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Reasoning about modesty among adolescents and adults in China and the U.S.

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A B S T R A C T

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Reasoning about modesty was examined among adolescents and young adults in China and the U.S. Participants made moral judgments of story characters who did a good deed and either truthfully accepted credit for it, or falsely denied having done it. The social context in which statements occurred was manipulated, with some made in private and others in front of a class. Chinese participants judged accepting credit for good deeds less favorably and lying in the service of modesty more favorably than did participants from the U.S. In each country, older participants judged modesty-based lies more favorably when they were told in public. Additionally, a high collectivist orientation and low individualistic orientation was associated with higher ratings of modesty-based lying in public, which provides the first direct link between endorsement of these values and moral judgments about lie-telling.

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For adolescents, gaining the regard of others is a major concern (Elkind, 1967). A seemingly obvious strategy is to disclose one's positive accomplishments and personal characteristics. However, doing so can produce undesirable consequences, such as creating an impression of immodesty (Banerjee, 2000; Watling & Banerjee, 2007b). This paper examines how adolescents and young adults in the U.S. and China reason about the appropriateness of either taking credit for one's own accomplishments, or falsely denying them in the service of social norms relating to modesty. In addition, the social context of communication is investigated by comparing how children reason about statements made in public versus private settings.

Cross-cultural differences

Studies comparing individuals in East Asian and North American countries indicate that modesty is emphasized to a substantially greater extent in the East (e.g., Cai, Brown, Deng, & Oakes, 2007). Specifically, in Eastern cultures there is a strong expectation that individuals will downplay their accomplishments (Kim, Chiu, Peng, Cai, & Tov, 2010), whereas in North America there is a greater emphasis on self-confidence and self-esteem (Heine, 2001; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). According to many scholars (e.g., Bond, Leung, & Wan, 1982), modesty is a major part of East Asian cultural traditions, and both children and adults are encouraged to be “unsung heroes” by minimizing their personal achievements.

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The greater emphasis on modesty in East Asia has been linked to situations in which individuals falsely deny credit for their prosocial actions (Fu, Lee, Cameron, & Xu, 2001; Lee, Cameron, Xu, Fu, & Board, 1997; Lee, Xu, Fu, Cameron, & Chen, 2001). Lee et al. (1997) presented children aged 7 to 11 from Canada and China with stories in which a child protagonist performs a good deed. Later, a teacher asks the protagonist whether he or she did the good deed, and the protagonist responds by either truthfully acknowledging it or falsely denying it. Children from Canada rated the truthful acknowledgment more favorably and the false denial less favorably than did their counterparts from China. Lee et al. also found that among the Chinese children there was an age-related increase in the tendency to evaluate modest lies favorably and immodest truths unfavorably. Fu et al. (2001) replicated the cross-cultural differences between Canada and China in an adult sample. Canadian adults typically asserted that the protagonists deserved credit for their good deeds and should truthfully acknowledge them, and Chinese adults typically asserted that the protagonists who lied to conceal their good deeds were demonstrating an appropriate degree of modesty.

In interpreting their findings, Lee et al. (1997) pointed out that modesty is seen as a central virtue in China and is emphasized throughout the socialization process. Although this emphasis on modesty in China is consistent with Communist ideology, it is by no means driven by Communist influences alone. Modesty is also emphasized in Confucian and Taoist traditions, and strong modesty norms are evident in East Asian societies outside of Communist China, including Taiwan (Lee et al., 2001) and Japan (Heyman, Itakura, & Lee, *in press*). Lee and colleagues (Lee et al., 1997) argued that there are close links between the collectivist values that tend to be emphasized in East Asian societies (see Oyserman, Coon, & Kimmelmeier, 2002) and the tendency to view a high level of modesty as appropriate. One possible explanation for this link is that modest behavior can help to deflect attention from ways in which individuals stand out from their group, thus promoting harmonious interpersonal relations within collectivist societies (see also Bond et al., 1982).

Social context of communication

The types of statements about the self that are generally considered to be socially appropriate vary as a function of the context in which the communication takes place (Aloise-Young, 1993; Banerjee, 2002; Buhrmester, Goldfarb, & Cantrell, 1992; Juvonen & Murdock, 1995; Watling & Banerjee, 2007a, 2007b). Watling and Banerjee (2007b) found that for participants between the ages of 8 and 11, an immodest response to praise was considered to be less appropriate if made among peers, as compared to adults. Juvonen and Murdock (1995) found that 14-year-old American students expressed less of a desire to portray themselves as hard working when among peers rather than teachers.

