

See discussions, stats, and author profiles for this publication at:
<https://www.researchgate.net/publication/282790991>

Moral Evaluations of Lying for One's Own Group

Article *in* Infant and Child Development · September 2015

Impact Factor: 1.2 · DOI: 10.1002/icd.1941

READS

12

6 authors, including:



Ann Cameron

University of British Columbia - V...

68 PUBLICATIONS 741 CITATIONS

SEE PROFILE



Kang Lee

University of Toronto

299 PUBLICATIONS 6,582 CITATIONS

SEE PROFILE

Moral Evaluations of Lying for One's Own Group

Genyue Fu^{a,*}, Yang C. Luo^b, Gail D. Heyman^{c,d,*}, Bo Wang^e,
Catherine A. Cameron^f and Kang Lee^{b,d,*}

^aHangzhou Normal University, Hangzhou, China

^bUniversity of Toronto, Toronto, Canada

^cUniversity of California, San Diego, USA

^dZhejiang Normal University, Jinhua, China

^eZhejiang University of Technology, Hangzhou, China

^fUniversity of British Columbia, Vancouver, Canada

This study investigated the development of moral judgments of blue lies, which occur when a speaker makes false statements to benefit a group of which he or she is a member. We investigated this issue in China, where there is substantial emphasis on the nature of children's associations with groups they belong to. Participants ranged in age from 9 to 17, and we asked them to evaluate lies that were told to benefit a team representing a speaker's class, school, or country. Judgments varied systematically as a function of age, with the 17-year-olds rating lying for any form of collective less negatively than did the younger age groups. In addition, across the age groups, children's affinity tended to shift from smaller groups to broader and more abstract collectives: 9- and 11-year olds were least critical of blue lies told to benefit a speaker's class, 13-year olds were least critical of blue lies told to benefit a speaker's school, and 17-year olds were least critical of blue lies told to benefit a speaker's country. Copyright © 2015 John Wiley & Sons, Ltd.

Key words: blue lies; collectivism; honesty; dishonesty; moral judgments

Although the importance of honesty is a central focus of moral socialization (Bussey, 1992; Heyman, Luu, & Lee, 2009), the goal of honest communication sometimes conflicts with other moral and social values (Lee 2000). For example, there are

*Correspondence to: Genyue Fu, Department of Psychology, Hangzhou Normal University, Hangzhou, 311121, China. E-mail: fugenyue@hznu.edu.cn, or Gail D. Heyman, Psychology, University of California San Diego, 9500 Gilman Dr, La Jolla, CA 92093-0109, USA. E-mail: gheyman@ucsd.edu
Kang Lee, Dr. Eric Jackman Institute of Child Study, University of Toronto 45 Walmer Road, Toronto, Ontario, Canada M5R 2X2. E-mail: kang.lee@utoronto.ca

situations in which truthful communication can have negative consequences for the recipient of the information, such as when an individual receives a gift he or she dislikes and is asked by the giver to evaluate it (Broomfield, Robinson, & Robinson, 2002; Bussey, 1999; Lee & Ross, 1997; Ma, Xu, Heyman, & Lee, 2011; Xu, Bao, Fu, Talwar, & Lee, 2010). There are also situations in which truthfully providing information about wrongdoing by a member of one's group is likely to result in negative consequences for the group as a whole (Chiu Loke, Heyman, Forgie, McCarthy, & Lee, 2011). In these cases, individuals may conclude that by lying to hide the transgression, they can best fulfil their obligation to remain loyal to the group. Lies made in these contexts have been termed *blue lies* (e.g. Barnes, 1994; Klockars, 1984) because they resemble situations in which police officers, who often wear blue uniforms in the United States, make false statements to protect fellow officers who are being investigated for official misconduct. The development of children's reasoning about blue lies is the focus of this paper.

Blue lie situations raise the issue of the importance of loyalty and ingroup-outgroup dynamics, which is a central moral domain in which there is variation in emphasis across cultural and subcultural communities (Haidt, 2007). As Haidt (2007) notes, research on morality has focused on issues of harm and fairness, but not other central moral domains. For this reason we know very little about how children might conceptualize loyalty and related notions like patriotism. Understanding how children reason about blue lies has implications for the broader society as well as for individuals who are directly involved. For example, one might demonstrate loyalty to a group by helping to conceal a group member's unethical conduct, but doing so can also create an atmosphere in which group members believe that they can continue the unethical conduct with impunity. Investigating how children reason about blue lies can also shed light on their reasoning about social groups, a topic that has broad implications for learning and development (Bigler, Jones, & Lobliner, 1997; Dunham, Baron, & Carey, 2011; Rhodes & Brickman, 2011). For example, Dunham et al. (2011) found that 5-year-olds already systematically distort information to make it favourable to ingroup members.

We chose to examine blue lies within China, a society with collectivist tendencies where ingroup-outgroup dynamics are likely to be especially salient, even to young children (Oyserman, Coon, & Kemmelmeier, 2002). Collectivism is a worldview that focuses on the goals of the collective, values intergroup harmony, and defines personal identity with reference to group achievements (Hofstede, 1980, 1991; Triandis, 1994, 1995). By telling blue lies, one can promote intergroup harmony by demonstrating loyalty to the group and a commitment to the group's goals. Consistent with the possibility that blue lies may be viewed as more acceptable in China than in North America, Fu, Xu, Cameron, Heyman, and Lee (2007) found that Chinese children aged 7 to 11 years disapproved of lies more strongly when they were told to benefit a specific individual rather than a group, whereas Canadian children of the same ages showed the reverse pattern.

