, 159) = 14.41, p < 0.001, \eta_p^2 = 0.27$. This interaction is depicted in the top portion of Figure 5. Within the United States, children focusing on the facts/actions of the story itself said that lying was significantly more positive than did children who focused on the lie itself ($p < 0.001$), children who focused on the impact on others ($p < 0.001$), and children who focused on the impact to the protagonist/self ($p < 0.001$). Within China, children who focused on the facts/actions of the story itself tended to make more positive evaluations of the lie than did children who said that the protagonist was concerned with an impact on self ($p = 0.06$). The only cross-country comparison to achieve significance was the relation between the impact on self response group and evaluations: Chinese participants who cited impact on self as motivation for the protagonist to lie evaluated that lie more negatively than did US children, $p < 0.001$.

Truth-ending stories—Motivation Responses were not predictive of story evaluations at least as a main effect. Motivation Responses *did* interact with Country, $F(5, 148) = 4.73, p < 0.001, \eta_p^2 = 0.14$. This interaction is depicted in the bottom portion of Figure 5. While there were no significant differences in relations between Motivation Response and evaluations within either the US or China, Chinese children focusing on social rules judged telling the truth significantly more positively than did US children, $p = 0.02$.

DISCUSSION

In this study, 7-, 9-, and 11-year-old Chinese and US children were asked to reason about situations in which a group committed a transgression and then an individual group member either lied or told the truth when asked about the transgression. This study was designed to explore the extent to which children's reasoning in these situations would differ across societies in which individualism and collectivism are emphasized differently. Unlike previous studies, which have related collectivism to an increase in the acceptability of lying for one's group (Fu *et al.*, 2008, 2007), we found that children from China considered lying for one's group to be *less* acceptable than did children from the United States. In addition, Chinese children's reasoning about lying or telling the truth for one's group revealed that they are often *not* considering the needs of the group to be most important.

It is likely that the difference in results between our study and previously reported findings on this topic has to do with the nature of the conflict posed to study children. In previous studies, stories were constructed such that protagonists had to choose between an individual and a group. For instance, in one scenario used by Fu and colleagues (2007, 2008) children were told that a friend of the protagonist really wants to sing in the chorus to use it as a learning opportunity, but is not a very good vocalist. The protagonist had to decide between telling the

truth to the chorus, which would hurt the friend but help the choral group, and lying to the chorus, which would help the friend but hurt the choral group. In essence, then, children had to decide who was more important—the group or the individual—in a forced-choice situation where both choices were socially acceptable.

The present study focused on situations where cheating had occurred—something that is considered a transgression in both collectivistic and individualistic societies. Story protagonists had to decide whether to lie about the group cheating, which is immoral but would protect or help the group, or whether to tell the truth about the group cheating, which is a moral decision but would also harm the group. In this case, Chinese children in all age groups favored truth-telling even though doing so might harm the group to which they belonged. In other words, when a group cheated, honesty became more important than group interests for Chinese children. The pattern of responses to the evaluation question indicates that Chinese children were *not* more focused on the group and the importance of upholding the group's decision than were US children. This suggests that perhaps the act of cheating or committing a transgression is negative enough to outweigh group interests and harmony. This is not to suggest that Chinese children were acting in an individualistic manner, but rather that they were acting based on what they believed to be a more salient moral aspect of the situation. This is consistent with theories of social reasoning proposed by Neff and Helwig (2002) and Turiel (2002), as well as Helwig *et al.* (2003), who proposed that 'individuals take into account the features of situations when making social and moral judgments in ways that may, at times, reveal opposition to (or disagreement with) prevailing cultural characterizations or practices'. (p. 796)

The pattern of responses for children from the United States indicates that they also viewed lying to conceal a group transgression negatively and telling the truth positively, although these tendencies became stronger with age. When story characters lied to conceal their group's transgression, younger children from the United States evaluated this decision less negatively than did Chinese children and older US children. When story protagonists told the truth about the group's transgression, the youngest US children evaluated this the least positively. The findings that younger US children, on average, both viewed telling the truth less positively and telling a lie more positively than other children suggest that Chinese children may be socialized to understand the 'wrongness' of telling a lie about a group's cheating behaviour at an earlier age and that US children are in the process of internalizing this value between 7 and 11 years of age.