The present study focuses on a different aspect of the social context of communication: whether the communication takes place in public or in private. Much of the research concerning self-presentation in public and private contexts has been conducted among adults in Western cultures (Baumeister & Ilko, 1995; Miller & Schlenker, 1985; Schütz, 1997; Sedikides, Gregg, & Hart, 2007; Sedikides, Herbst, Hardin, & Dardis, 2002). This research suggests that people tend to behave more modestly in public than they do in private. For example, Miller and Schlenker (1985) found that participants were less likely to take personal credit for group successes in a public versus a private setting.

If modest values are emphasized in East Asian cultures as a means to promote harmonious group relationships (Lee et al., 1997), it seems reasonable to predict that expectations for modesty will be greater in public versus private settings. In addition, weaker expectations of behavioral consistency in East Asian cultures (Heine, 2001) that are associated with a strong emphasis on roles and relations (Markus & Kitayama, 1991) may translate into a greater willingness to accept differences in behavior between public and private settings. As is consistent with this possibility, Japanese adults wrote more modest descriptions of themselves when in a public setting rather than in private (Kanagawa, Cross, & Markus, 2001), but American adults did not provide significantly different descriptions across these contexts.

A small number of developmental studies have examined the public-private distinction in children's reasoning about modesty (Heyman, Itakura, & Lee, *in press*; Yoshida, Kojo, & Kaku, 1982; Fu et al., 2010). This research has established the importance of the distinction in Japan among children ages 7–11 years. Yoshida et al. (1982) asked Japanese children to identify which of a series of statements they felt described them best. Some of the statements were self-enhancing, such as "I know many kinds of things," and others were self-critical, such as "There are many things that I am worse at than other people." Participants selected more self-enhancing statements when they responded privately on a questionnaire than when they responded orally in the presence of ten classmates. Heyman, Itakura, and Lee (*in press*) also found effects of social context in reasoning about modesty among Japanese children. Children ages 7 to 11 judged the acknowledgment of a good deed more negatively when it was made in front of an audience of classmates rather than in private. This effect of setting increased with age, which may reflect the increased exposure to Japanese modesty norms among the older children. In contrast, there were no such effects of setting in a comparison group of children from the U.S. Fu et al. (2010) replicated this finding with Chinese children under 12 years of age and further found that the collectivist tendencies of the children's parents significantly predicted children's moral judgments about modest-related lies.

The present research

The present research had three main goals. First, we aimed to extend research on cross-cultural differences in modesty to include an adolescent sample. Although adolescence has long been recognized as a stage during which individuals are highly aware of how they are likely to be perceived by others (Harter, 1999; Elkind, 1967), little is known about how they reason about the types of communication about the self that are appropriate, including when modest and immodest responses are

needed. We investigated this issue by examining modesty judgments among participants ranging in age from early adolescence through early adulthood, in both China and the U.S.

A second goal was to determine whether reasoning about the appropriateness of lying in the service of modesty is related to the distinction between collectivist versus individualist cultural values. Although patterns of judgment about modesty-based lying tend to co-occur with cross-cultural differences in collectivist versus individualist values (Fu et al., 2001; et al., 2009; Heyman, et al., 2009; Lee et al., 1997, 2001) to date there has been no evidence of a direct relationship between individuals' moral judgments and their individualist-collectivist values except for Fu et al. (2010) that only established a linkage between children's moral judgments and their parents' collectivist tendencies.

A third goal was to build upon previous work that has examined how children's reasoning about modesty differs as a function of the social context in which the communication takes place (Heyman, Itakura, & Lee, in press; Fu et al., 2010; Watling & Banerjee, 2007b; Yoshida et al., 1982). We examined this issue by comparing participants' evaluations of modest and immodest responses that were made in the presence of a group versus in private.

Method

Participants

There were a total of 689 participants, including 400 from China ($M = 16.33$, $SD = 2.51$, Range: 12.77–21.84 years, 243 females) and 289 from the U.S. ($M = 16.27$, $SD = 2.35$, Range: 11.49–22.96 years, 144 females). Child participants in both countries were recruited through their schools, and the adult participants, who were college students, were recruited through their professors. All participants from China were Han Chinese students who came from diverse economic backgrounds and lived in a large city in an eastern coastal province of P.R. China. Participants from the U.S. were either Euro-American ($N = 169$) or Hispanic ($N = 120$) students who came from diverse economic backgrounds and lived a large city in the west coast of the U.S.