One factor that may affect individuals' willingness to lie to benefit group members that has not been explored in previous research is the nature of the group in question. This issue is important to examine given that a group is a multi-faceted social construct. Groups can be familial, ethnic, racial, religious, cultural, and educational. There can be different levels within each particular group. For example, a child may be a student of a particular school and also a member of a class within that school. There is a limited amount of research suggesting that children show different patterns of reasoning about different groups they are associated with. For example, in a study of 9- to 14-year-olds, Mulvey, Hitti, Rutland, Abrams, and Killen (2014) found that ingroup preferences based on school affiliation were

stronger than those based on gender. The importance of specific collectivities might also vary with age. This possibility is consistent with a theoretical framework developed by Eccles (2009) in which individuals are characterized as having not only multiple personal identities, but also multiple collective identities that change in centrality across the lifespan.

The Present Research

In the present research, we examined the possibility that younger children will place a greater emphasis on membership in smaller groups in which they know all of the individual members (e.g. one's class), and with development they will come to place a greater emphasis on membership in larger groups (e.g. one's country), at least within societies that promote these values. We propose that this is the case because it is more difficult for children to view themselves as members of bigger groups where there are not personal intergroup dynamics (e.g. reciprocal interactions), but that they can be taught to generalize the feelings that emerge in small group settings to larger and more abstract groups. This possibility is also generally consistent with evidence that children's sense of identity broadens with age. For example, in a study of 5- to 11-year-olds, Bennett, Yuill, Banerjee, and Thomson (1998) found that only older children believed that wrongdoing committed by people one associates with has negative implications for one's reputation.

Currently, there is no empirical evidence regarding whether children at different ages might make distinctions among types of collectives that have implications for how they judge blue lies, and the present research addressed this gap in the literature directly. We examined the issue among children who were born and currently reside in China, which, as noted previously, is a culture that places a high level of emphasis on the collective good. In the present study, we presented children with scenarios in which story characters either tell the truth to reveal transgressions or tell a lie to conceal transgressions committed by a group to which the story characters belong. Unlike the previous research, we systematically manipulated the nature of the group whereby story characters' truths or lies would benefit or harm either their class, school, or country. We focused on the three levels of collectivity because they are distinct entities that Chinese children are regularly socialized about. For example, many group activities in Chinese schools are organized with reference to the class or a school as a unit, and there are often academic and athletic competitions between classes at the same school and between schools. Additionally, Chinese children are socialized to identify with their country through efforts to encourage collectivism and patriotism, which are a regular part of the daily curriculum.

We chose to include individuals between 9 and 17 years of age because we were interested in covering a broader developmental range than has been investigated in other research on this topic (Fu et al., 2007; Sweet, Heyman, Fu, & Lee, 2010). We were particularly interested in including adolescents in the sample in light of evidence concerning their beliefs about group loyalty, and their desire to fit in with their social group (Chiu Loke et al., 2011; Friman et al., 2004).

Based on the existing evidence, we hypothesized that with increased age participants would be more accepting of blue lies and less accepting of truthful statements that harm the collective. We also predicted that participants' moral judgments of blue lies would be influenced by the nature of the collective that the lies supposedly served to help. In particular, the youngest children were expected to show the greatest concern for blue lies to benefit groups in which it

is possible to know all members personally, and the oldest children were expected to show the greatest concern for blue lies to benefit larger social groups, as their notion of collectives becomes broader.

METHOD

Participants

There were 160 participants from an East Coast metropolitan community in China and surrounding areas, including 32 9-year-olds ($M_{\text{age}} = 9.01$ years, $SD = .25$; 17 females), 32 11-year-olds ($M_{\text{age}} = 11.02$ years, $SD = .27$; 16 females), 32 13-year-olds ($M_{\text{age}} = 13.12$ years, $SD = .28$; 13 females), 32 15-year-olds ($M_{\text{age}} = 15.06$ years, $SD = .26$; 18 females), and 32 17-year-olds ($M_{\text{age}} = 16.97$ years, $SD = .24$; 14 females). All participants were Han Chinese, with significantly more being city (68.2%) than rural (31.8%) residents. Participants came from families of mixed SES backgrounds, ranging from having parents with only an elementary school education to having parents with postgraduate degrees.

Data from an additional U.S. sample was collected and analysed, but it is not reported here because of concerns about the sample size and the cross-cultural comparability of the different levels of collective. Additionally, data was collected from a younger group (7-year-olds) that is not reported here because of a concern that participants in this age group may have had difficulty following and remembering the stories.

Materials

Eight stories were used in this study. Six *collective* stories described a veracity-versus-collective-interest scenario (collective), in which the protagonist either lied in favour of the group interest, or told the truth against the group interest. The six stories were created by manipulating two levels of veracity (e.g. lie- and truth-telling) and three collective levels (e.g. class, school, and country). Therefore, the protagonist told: (1) a lie to benefit the class, (2) a lie to benefit the school; (3) a lie to benefit the country; (4) the truth to be honest but harm the class; (5) the truth to be honest but harm the school; or (6) the truth to be honest but harm the country. Three types of competitions were used to construct specific scenarios for the collective stories: sports (basketball and volleyball), science (math and physics), and language (debate and spelling). For example, in one story version, a protagonist attends a high school basketball competition between a team representing China and a team representing the U.S. and realizes that one of the players on her country's team is actually a star college player. A coach then asks the protagonist whether the college player is really a high school player, so the protagonist considers the implications of lying and telling the truth, and then lies to help her country's team look good.

We also used two control *self* stories that described an honesty-versus-self-interest scenarios in which the protagonist either lied to benefit self, or told the truth to be honest. The two self stories were created by using two levels of veracity (lies vs. truth-telling). Two specific scenarios were used: breaking a computer, and breaking a window. For example, in one story a protagonist accidentally breaks a computer, is asked about it by a teacher, and lies in order to avoid paying for the repairs.