With regard to children's responses to the motivation questions, when the story protagonist told the truth, a clear cross-cultural pattern emerged: children from the US were much more likely to say that the protagonist had told the truth because of a concern for the impact on self. Children from China, however, were much more likely to say that the protagonist told the truth because it was the truth or because the protagonist was honest. Few children from either China or the United States said that the protagonist told the truth because of a concern for others. The pattern of responses in US children does seem to be consistent with the cultural value of individualism; a concern for an impact to oneself is a part of the typical definition of individualism (Hofstede, 1980, 1991; Triandis, 1994, 1995). Observed age-related increases in the frequencies of referencing the impact on self as the protagonist's motivation for telling the truth are also indicative of socialization of these individualistic practices continuing during this age range.

In contrast, the pattern of responses in Chinese children is not entirely consistent with the cultural value of collectivism. If individuals from collectivist societies were to act according to the definition of collectivism (Hofstede, 1980, 1991; Triandis, 1994, 1995), one might expect the protagonist to tell the truth due to either a concern for the morality of the group (impact on others) or a social edict to be truthful (social rules category). Chinese children typically did

not provide responses in these categories for the truth-telling scenarios, however. Chinese children most frequently said that the protagonist was motivated by honesty or by being truthful, which could be taken to indicate that the protagonist was motivated by an internal, personal, individual characteristic. One might speculate, however, that Chinese children's tendency to refer to the moral principles of honesty and the importance of being truthful is more collectivist in nature than simply referring to a concern for oneself and is in keeping with the concepts of *yi* and *jen*. While collectivism certainly does not preclude the promotion of individual traits such as honesty, the finding that Chinese children refer to this as the protagonist's main motivation to tell the truth suggests that in certain circumstances, individual traits are at least as important as group-related goals or motivations.

The pattern of responses when explaining motivations for the protagonist to lie is perhaps even more surprising than the motivation response patterns in the truth-telling scenarios. When the protagonist lied about the group's cheating behaviour, children from both cultures were most likely to talk about the protagonist's concern for him/herself as a motivation to lie. This response was more frequent in Chinese children than US children. Few children from either country referenced a concern for the impact on others as a reason for the protagonist to lie. Again, the pattern of responses among US children is consistent with the culturally supported value of individualism, and age-related increases in the tendency to focus on an impact to self as the motivation to lie suggest that socialization of these ideals is continuing during this age range. The pattern of responses in Chinese children, however, is not at all consistent with the culturally supported value of collectivism. While honesty could arguably be considered a higher-level group directive and thus a morally appropriate thing to do both for yourself and for your group, lying has no such connotations. In these scenarios a group committed a transgression by cheating in order to win a prize. The fact that so many Chinese children said that the protagonist had lied because of a concern for *self* and so few Chinese children mentioned a concern for others as a motivation for the protagonist to lie, coupled with the negative evaluations that Chinese children gave to protagonists who decided to lie for their group, clearly calls into question the generalizability of the collectivist tendency to view the needs of the group as most important and most salient.

With regard to the justification question, more than half of the children in both the US and China focused on the fact that a lie or the truth was told as justification for their evaluations. This indicates that children in both countries indeed focused on the protagonist's decision to lie or tell the truth and not the group act of committing the transgression. The only age-related changes were observed in US children providing justifications for their evaluations of the protagonist telling the truth: younger children were more likely to talk about the facts of the situation, whereas older children were more likely to mention social rules as justification. This again demonstrates that socialization is still occurring in this age range for US children, and that social rules are becoming more pertinent during this age range, as well.

Also notable in the justification responses was the absence of a concern for the impact on others. Few children from either country cited a concern for the impact on others as justification for their evaluations (5 total across both lie and truth endings). Children certainly were not often saying things like 'he shouldn't have told on his group' or 'she did the right thing by standing by her group'. While it is not surprising that children frequently mentioned the fact that the truth or a lie was told as justification for their evaluations, it is somewhat surprising that more children from China, the collectivist culture, did not mention the impact of the protagonist's decision on others (specifically the other group members) when justifying their evaluations. This perhaps is in keeping, though, with the Chinese children's more negative evaluations, and again points to the limits of collectivism in influencing an individual child's social reasoning.