For the purpose of the present study, we divided the participants into four age groups according to their age in years by quartiles. We obtained four age groups for the Chinese sample: Age Group 1: $M = 13.35$, $SD = .28$, $N = 101$; Age Group 2: $M = 15.01$, $SD = .66$, $N = 99$; Age Group 3: $M = 17.14$, $SD = .47$, $N = 100$; Age Group 4: $M = 19.84$, $SD = .82$, $N = 100$. We also obtained four age groups for the US sample: Age Group 1: $M = 13.84$, $SD = .90$, $N = 75$; Age Group 2: $M = 15.34$, $SD = .24$, $N = 70$; Age Group 3: $M = 16.49$, $SD = .37$, $N = 72$; Age Group 4: $M = 19.47$, $SD = 1.98$, $N = 72$.

Overview of procedure

Participants of all ages were asked to read and fill out two sets of question sets. The first set contained scenarios about protagonists who performed a prosocial or antisocial action, and then truthfully acknowledged or falsely denied doing it. The second set of questionnaires consisted of an adaptation of the Auckland Individualism and Collectivism Scale (Shulruf, Hattie, & Dixon, 2007).

Participants completed the questionnaires in groups, in a classroom setting. One or more trained experimenters conducted the sessions and remained available to answer questions. The procedure took about fifteen minutes to complete. IRB approval for the study was obtained in each country, and consent was obtained from all participants. For child participants, only those who had obtained consent from a parent or legal guardian were invited to participate.

Story scenarios

Each participant responded to eight stories. The stories were adapted from ones originally written in English by a team of East Asian and North American researchers (Lee et al., 1997), and then translated into Chinese using a back-translation procedure.

In each of four experimental stories, a protagonist performs a prosocial deed, such as giving her own money to a classmate for a class trip. The protagonist is asked about it and responds. The nature of the response (whether it was truthful or a lie) and the social context in which it takes place (in private or in front of the class) was manipulated within subjects, across the four stories. There were also four control stories, based on the same two within-subjects factors, in which a protagonist does an antisocial deed such as tearing a page out of a library book. Four stories were presented in one of four possible randomly determined orders. The within-subjects factors (i.e., truth vs. lie, public vs. private) were assigned to the different stories to prevent the specific details of the stories from having an undue influence on the results. For example, for each specific story, approximately half of the participants read a version in which the protagonist responded truthfully, and about half read a version in which the protagonist responded by lying. Stories appeared in one of two possible randomly determined orders. An example of a complete set of stories is presented in the Appendix.

Participants were asked to read the stories and respond to questions about them. After hearing each story, participants were asked a *lie categorization* question to determine whether they considered the protagonist's response to be "a lie," "the truth," or "something else." This measure was included to examine the possibility that children might not always consider the act of intentionally providing inaccurate information to be a lie if it constitutes a culturally accepted response (see Sweetser, 1987).

Next, participants were asked to make an *evaluative judgment* of the protagonist's response using 7-point Likert-type scale, in which the response options ranged from *very, very bad* (coded as -3) to *very, very good* (coded as 3). These evaluative judgments served as the primary dependent measure.

Auckland Individualism and Collectivism Questionnaire

After they completed the story scenarios, participants filled out a version of the *Auckland Individualism and Collectivism Questionnaire* (see Shulruf et al., 2007, for detailed information about reliability) that was adapted for an adolescent population. Participants were asked to “Please circle the answer that corresponds best to you,” and then rated a total of 30 statements that described behaviors, beliefs or preferences. Participants indicated their response to each item by circling one of the following 6 selections: “never or almost never” (scored as 0); “rarely” (scored as 1); “occasionally” (scored as 2); “sometimes” (scored as 3); “frequently” (scored as 4); “always” (scored as 5). Example items on the individualism scale included, “I see myself as my own person” and “I consider myself as a unique person separate from others.” Example items on the collectivism scale included, “It is my duty to take care of family, even when I have to sacrifice what I want” and “I have the feeling that my relationships with others are more important than my own accomplishments.” Some items were reverse coded, as indicated by the scoring guidelines of Shulruf et al. (2007). Mean individualism and collectivism scores were computed.

Results

Preliminary analyses revealed no main effects or interactions involving gender, and it was not included in subsequent analyses.

Lie categorization

Children in all conditions overwhelmingly classified truthful acknowledgement of one’s prosocial deed as “the truth,” and false denial as “a lie.” The mean rates of categorizing untruthful statements as lies were 98% ($SD = 1\%$) for American participants and 96% ($SD = 2\%$) for Chinese participants, and the mean rates for categorizing truthful statements as the truth were 97% ($SD = 1\%$) for American participants and 88% ($SD = 3\%$) for Chinese participants.