We counterbalanced competition type, veracity status, and collective level (e.g. class, school, and country) within *collective* and *self* stories to produce six sets of different stories (see Appendix A). Each participant was assigned to a specific set of stories. Thus, the specific nature of the scenarios was counter-balanced for either blue lies or truth-telling and for different levels of collectivity. To control for order effects, the eight stories were read to each participant in a randomized order. Also, half of the participants were told stories in which the protagonist first considered lying (e.g. 'If I say she's a high school student, I would have to lie; but the Chinese team will look good to have won this game against another country.'), while the other half were told stories in which the protagonist first considered truth-telling (e.g. 'If I say she's not a high school student, I wouldn't have to lie; but the Chinese team will look bad.').

Procedure

Each child participant was interviewed individually in a quiet room. The entire procedure was conducted in a single 20-min session. The participant was first trained to use a 7-point rating scale: 'very, very good' (three red stars), 'very good' (two red stars), 'good' (one red star), 'neither good nor bad' (a blue circle), 'bad' (one black X), 'very bad' (two black Xs), and 'very, very bad' (three black Xs). During training, participants learned to use the scale to respond to the questions in a practice story, and feedback was given to ensure participants' full understanding of the scale. This scale has been used extensively with children as young as 4 to 5 years of age in their evaluations of moral transgressions and truth- and lie-telling about them in different social contexts (e.g. Bussey, 1992; Talwar & Lee, 2002). Children have shown no difficulty with using the scale. Once participants learned how to use the scale, the experimenter read each of the eight stories aloud. Following each story, the participants were asked to indicate their evaluation of the degree of goodness/badness of the character's statement by pointing to one of the symbols on the 7-point rating scale. Then, the participants were asked to explain their ratings.

Explanations were coded according to five themes: honesty, collectivism at the country level, collectivism at the school level, collectivism at the class level, and individualism. Based on the presence and absence of the five themes, the data were coded into 10 categories: 'honesty', 'country', 'honesty and country', 'school', 'honesty and school', 'class', 'honesty and class', 'self', 'honesty and self', and 'other' (see Appendix B for detailed sample responses for each category). Two independent raters categorized participants' responses to each of the stories. All Cohen's kappas were above .90.

RESULTS

Preliminary analyses found no significant effects of gender or the order of the stories, so responses were collapsed across these factors for all of the following analyses. Participants' responses to the self stories were used as a covariate as a means to control for how participants of different ages used the rating scale. Figure 1 shows the adjusted means and standard errors for participants' moral evaluations of blue-lie and truth-telling stories, at the country, school, and class levels, after controlling for responses in the self stories. We analysed the lie and truth stories in separate ANOVAs based on prior research suggesting that children

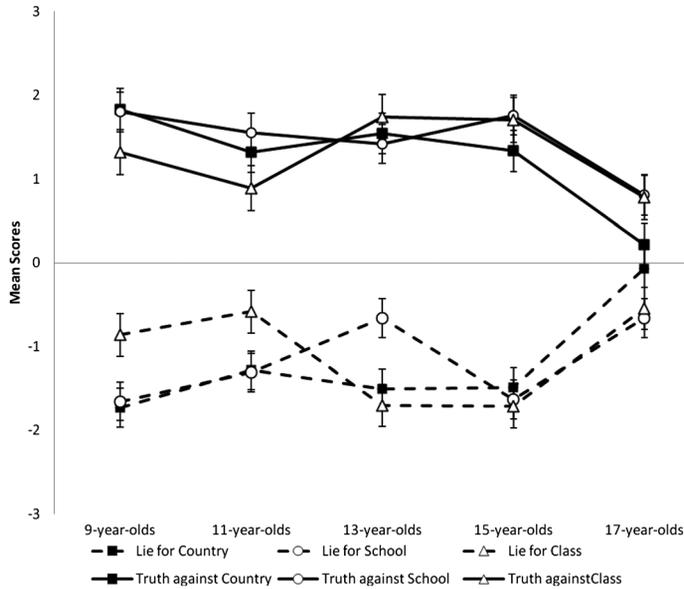


Figure 1. Adjusted means and standard errors of children's moral evaluation of lie- and truth-telling stories after controlling for lie- or truth-telling for self. 3 = 'very, very good'; 2 = 'very good'; 1 = 'good'; 0 = 'neither good nor bad'; -1 = 'bad'; -2 = 'very bad'; and -3 = 'very, very bad'.

reason differently about lies versus the truth (e.g. Lee et al., 1997; Fu et al., 2008, 2010, 2011), but analyses including both of these ANOVAs yielded a very similar pattern of results (in addition to the expected main effect of truth versus lie).

Moral Evaluations

Lie-telling for a collective

A 3 (Beneficiary: country, school, class) \times 5 (Age: 9, 11, 13, 15, 17) repeated-measures ANCOVA was performed on children's moral ratings of lies for a collective, with beneficiary as the within-subjects factor, age as between-subjects factor, and participants' ratings of lies for self as the covariate. The covariate was significant, $F_{(1, 154)} = 16.83$, $p < .001$, $\eta^2 = .10$, suggesting that participants' moral ratings of lies for a collective were significantly related to their moral ratings of lies for self. After partialling out the effect of the covariate, the age effect was significant, $F_{(4, 154)} = 6.67$, $p < .001$, $\eta^2 = .15$, and so was the interaction between beneficiary and age, $F_{(8, 308)} = 4.00$, $p < .001$, $\eta^2 = .09$.