Limitations and Future Directions

Our findings suggest that some important caveats need to be added to findings from previous research (e.g. Fu *et al.*, 2008, 2007) and clearly demonstrate that cultural values of collectivism and individualism are more context-dependent than has been previously indicated (this context-dependence is also discussed by Bond, 2002, and Kitayama, 2002). Our focus on situations in which a group commits a transgression, however, does not allow for more fine-tuned cross-cultural or age-related comparisons that would be made possible by including a comparison situation in which an *individual* commits a transgression and then either lies or tells the truth about it. Future research should include comparable situations in which an individual acts alone, which would allow for further understanding of the influences of collectivism versus individualism on socialization and context-dependent beliefs about lying and telling the truth.

Future research is also needed to examine how the results might generalize across a wider range of transgressions. It is possible that children view cheating differently than other types of transgressions and/or that cross-cultural and age-related differences may depend on the type of transgression committed. For instance, stealing or breaking another's possession may be considered differently than cheating, and cheating to win a competition may even be considered differently from cheating to get a better grade.

It will also be important to examine how results might generalize across different populations. One such issue of generalization concerns whether children in rural China might look different from the urban Chinese children tested in the present research. Such a possibility would be consistent with findings suggesting that children in urban populations in China are becoming increasingly influenced by Western values (Chen, Cen, Li, & He, 2005), but that these patterns may look very different in rural populations (Chen, Wang, & Wang, 2009).

As with all research in which children are asked about their thoughts and opinions, there is the potential that study children answered in a way that they believed to be socially desirable, rather than consistently with how they really think or would act in similar situations. In addition, there is the possibility of cultural differences in providing socially acceptable answers, which might be related to cultural differences in views of adult testers. Consequently, it will be important for future research to further examine children's actual behaviour in these kinds of situations and relate their behaviours to their reasoning in hypothetical situations (see Fu *et al.* 2008).

CONCLUSIONS

In this study, Chinese children viewed a lie told to conceal a group transgression less favorably than did US children, talked about the impact to the protagonist when reasoning about the protagonist's motivation to lie, and did not talk about the impact to other group members when reasoning about the protagonist's motivations for lying or telling the truth. In the context of committing a transgression, the negative view about lying *was* extreme enough to supersede cultural values of collectivism or individualism. Taken together, the findings suggest that collectivist ideals do not necessarily equate to a greater focus on the group, and that situational context matters.

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Figure 1.
Average evaluations for lies and truths by country and age.

Figure 2.
Justification question responses by country.

Figure 3.
Justification responses as predictors of evaluations in US and China.

Figure 4.
Motivation question responses by country.

Figure 5.
Motivation responses as predictors of evaluations in US and China.

Table 1

Frequencies of coded justification responses by story type, country, and age

	United States				China			
	7 years	9 years	11 years	7 years	9 years	11 years	7 years	11 years
<i>Lie endings</i>								
Truth/Lie focus	17	16	11	20	21	14		
Facts of situation	8	3	3	2	0	1		
Impact on others	0	1	0	0	0	0		
Impact on self	1	3	1	1	1	2		
Social rules	5	3	4	7	9	15		
Other	2	0	0	2	1	0		
Totals	33	26	19	32	32	32		
<i>Truth endings</i>								
Truth/Lie focus	20	10	11	20	20	23		
Facts of situation	8	3	0	2	0	0		
Impact on others	0	2	1	0	1	0		
Impact on self	3	5	1	1	0	0		
Social rules	2	4	6	9	11	9		
Other	0	2	0	0	0	0		
Totals	33	26	19	32	32	32		

Table 2

Frequencies of coded motivation responses by story type, country, and age

	United States			China		
	7 years	9 years	11 years	7 years	9 years	11 years
<i>Lie endings</i>						
Truth/Lie focus	2	5	1	5	3	1
Facts of situation	12	2	1	1	1	2
Impact on others	1	3	3	1	0	3
Impact on self	21	24	24	25	28	26
Social Rules	1	0	0	0	0	1
Other	1	1	1	0	0	0
Totals	38	35	30	32	32	33
<i>Truth endings</i>						
Truth/Lie focus	0	6	5	18	16	24
Facts of situation	13	9	2	3	2	2
Impact on others	3	4	1	1	2	3
Impact on self	18	12	20	4	2	2
Social rules	3	4	2	6	8	2
Other	1	0	0	0	2	0
Totals	38	35	30	32	32	33