Evaluative judgments

In light of evidence that children reason differently about antisocial versus prosocial stories and truth-telling versus lie-telling stories (e.g., Lee et al., 1997, 2001; Heyman, Sweet, & Lee, 2009), no omnibus ANOVA was conducted. Instead, separate repeated measures ANOVAs were conducted for each of the four story categories (truth-telling about prosocial deeds, lie-telling about prosocial deeds, truth-telling about antisocial deeds, and lie-telling about antisocial deeds; see Appendix for complete text) with moral evaluations of the story character’s statement as the dependent variable. Because participants only occasionally categorized the truthful statements not as the truth or untruthful statements not as lies, the moral evaluation data from all participants regardless of their occasional misclassifications were included in the analyses below to ensure as many participants as possible to be included in the analyses. Additional analyses using only those participants without misclassifications yielded essentially the same results.

Truth-telling about prosocial deeds

A repeated measures ANOVA with the private-public setting factor as a within-subjects factor, and with age group and country as the between-subjects factors, was performed on ratings of the two prosocial truth-telling stories (Fig. 1). The setting effect was significant, $F(1, 670) = 40.73, p < .0001, \eta^2 = .06$, which was mainly due to the fact that ratings of truth-telling were slightly less positive in public than in private. The country effect was also significant, $F(1, 670) = 214.29, p < .001$,

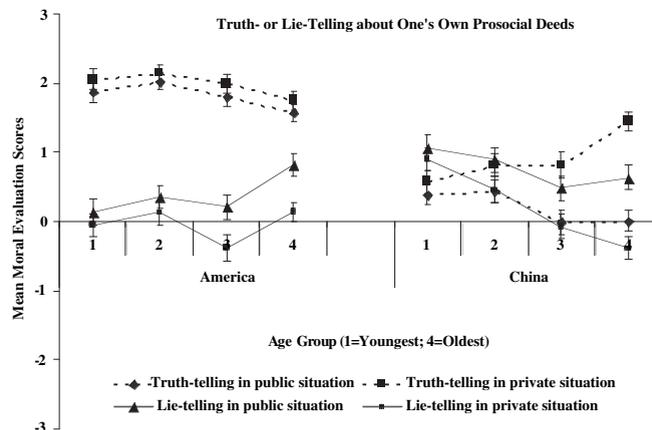


Fig. 1. Evaluations of truth-telling and lie-telling about prosocial behavior, in public in private settings, by participants from China and the U.S.

$\eta^2 = .24$, which was due to the fact that American participants rated prosocial truth-telling more positively than Chinese ones. Also, the country by setting and age by setting interactions were significant, $F(1, 670) = 16.83, p < .001, \eta^2 = .03$, and $F(3, 670) = 3.86, p < .01, \eta^2 = .02$, respectively. These interactions were further modified by a significant 3-way interaction, $F(3, 670) = 4.33, p < .01, \eta^2 = .02$.

To explore this significant 3-way interaction, we examined the data from American and Chinese participants separately. We performed paired sample *t*-tests to compare ratings of prosocial truth-telling between the public and private conditions (LSD with $\alpha = .05$). For the American data, the setting effect was not significant for any of the four age groups. However, for the Chinese data, except for the youngest age group, the rating differences between prosocial truth-telling in private and in public for the other three older age groups became increasingly wide, $t(99) = 2.00, p = .048, t(98) = 3.73, p < .0001$, and $t(99) = 8.21, p < .0001$, respectively (see Fig. 1). Their ratings of prosocial truth-telling in private became increasingly more positive, whereas their ratings of prosocial truth-telling in public became increasingly less positive.

Lie-telling about prosocial deeds

A repeated measures ANOVA with the private-public setting factor as a within-subjects factor, and with age group and country as the between-subject factors, was performed on ratings of the two prosocial lie-telling stories. The setting effect was significant, $F(1, 667) = 45.89, p < .0001, \eta^2 = .06$, which was mainly due to the fact that ratings of lie-telling were more positive in public than in private. The country effect was also significant, $F(1, 667) = 11.72, p < .01, \eta^2 = .02$, which was due to the fact that Chinese participants rated prosocial lie-telling more positively than the American participants. Also, the age by setting and age by country interactions were significant, $F(3, 667) = 4.53, p < .01, \eta^2 = .02$, and $F(3, 667) = 5.15, p < .01, \eta^2 = .02$, respectively.