We further ran three follow-up ANCOVAs (Between-subjects factor: Age [9, 11, 13, 15, 17]; Covariate: lie for self) on the lie-for-country, lie-for-school, and lie-for-class stories separately to investigate the significant interaction further. The covariate (lie for self) was significant for all three analyses, $F_{(1, 154)} = 16.76$, $p < .001$, $\eta^2 = .10$, $F_{(1, 154)} = 4.07$, $p = .045$, $\eta^2 = .03$, and $F_{(1, 154)} = 6.46$, $p = .012$, $\eta^2 = .11$. After controlling for the effect of lie for self, the age effect on participants' evaluation of lies for a collective was significant at all three levels of beneficiary, $F_{(4, 154)} = 7.23$, $p < .001$, $\eta^2 = .15$, $F_{(4, 154)} = 4.02$, $p = .004$, $\eta^2 = .10$, and $F_{(4, 154)} = 4.77$, $p < .001$, $\eta^2 = .11$, for lie-for-country, lie-for-school, and lie-for-class conditions respectively.

Post-hoc analyses were performed using Sidak corrected post hoc comparisons to follow up on the significant age effect. The results showed that 17-year-olds rated the lie-for-country story less negatively than did the 9-, 11-, 13-, and 15-year-olds ($ps \leq .006$), but no difference was found among the 9-, 11-, 13-, and 15-year-olds ($ps > .10$). Regarding the lie-for-school story, 13- and 17-year-olds rated the lie-for-school story less negatively than did the 9-, 11-, and 15-year-olds ($ps \leq .050$), but no difference was found among the 9-, 11-, and 15-year-olds ($ps \geq .639$). Vis-a-vis the lie-for-class story, the 9-, 11-, and 17-year-olds's ratings were less negative than were the 13- and 15-year-olds' ratings ($ps \leq .006$), but no difference were found among the 9-, 11-, and 17-year-olds or between the 13- and 15-year-olds ($ps \geq .272$). These results generally suggested that 17-year-olds tended to rate lying for any form of collectivity less negatively than the younger age groups. In contrast, among the younger age groups, the rating for lie-for-school peaked at 13 years of age, whereas the rating for lie-for-class peaked around 9 and 11 years. Thus, overall, the attunement to a collective developed with age, and their moral evaluation of lies for different levels of collectives changed accordingly. Specifically, children started to place emphasis on the benefit to their class around 9 years of age, the benefit to their school around 13 years of age, and the benefit to their country around 17 years of age.

Truth-telling against a collective

A 3×5 (Within-subjects factor: Beneficiary; Between-subjects factor: Age; Covariate: truths against self) ANCOVA revealed a significant effect for the covariate (truths against self), $F_{(1, 154)} = 12.35$, $p < .001$, $\eta^2 = .12$. After partialling out the effect of the covariate, only the age main effect was significant, $F_{(5, 154)} = 5.23$, $p < .001$, $\eta^2 = .12$. Follow-up analysis on the significant main effect of age indicated that 17-year-olds gave less positive ratings than 9-, 13-, and 15-year-olds, but there was no difference between 17- and 11-year-olds.

Justifications of Moral Judgments

Lie-telling for a collective

Table 1 shows each type of justification statement provided by participants for each blue lie story. We excluded the 'other' category for analysis due to a very small percentage of children giving reasons in this category. The 3×5 (Category [honesty, group, honesty and group] \times Age [9, 11, 13, 15, 17]) chi-square analyses on four lie-telling stories revealed a significant age effect for the lie-for-country and lie-for-class stories, $\chi^2_{(8)} = 20.38$, $p = .009$, and $\chi^2_{(8)} = 17.12$, $p = .029$, but not for a lie for school or self. Older children showed a stronger tendency to incorporate a sense of group into their reasoning. For example, on the lie for country story only 31% of 9-year-olds gave responses that fell into either the group or the group and honesty category, as compared to 81% of 17-year-olds (see Table 1).

Truth-telling against a collective

Similar to the analyses of lie-telling stories, we used 3 Category \times 5 Age chi-square analyses on the four truth-telling stories and found similar significant effects of age for telling the truth against country, school, and class, $\chi^2_{(8)} = 16.75$, $p = .033$, $\chi^2_{(8)} = 17.72$, $p = .023$, and $\chi^2_{(8)} = 15.33$, $p = .053$, respectively, but not for telling the truth against self. As was the case with lie-telling for a collective, older children tended to refer to a sense of a group to a greater extent. For example, on

Table 1. Categorization of moral reasoning on blue-lie stories

	Honesty	Group	Both Honesty and group	Other
Lie for country				
9-year-olds	65.6	12.5	18.8	3.1
11-year-olds	28.1	21.9	50.0	0
13-year-olds	40.6	15.6	43.8	0
15-year-olds	40.6	18.8	37.5	3.1
17-year-olds	15.6	31.2	50.0	3.1
Total	47.9	20.0	40.0	1.9
Lie for school				
9-year-olds	65.6	15.6	18.8	0
11-year-olds	56.2	12.5	28.1	3.1
13-year-olds	34.4	18.8	40.6	6.2
15-year-olds	56.2	9.4	34.4	0
17-year-olds	40.6	28.1	18.8	12.5
Total	50.6	16.9	28.1	4.4
Lie for class				
9-year-olds	59.4	18.8	21.9	0
11-year-olds	50.0	9.4	34.4	6.2
13-year-olds	59.4	6.2	31.2	3.1
15-year-olds	68.8	9.4	21.9	0
17-year-olds	31.2	34.4	31.2	3.1
Total	53.8	15.6	28.1	2.5
Lie for self				
9-year-olds	75.0	3.1	21.9	0
11-year-olds	59.4	6.2	34.4	0
13-year-olds	78.1	6.2	15.6	0
15-year-olds	75.0	9.4	15.6	0
17-year-olds	84.4	6.2	9.4	0
Total	74.4	6.2	19.4	0

the truth against country story only 25% of the 9-year-olds gave responses that fell into either the group or the group and honesty category, as compared to 59% of the 17-year-olds (see Table 2).

DISCUSSION

This study examined the development of moral reasoning about blue lies, which are false statements told to benefit a group of which the speaker is a member. We examined age-related differences in the judgments of participants aged 9 to 17 years in relation to the nature of the group that the lies were intended to benefit. We conducted the study in China, where there is a strong emphasis on ingroup-outgroup dynamics.

We found that the oldest participants tended to rate lying for any form of collective less negatively than did the younger age groups. This suggests that Chinese children's concerns about group loyalty generally increase across the teen years, perhaps as a consequence of repeated opportunities to experience and observe the positive consequences of being seen as a loyal group member as well as the negative consequences of being seen as a disloyal group member.

Table 2. Categorization of moral reasoning on truth-telling stories

	Honesty	Group	Both honesty and group	Other
Truth against country				
9-year-olds	75.0	9.4	15.6	0
11-year-olds	56.2	6.2	37.5	0
13-year-olds	53.1	25.0	21.9	0
15-year-olds	50.0	12.5	37.5	0
17-year-olds	34.4	28.1	31.2	6.2
Total	53.7	16.2	28.7	1.2
Truth against school				
9-year-olds	84.4	3.1	9.4	3.1
11-year-olds	68.8	9.4	21.9	0
13-year-olds	56.2	9.4	31.2	3.1
15-year-olds	50.0	6.2	43.8	0
17-year-olds	43.8	18.8	28.1	9.4
Total	60.6	9.4	26.9	3.1
Truth against class				
9-year-olds	71.9	3.1	25.0	0
11-year-olds	65.6	9.4	25.0	0
13-year-olds	75.0	6.2	15.6	3.1
15-year-olds	59.4	0	40.6	0
17-year-olds	46.9	18.8	28.1	6.2
Total	63.8	7.5	26.9	1.9
Truth against self				
9-year-olds	96.9	0	3.1	0
11-year-olds	100.0	0	0	0
13-year-olds	100.0	0	0	0
15-year-olds	100.0	0	0	0
17-year-olds	100.0	0	0	0
Total	99.4	0.0	0.6	0.0

We also found that the specific collectives children identified with tended to differ with age. The youngest participants (9- and 11-year olds) were least critical of blue lies told to benefit their class, slightly older participants (13-year olds) were least critical of blue lies told to benefit their school, and the oldest participants (17-year-olds) were least critical of blue lies told to benefit their country. These results reflect a developmental change in the extent to which children value different levels of collectivities. For the youngest children, the group that they most immediately belong to (i.e. their class) appears to be the most important and consequently they most highly valued lies that told to protect a class's interest. With age, children's experiences as members of groups with known individual members may lead to group-oriented feelings that socializing agents can tap into to promote a sense of affinity with larger groups. For children in the middle age groups, this sense broadens to include the school, so their valuation of lying to protect the interests of their school becomes the most important. For the oldest participants, the idea of collectivity appears to encompass their country, so lying to protect their country becomes the most valued act. However, it should be noted that the evaluations of truth telling against a collective and lying for a collective did not always change in a linear fashion. For example, the 13-year-olds rated lying for their school least negatively and expressing the truth against the three groups equally positively, and the 15-year-olds rated truth-telling against one's

country the least positively and their ratings of lying for the three groups were undifferentiated. This trend may reflect the possibility that across these years children undergo a transition in their sense of the importance of the three groups.

It is likely that school policies and practices play an important role in influencing children's beliefs about group identification (Fu et al., 2007, 2008; Pan, 2004; Meng, 1999; Zeng, 2002). For instance, when Chinese children enter elementary school, they are assigned to a class and remain in it throughout their elementary school years, and most children eventually become members of a formal political group called the 'young pioneer team' (Fu et al., 2007). These formal groupings serve as the basis for organizing the daily schedule, including academic instruction and extracurricular activities. This arrangement gives children extensive experience with the same set of peers over time and encourages them to learn to work with other group members and resolve conflicts effectively (Meng, 1999; Pan, 2004). Children are evaluated based on their contributions to the group, as well as their personal achievements, and these evaluations play an important role in the leadership roles that are awarded to them, such as *subgroup leader* or *class-in-chief*. Overt instruction that emphasizes the importance of contributing to the group is also likely to play a role in helping Chinese children to learn the group-oriented values of Chinese society (Fu et al., 2007; Zeng, 2002). This instruction includes formal moral training in which the values of collectivism and patriotism are emphasized explicitly (Fu et al., 2007; Meng, 1999). For example, children are taught that the *Da Wo* ('big me' or the collective) is greater than the *Xiao Wo* ('little me' or the self). An orientation toward the collective is also prompted within the context of academic courses in which children are taught about heroic figures who exemplify collectivist ideals. Further research will be needed to examine how the teachings of different levels of collectives are incorporated into educational programming at different ages, and the extent to which these explicit teachings become incorporated into children's developing beliefs about the importance of loyalty to the collective. Our findings suggest that with age, Chinese children find it more acceptable to lie to benefit increasingly broader groups, and our results also raise questions about the origins of loyalty to broad collectives. It may be that a sense of loyalty to larger collectives emerges only after children have first developed a sense of loyalty to groups that can be understood more concretely. Specifically, children may develop group loyalty within a context in which they focus on specific relationships within the group and the approval and disapproval they receive from group members.