To explore these significant interactions, we performed paired sample *t*-tests on the American and Chinese data separately. The pair-sample *t*-tests compared ratings of prosocial lie-telling between the public and private conditions for each of the four age groups, as described above (LSD with $\alpha = .05$). For the American participants, the two younger age groups did not rate prosocial lie-telling in private and in public significantly differently, whereas the two older age groups rated prosocial lie-telling in public more positively than in private, $t(71) = 2.61, p = .013$ (Age Group 3) and $t(66) = 4.28, p < .0001$ (Age Group 4), respectively (see Fig. 1). For the Chinese participants, except for the youngest age group, the rating differences between prosocial lie-telling in private and that in public for the other three older age groups became increasingly wide, $t(99) = 2.89, p = .011, t(96) = 2.36, p = .02$, and $t(99) = 5.09, p < .0001$, respectively (see Fig. 1). Their ratings of prosocial lie-telling in public were more positive than their ratings of prosocial lie-telling in private.

Truth-telling about antisocial deeds

A repeated measures ANOVA with the private-public setting factor as a within-subjects factor, and with age group and country as between-subjects factors, was performed on ratings of the two antisocial truth-telling stories (Table 1). The setting effect was significant, $F(1, 650) = 13.74, p < .001, \eta^2 = .02$, which was due to the fact that participants rated antisocial truth-telling more positively in private than in public. The country effect was significant, $F(1, 650) = 4.01, p < .05, \eta^2 = .01$, which was due to the fact that Chinese participants rated antisocial truth-telling slightly more positively than did American participants. Also, there was a significant age by country effect, $F(3, 650) = 3.30, p < .05, \eta^2 = .02$, which was mainly due to the fact that Chinese and American participants at all ages rated truth-telling about one's antisocial deeds equally positively, except for the youngest American children who rated such behavior less positively than did their Chinese counterparts (See Table 1).

Antisocial lie-telling

A repeated measures ANOVA with the private-public setting factor as a within-subjects factor, and with age group and country as the between-subject factors, was performed on ratings of the two antisocial lie-telling stories (Table 1). The setting effect was significant, $F(1, 639) = 7.01, p < .01, \eta^2 = .01$, which was due to the fact that participants rated antisocial lie-telling more negatively in public than in private.

Table 1

Mean evaluative judgment scores of responses to antisocial stories by country and age group.

Age Group	Truth-Telling		Lie-Telling	
	Public	Private	Public	Private
U.S.				
1	0.58 (1.79)	0.75 (1.87)	-2.50 (1.02)	-2.20 (1.27)
2	0.98 (1.58)	1.20 (1.53)	-2.27 (1.14)	-2.23 (1.00)
3	0.90 (1.83)	1.30 (1.67)	-2.54 (0.78)	-2.21 (0.92)
4	1.21 (1.77)	1.15 (1.68)	-2.23 (1.01)	-2.15 (1.06)
China				
1	1.42 (1.74)	1.68 (1.61)	-2.74 (0.71)	-2.71 (1.01)
2	0.86 (2.07)	1.30 (1.83)	-2.59 (1.06)	-2.72 (0.69)
3	1.14 (1.91)	1.18 (2.02)	-2.68 (0.89)	-2.20 (1.64)
4	0.94 (1.84)	1.60 (1.46)	-2.44 (1.13)	-2.41 (1.01)

Note. Standard deviations are shown in parentheses.

The country effect was also significant, $F(1, 639) = 14.50, p < .001, \eta^2 = .02$, with Chinese participants providing more negative ratings than American participants. Also, there was a significant age by setting effect, $F(3, 639) = 4.55, p < .01, \eta^2 = .02$, which was mainly due to the fact that participants in the third age group for unknown reasons rated lying about antisocial behavior in public more negatively than in private (See Table 1).

Individualism-collectivism scores

Preliminary analyses revealed that Euro-American and Hispanic American participants' individualism and collectivism scores were not significantly different. Thus, the data were combined for the subsequent analyses.

A MANOVA was performed on participants' individualism and collectivism scores with country (China versus US) and age group as between subject factors (Table 2). The multivariate tests showed that the country effect was significant, $F(2, 648) = 231.86, p < .001, \eta^2 = .42$, suggesting that the patterns for the individualism and collectivism scores were different for participants from China and US. The age effect was also significant, $F(6, 1298) = 4.55, p < .001, \eta^2 = .02$, suggesting that the patterns for the two scores also changed with increased age. Finally, the age by country interaction was also significant, $F(6, 1298) = 5.95, p < .001, \eta^2 = .03$. This significant interaction suggests that participants' age and country affected the pattern of their individualism and collectivism scores.