One question raised by the present research is whether the findings might reflect culture-specific socialization efforts versus developmental patterns that extend across cultures. It is possible that such effects depend on socializing agents actively promoting group-oriented thinking. However, it is also possible that the same general patterns apply, but that the nature of the specific groups of particular interest varies as a function of culture. For example, for children in the West, it may be that notions of loyalty are more likely to develop in small group contexts outside of the classroom (e.g. for sports teams).

Some limitations of this study should be noted. The themes of the blue lie and truth-telling scenarios involved team competitions only. Thus, it is not clear whether the patterns of responses that were seen will generalize to other school or non-school related situations, such as cheating on exams, bullying, or criminal activity. Additionally, although we used control stories to address potential age differences in scale use, it will be important to include controls for other factors in further research as well, such as the nature of the information that protagonists were considering lying about. It will also be important for future research to examine children's affinity for collectives in other contexts, including those that do not involve a conflict between the interests of their group and truth-telling.

When considering the development of factors that affect group loyalty, it is important to keep in mind that group loyalty is only one of many factors that are likely to come into play when children evaluate the acceptability of telling the truth or a blue lie about one's collective. As children make these decisions, they must also consider how much they value truth-telling for its own sake. It is also the case that children are likely to anticipate a range of possible consequences for those who choose to lie or tell the truth in blue-lie situations. These include the effects of consequences that may be imposed by those outside the group, and how lying or truth-telling might affect intergroup dynamics (e.g. whether group members who reveal a transgression to outsiders are likely to be labelled with terms such as *snitch* or *narc*; Syvertsen, Flanagan, & Stout, 2009). Further research will be needed to examine which of these factors children consider, and how they are weighed in moral evaluation, including whether they change as a function of development and culture. For example, it may be that young children are more concerned with direct negative consequences to themselves or group members, but that older children tend to focus on more abstract factors, like group reputation. There may also be developmental or age-related differences in the extent to which blue lies are seen as prosocial acts.

One important question is whether children's reasoning about blue lies is predictive of their behaviours in these kinds of situations. At least some research suggests that this is the case: Fu, Evans, Wang, and Lee (2008) asked Chinese children to evaluate story characters who lie for the benefit of their class and found that participants who judged the characters the least negatively were also the most likely to try to conceal cheating by their teammates in a competition. Further research will be needed to further examine how their reasoning about blue lies to protect different groups may or may not translate into real-world decision making.

In summary, this study found evidence of an age-related change in the moral evaluations of blue lies based on the nature of the collective that the lie is designed to protect. The youngest were most likely to endorse blue lies told to benefit the speaker's class, somewhat older children were most likely to endorse blue lies told to benefit the speaker's school, and the oldest were most likely to endorse blue lies told to benefit the speaker's country.

ACKNOWLEDGEMENTS

This research was supported by Grants from the Social Sciences and Humanities Research Council of Canada, the National Institutes of Health – United States (R01HD048962), and the National Science Foundation of China(31371041, and 31470993).

REFERENCES

- Bennett, M., Yuill, N., Banerjee, R., & Thomson, S. (1998). Children's understanding of extended identity. *Developmental Psychology, 34*(2), 322–331. DOI: 10.1037/0012-1649.34.2.322
- Barnes, J. A. (1994). *A pack of lies: Towards a sociology of lying*. Cambridge, UK: Cambridge University Press.
- Bigler, R. S., Jones, L. C., & Lobliner, D. B. (1997). Social categorization and the formation of intergroup attitudes in children. *Child Development, 68*, 530–543.
- Broomfield, K. A., Robinson, E. J., & Robinson, W. P. (2002). Children's understanding about white lies. *British Journal of Developmental Psychology, 20*, 47–65. DOI: 10.1348/026151002166316