To explore this interaction, two repeated measures ANOVA were performed on participants' individualism score and collectivism score separately, with age group and country (China versus US) as the between subject factors. For the collectivism scores, the country effect was significant, $F(1, 654) = 313.74, p < .001, \eta^2 = .32$, which was due to the fact that Chinese participants were significantly more collectivistic than American participants. The age effect was also significant, $F(3, 654) = 8.32, p < .001, \eta^2 = .04$, which was due to the fact that the youngest age group had higher collectivism scores than the other age groups. Finally, the age by country interaction was also significant, $F(3, 654) = 9.61, p < .001, \eta^2 = .04$. This significant interaction was due to the fact that whereas Chinese participants were overall more collectivistic than American participants, the difference was the smallest for the youngest age group.

For the individualism score, the country effect was significant, $F(1, 662) = 414.30, p < .001, \eta^2 = .39$, which was due to the fact that Chinese participants were significantly less individualistic than American participants. The age effect was also significant, $F(3, 662) = 7.20, p < .001, \eta^2 = .03$, which was due to the fact that the youngest age group was less individualistic than any of the other age groups. Finally, the age by country interaction was also significant, $F(3, 662) = 10.19, p < .001, \eta^2 = .04$. This significant interaction was due to the fact that whereas Chinese participants were overall less individualistic than American participants, the difference was the smallest for the youngest age group.

Relation between moral judgments and individualism-collectivism scores

Two separate hierarchical regression analyses were performed on participants' ratings of prosocial truth-telling in public or in private. The age group factor was entered into the model first as the predictor, followed by the participants' individualism score and collectivism score. After partialling out the effect of age, participants' individualism and collectivism scores together significantly predicted their ratings of prosocial truth-telling in public, $\Delta R^2 = .07, \Delta F(2, 648) = 25.64, p < .001$. Inspection of the final model showed that the participants' individualism and collectivism scores also uniquely predicted their moral evaluations above and beyond the scores' common contributions ($\beta = .15, t = 2.84, p < .01; \beta = -.14, t = -2.53, p < .05$). Thus, the lower the individualistic tendency and the higher the collectivistic tendency, the more likely the participants rated the truth-telling in public less positively. For truth-telling about prosocial behavior in the private setting, after partialling out the effect of age, participants' individualism and collectivism scores together significantly predicted their ratings of prosocial truth-telling, $\Delta R^2 = .04, \Delta F(2, 648) = 13.01, p < .001$. Inspection of the final model showed that the participants' individualism score but not their collectivism scores uniquely predicted their moral evaluations above and beyond the two scores' common contributions ($\beta = .13, t = 2.45, p < .05; \beta = -.18, t = 1.39, n.s.$). Thus, the more individualistic, the more likely the participants

Table 2
Mean individualism and collectivism scores by country and age group

Age Group	Individualism	Collectivism
U.S.		
1	49.49 (17.11)	58.16 (19.15)
2	60.32 (15.91)	45.65 (16.60)
3	60.12 (17.94)	46.14 (16.60)
4	51.25 (17.86)	55.54 (18.24)
China		
1	38.11 (8.52)	73.43 (14.12)
2	39.14 (7.69)	73.26 (12.06)
3	36.58 (6.35)	75.46 (8.28)
4	38.36 (6.34)	73.15 (7.59)

Note. Standard deviations are shown in parentheses. Possible scores on the collectivism scale range from 17 to 102, and possible scores on the individualism scale range from 13 to 78.

rated truth-telling positively (and, though not uniquely significant, the more collectivistic, the less likely the participants rated truth-telling positively).

Separate hierarchical regression analyses were performed on participants' ratings of prosocial lie-telling in public or in private. After partialling out the effect of age group factor, the participants' individualism score and collectivism score failed to significantly predict their moral evaluations of lie-telling about prosocial behavior in both private and public.

Discussion

Adolescents and adults in China and in the U.S. were asked to judge the appropriateness of truthfully acknowledging one's own good deeds or falsely denying them. As is consistent with previous cross-cultural comparisons between younger children from East Asia versus North America (Lee et al., 1997, 2001), Chinese participants judged accepting credit for good deeds less positively and falsely denying them less negatively than did the participants from the U.S.

A central finding was that Chinese participants judged the acknowledgment of a good deed more negatively when it was made in front of an audience of classmates as compared to in private. This effect emerged after age 13 and increased with age.

In contrast, the responses of participants from the U.S. showed no differentiation between public and private settings and no age-related differences. A similar pattern of results was seen by Heyman, Itakura, and Lee (in press) among 7- to 11-year-olds in Japan and the U.S. and by Fu et al. (2010) among 7- to 11-year-olds in China and U.S. They found that the participants from Japan and China evaluated modesty-based lying differently when it occurred in public rather than in private, and that this effect was strongest among the older children. In contrast, no such effect was seen among the children from the U.S. Taken together, these results suggest that in East Asia, it is considered problematic for individuals to call positive attention to themselves in public (see also Yoshida et al., 1982). The present results also suggest that in East Asia, age-related changes in beliefs about modesty norms continue to develop after 11 years of age.

As noted above, participants from the U.S. were not sensitive to the public versus private distinction in their reasoning about truth-telling that potentially demonstrates immodesty. However, when reasoning about telling lies in the service of modesty, they differentiated between public and private settings, as did the Chinese participants. Specifically, participants in both the U.S. and China considered telling a prosocial lie to be more acceptable when it was done in a public rather than a private setting, and in each country this effect was greater among the older age groups than the younger age groups.

One might wonder why the patterns of evaluation for lying were not simply the reverse of those seen for truth-telling. One explanation is that telling the truth and telling a lie are only two of an entire range of ways that one might respond to a question about a good deed. For example, the speaker might say nothing and change the subject, or admit to the good deed while downplaying its significance. Participants' awareness of these types of alternative possibilities might have affected their ratings. Additionally, participants might have focused on different aspects of the scenario when they reasoned about truth-telling versus lying (see Heyman, et al., 2009). For example, participants may have found truth value of the speaker's statement more salient in lie-telling scenarios than in truth-telling scenarios, because the motive for telling a lie is more likely to involve a more complex explanation than the motive for telling the truth. Consequently, in lie-telling situations, participants in both countries may have been equally likely to focus on the circumstances in which telling a lie is acceptable. In contrast, in the truth-telling situations, participants may have focused on the question of modesty violations, which are likely to be more salient within East Asian countries because they are an important focus of socialization (Lee et al., 1997).

It is also notable that when a distinction was seen between the public and private contexts, it tended to be stronger among older children. As noted previously, such a pattern has also been seen in previous research among Japanese children aged 7 to 11. This suggests that the process of internalizing norms that define appropriate ways to talk about oneself in public versus in private takes place over an extended period of time, and that younger children may not yet appreciate many of the nuances of this distinction. However, even early elementary school children are capable of appreciating the fact that communication can have different implications when it takes place in public versus in private. Specifically, children as young as age 5 have some understanding that a statement that might hurt someone's feelings would be more appropriate to convey in private than in public (Eskritt & Lee, 2009).

The antisocial control stories were included to help rule out the possibility that any differences based on culture or age that might be seen could be explained in terms of response biases. The age and culture differences on these measures were minimal. Specifically, Chinese participants rated truth-telling about antisocial deeds slightly more positively than did participants in the U.S., and this difference was accounted for by the youngest participants only. Notably, this pattern of cross-cultural difference runs in the opposite direction as the pattern seen with our experimental stories, in which Chinese participants rated truth-telling more negatively than did U.S. participants. Additionally, Chinese participants rated lie-telling more negatively than did U.S. participants, which again runs opposite to the pattern seen with our experimental stories.

Results from the *Auckland Individualism and Collectivism Scale* (Shulruf et al., 2007) indicated that as expected American participants were more individualistic and less collectivistic than the Chinese participants. Beyond the age-related trends in the individualism and collectivism measures is the question of how they might relate to the moral evaluation of modest versus immodest statements. Some researchers (e.g., Lee et al., 1997) have argued that differences in these values relate to the socialization of modesty. Consistent with this argument we found that low individualistic tendencies and high collectivist tendencies were associated with less positive ratings of prosocial truth-telling in public.

Limitations and future directions

One limitation to the present research, and to all cross-cultural research, is that it is not possible to fully determine the underlying causes of observed differences. For example, U.S. and Chinese samples could not be perfectly matched, and despite our efforts, subtle differences in meaning might have been introduced during the translation process. Thus, even though the findings provide evidence of a direct link between individualism and collectivism ratings and reasoning about modesty, other factors may have contributed to the findings as well.

An important direction for future research will be to examine the public/private distinction in other ways. In the present research, we operationalized this distinction by manipulating whether the communication that was directed toward a teacher took place in front of a group of students. By defining it in this way, the results could have been influenced by the fact that the public situation involves two different audiences but the private situation does not. The fact that the two audiences consist of teachers and peers may be particularly significant in light of research documenting differences in the way children expect peers versus adults to respond to different self-presentational strategies (Juvonen & Murdock, 1995; Watling & Banerjee, 2007b).