- Bussey, K. (1992). Lying and truthfulness: Children's definitions, standards, and evaluative reactions. *Child Development*, 63, 129–137.
- Bussey, K. (1999). Children's categorization and evaluation of different types of lies and truths. *Child Development*, 70, 1338–1347. DOI: 10.1111/1467-8624.00098
- Chiu Loke, I., Heyman, G. D., Forgie, J., McCarthy, A., & Lee, K. (2011). Children's moral evaluations of reporting the transgressions of peers: Age differences in evaluations of tattling. *Developmental Psychology*, 47, 1757–1762. DOI: 10.1037/a0025357
- Dunham, Y., Baron, A. S., & Carey, S. (2011). Consequences of "minimal" group affiliations in children. *Child Development*, 82, 793–811.
- Eccles, J. (2009). Who am I and what am I going to do with my life? Personal and collective identities as motivators of action. *Educational Psychologist*, 44, 78–89.
- Friman, P. C., Woods, D. W., Freeman, K. A., Gilman, R., Short, M., McGrath, A. M., & Handwerk, M. L. (2004). Relationships between tattling, likeability, and social classification: A preliminary investigation of adolescents in residential care. *Behavior Modification Special Issue: Introduction to Special Issue on Adolescent Conduct Problems*, 28(3), 331–348. DOI: 10.1177/0145445503258985
- Fu, G., Brunet, M. K., Lv, Y., Ding, X., Heyman, G. D., Cameron, C. A., & Lee, K. (2010). Chinese children's moral evaluation of lies and truths: Roles of context and parental individualism-collectivism tendencies. *Infant and Child Development*, 19, 498–515. DOI: 10.1002/icd.680
- Fu, G., Evans, A. D., Wang, L., & Lee, K. (2008). Lying in the name of collective good: A developmental study. *Developmental Science*, 11, 495–503. DOI: 10.1111/j.1467-7687.2008.00695.x
- Fu, G., Heyman, G. D., & Lee, K. (2011). Reasoning about modesty among adolescents and adults in China and the U.S. *Journal of Adolescence*, 34, 599–608. DOI: 10.1016/j.adolescence.2010.10.003
- Fu, G., Xu, F., Cameron, C. A., Heyman, G., & Lee, K. (2007). Cross-cultural differences in children's choices, categorizations, and evaluations of truths and lies. *Developmental Psychology*, 43, 278–293. DOI: 10.1037/0012-1649.43.2.278
- Haidt, J. (2007). The new synthesis in moral psychology. *Science*, 316(5827), 998–1002.
- Heyman, G. D., Luu, D. H., & Lee, K. (2009). Parenting by lying. *Journal of Moral Development*, 38, 353–369. DOI: 10.1080/03057240903101630
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (1991) *Cultures and organizations: Software of the mind*. London: McGraw-Hill.
- Klockars, C. B. (1984). Blue lies and police placebos: The moralities of police lying. *American Behavioral Scientist*, 27, 529–544. DOI: 10.1177/000276484027004007
- Lee, K. (2000). The development of lying: How children do deceptive things with words. In J. W. Astington (Ed.), *Minds in the making*, (pp.177–196). Oxford: Blackwell.
- Lee, K., Cameron, C. A., Xu, F., Fu, G., & Board, J. (1997). Chinese and Canadian children's evaluations of lying and truth telling: Similarities and differences in the context of pro- and antisocial behaviors. *Child Development*, 68, 924–934.
- Lee, K., & Ross, H. J. (1997). The concept of lying in adolescents and young adults: Testing Sweetser's folkloristic model. *Merrill-Palmer Quarterly*, 43, 255–270.
- Ma, F., Xu, F., Heyman, G. D., & Lee, K. (2011). Chinese children's evaluations of white lies: Weighing the consequences for recipients. *Journal of Experimental Child Psychology*, 108, 308–321. DOI: 10.1016/j.jecp.2010.08.015
- Meng, Z. (1999). Scientific and comprehensive collectivism education. *Journal of Capital Normal University*, 5, 57–60.
- Mulvey, K. L., Hitti, A., Rutland, A., Abrams, D., & Killen, M. (2014). Context differences in children's ingroup preferences. *Developmental Psychology*, 50(5), 1507–1519. DOI: 10.1037/a0035593
- Oyserman, D., Coon, H. M., & Kimmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analysis. *Psychological Bulletin*, 128, 3–72. DOI: 10.1037/0033-2909.128.1.3
- Pan, X. (2004). Analysis of collectivism identification. *Journal of the Chinese Society of Education*, 7, 16–19.
- Rhodes, M., & Brickman, D. (2011). The influence of competition on children's social categories. *Journal of Cognition and Development*, 12, 194–221. DOI: 10.1080/15248372.2010.535230

- Sweet, M. A., Heyman, G. D., Fu, G., & Lee, K. (2010). Are there limits to collectivism? Culture and children's reasoning about lying to conceal a group transgression. *Infant and Child Development*, 19, 422–442. DOI: 10.1002/icd.669
- Syvertsen, A., Flanagan, C. A., & Stout, M. (2009). Code of silence: Students' perceptions of school climate and willingness to intervene in a peer's dangerous plan. *Journal of Educational Psychology*, 101, 219–232. DOI: 10.1037/a0013246
- Talwar, V., & Lee, K. (2002). Development of lying to conceal a transgression: Children's control of expressive behaviour during verbal deception. *International Journal of Behavioral Development*, 26, 436–444. DOI: 10.1080/01650250143000373
- Triandis, H. C. (1994). *Culture and social behavior*. New York: McGraw-Hill.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Xu, F., Bao, X., Fu, G., Talwar, V., & Lee, K. (2010). Lying and truth-telling in children: From concept to action. *Child Development*, 81, 581. DOI: 10.1111/j.1467-8624.2009.01417.x
- Zeng, X. (2002). Collectivism is the cornerstone of moral education. *Theory and Practice of Education*, 22, 61–63.

APPENDIX A

Sample Set of Stories Used in the Study

Lie for country

1. Xiao Chao is a basketball fan. One day, she went to see a special basketball game. She was excited because a team from a high school near her house had been picked to be in a competition of the United States against China. The high school team near her house was representing China, and the high school team from the U.S. was representing the U.S. During the game, Xiao Chao realizes that player number three from the Chinese team isn't really a high school student; she's a star college player. Later, the Chinese team won the game. The coach from the high school team from China saw Xiao Chao and said: 'Player number three from the Chinese team is awesome! Is she really still in high school?' Xiao Chao thinks to herself:
 - 1) If I say she's a high school student, I would have to lie; but the Chinese team will look good to have won this game against another country.
 - 2) If I say she's not a high school student, I wouldn't have to lie; but the Chinese team will look bad.

Xiao Chao thought about it for a moment, and answered: 'yes, she's a high school student.'

Truth against country

2. Xiao Zhuang is a volleyball fan. One day, she went to see a special volleyball tournament. She was excited because a team from a high school near her house had been picked to be in a competition of the United States against China. The high school team near her house was representing China, and the high school team from the U.S. was representing the U.S. During the tournament, Xiao Zhuang realizes that player number two from the Chinese team isn't really a high school student; she's a star college player. Later, the Chinese team won the tournament. The coach from the high school team from China

saw Xiao Zhuang and said: 'Player number two from the China team is awesome! Is she really still in high school?' Xiao Zhuang thinks to herself:

- 1) If I say she's a high school student, I would have to lie; but the Chinese team will look good to have won this game against another country.
- 2) If I say she's not a high school student, I wouldn't have to lie; but the Chinese team will look bad.

Xiao Zhuang thought about it for a moment, and answered: 'no, she's not really a high school student.'

Lie for school

3. Xiao Qi loves Math. One day, she went to see a math competition between her school and another school from a nearby town. During the competition, Xiao Qi realized that contestant number three from her school isn't really from her school; she's great at math and much older. Later, her school won the competition. The teacher from the other school saw Xiao Qi and said: 'Contestant number three from your school is fantastic! Does she really go to your school?' Xiao Qi thinks to herself:

- 1) If I say she goes to my school, I would have to lie; but my school will look good to have won this math competition.
- 2) If I say she doesn't go to my school, I wouldn't have to lie; but my school will look bad.

Xiao Qi thought about it for a moment, and answered: 'yes, she goes to my school.'

Truth against school

4. Xiao Mi loves Biology. One day, she went to see a biology competition between her school and another school from a nearby town. During the competition, Xiao Mi realized that contestant number two from her school isn't really from her school; she's great at biology and much older. Later, her school won the competition. The teacher from the other school saw Xiao Mi and said: 'Contestant number two from your school is fantastic! Does she really go to your school?' Xiao Mi thinks to herself:

- 1) If I say she goes to my school, I would have to lie; but my school will look good to have won this biology competition.
- 2) If I say she doesn't go to my school, I wouldn't have to lie; but my school will look bad.

Xiao Mi thought about it for a moment, and answered: 'no, she doesn't go to my school.'

Lie for class

5. Xiao Sun loves debating. One day, she went to see a debate between her class and another class. During the debate, Xiao Sun realized that debater number three from her class is great at debating and was transferred to a different class a long time ago. Later, her class won the debate competition. The teacher

from the other class saw Xiao Sun, and said: 'Debater number three from your class is awesome! Is she really in your class?' Xiao Sun thinks to herself:

- 1) If I say she's in my class, I would have to lie; but my class will look good to have won this debate competition.
- 2) If I say she's not in my class, I wouldn't have to lie; but my class will look bad.

Xiao Sun thought about it for a moment, and answered: 'yes, she's in my class.'

Truth against class

6. Xiao Yang loves spelling. One day, she went to see a 'spelling bee' between her class and another class. During the competition, Xiao Yang realized that contestant number two from her class is great at spelling and was transferred to a different class a long time ago. Later, her class won the spelling bee competition. The teacher from the other class saw Xiao Yang, and said: 'Contestant number two from your class is awesome! Is she really in your class?' Xiao Yang thinks to herself:

- 1) If I say she's in my class, I would have to lie; but my class will look good to have won this 'spelling bee'.
- 2) If I say she's not in my class, I wouldn't have to lie; but my class will look bad.

Xiao Yang thought about it for a moment, and answered: 'no, she's not in my class.'

Lie for self

7. Xiao li was playing with the school's newest computer, and she accidentally broke it. Her teacher asks her: 'Do you know who broke it?' Xiao li thinks to herself:

- 1) If I say I don't know, I would have to lie; but I won't have to pay for the computer.
- 2) If I say I know and admit to breaking the computer, I wouldn't have to lie; but I will have to pay for it.

Xiao li thought about it for a moment, and answered: 'No, I don't know.'

Truth against self

8. Xiao Du was playing with a ball inside her classroom and she accidentally broke the window. Her teacher asks her: 'Do you know who broke it?' Xiao Du thinks to herself:

- 1) If I say I don't know, I would have to lie; but I won't have to pay for the window.
- 2) If I say I know and admit to breaking the window, I wouldn't have to lie; but I will have to pay for the window.

Xiao Du thought about it for a moment, and answered: 'Yes, I broke it.'

APPENDIX B

Coding Examples of Children's Responses to Moral Reasoning Question

Coding categories	Response examples
Honesty	'It was a lie.' 'She told the truth.' 'It's like cheating.'
Country (collectivism at the country level)	'It would make the whole country bad.' 'He did this for his country.' 'If other people find about it, the reputation of our country will be affected.'
Honesty and country	'This situation has more to do with nationalism and pride in this instance overtakes honesty. This, is then very bad.' 'He's lying and trying to make his country look, and he's saying his country is the best.' 'It's against another country, and even though you're sticking up for your country, it's still not right to lie.'
School (collectivism at the school level)	'He didn't want to betray his school.' 'I shall do the same to protect the benefit of our school.' 'The school is like our home, we should protect its reputation.'
Honesty and school	'If she told a lie her school would look bad.' 'He cheated and he didn't tell the truth and lied to the teacher. And he just wanted his own school to win.' 'He was lying for his school, and not for himself.'
Class (collectivism at the class level)	'When the teacher finds out his class will look worse.' 'She did this for her class.' 'The honor of her class should be the priority.'
Honesty and class	'He lied but wanted his class to win.' 'He lied to protect his class.' 'We shall protect the benefit of our class, but honesty is also important.'
Self (individualism)	'Now Xiao Chao doesn't have to pay for the window but will cause a bad situation for her teacher and probably her conscience.' 'I can see him being afraid of the consequences.' 'Computers are expensive. He should pay for it.'
Honesty and self	'He lied so he wouldn't have to pay for the window.' 'She knew she lied just to stay out of trouble. And she would have to pay but instead now other people need to pay.' 'It's expensive and he didn't want to pay for it, so he lied about it.'
Other	No response 'There isn't right or wrong answer, either would hurt someone.' 'Depends on the situation.' 'It will be more helpful for him in the long run, although it is more difficult.'