It will also be important to systematically compare different forms of modest and immodest responses. In the present research, this issue was addressed in a context in which questions of lying come into play. The results of our control stories, and previous work examining reasoning about antisocial lies (e.g., Lee et al., 1997), suggest that our findings of cross-cultural differences in reasoning about modesty cannot be explained in terms a general tendency to view lying as more acceptable in China. However, it may still be the case that the truthfulness of the protagonists' statements played a significant role in how they were rated. In addition, it may prove useful to compare the relatively subtle ways of calling attention to oneself that were investigated in the present research with the more overt approaches that have been examined previously (e.g., Watling & Banerjee, 2007b, who presented statements such as "of course, I'm the best"). These types of comparisons will be important to gain a nuanced understanding of the extent to which modest versus immodest behavior is accepted and encouraged by different societies.

Even though participants from the U.S. showed greater approval of immodest responses than did Chinese participants, it does not necessarily imply that the children in the U.S. have been socialized to be immodest. We argue that in both countries, children and adults have a desire to call positive attention to themselves, but not to the extent that they are considered to be immodest. It is likely that in China, there tend to be higher standards that one must meet to be considered appropriately modest. However, there may be circumstances in China in which calling positive attention to oneself is viewed as *less* immodest than in the U.S. This appears to be the case among late elementary school children when high-achievers report their high test scores to low-achieving classmates. The predominant interpretation for this behavior among children in the U.S. is that it is an act of showing off, whereas the predominant interpretation among children in China is that it is an implicit offer of help to the low achiever (Heyman, Fu, & Lee, 2008). A better understanding of the way in which different cultures define and operationalize appropriate modesty should lead to important insights into enculturation processes and the development of reasoning about self-presentation.

Summary

The present research replicates previous findings concerning children's reasoning about modesty in East Asia and North America, and extends them to an adolescent and young adult sample. The results also indicate that Chinese participants viewed it as less acceptable to truthfully take credit for one's own good deeds when in a public rather than a private setting. In contrast, participants in the U.S. made no such distinction, but they were sensitive to the distinction between public and private settings with reference to lying to avoid disclosing one's own good deed. Differences in reasoning about public versus private settings tended to increase with age, which suggests that individuals become increasingly aware of the potential interpersonal implications of this distinction across the adolescent years. Finally, this work is the first to demonstrate a direct link between the way individuals reason about modesty and their endorsement of collectivist values. Taken together, the results suggest that developmental change in reasoning about modesty continues to take place after the age of 11, and that cultural values play an important role in shaping their developmental trajectory.

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Appendix. Prosocial stories

Truth value: truth; setting: public

Kelly knew that her friend, Anne, had lost her money for the class trip. Now she couldn't go on the trip with the rest of her class. Kelly secretly put some of her own money in Anne's pocket so Anne could go on the trip. So Kelly left the money for Anne, and when Anne found the money and told her classmate, the teacher said to the class, "Anne just told me that someone

has given her money so she can go on the trip.” The teacher then asked Kelly in front of the class, “Do you know who left the money for Anne?” Kelly had left the money for Anne, so Kelly said to her teacher, “Yes, I did it.”

Truth value: truth; setting: private

When Jenny was out at recess, she saw that the schoolyard was littered with garbage, so she picked up all the pieces she could find and threw them in the trash can. So Jenny cleaned the schoolyard. At the end of recess, Jenny’s teacher said to her class, “I notice that the schoolyard is now nice and clean.” When nobody was around, the teacher asked Jenny, “Do you know who cleaned the yard?” Jenny had cleaned the schoolyard, so Jenny said to her teacher, “Yes, I did it.”

Truth value: lie; setting: public

Mark knew that his friend, Timmy, had lost his lunch money and now had no money to buy his lunch. When Timmy left his desk, Mark secretly put some of his own money in Timmy’s desk so Timmy could buy some lunch. So Mark left some money for Timmy. When Timmy found the money and told his classmate, the teacher said to the class, “Timmy just told me that someone has given him money so he can now buy his lunch.” The teacher then asked Mark in front of the class, “Do you know who left the money for Timmy?” Even though Mark had left the money for Timmy, Mark said to his teacher, “No, I didn’t do it.”

Truth value: lie; setting: private

Alex had to stay inside at recess time because he was getting over a cold. Alex decided to clean up the classroom for his class. So Alex cleaned the classroom. When his teacher returned after recess, she said to the class, “Oh, I see that someone has cleaned the classroom.” When nobody was around, the teacher asked Alex, “Do you know who cleaned the classroom?” Even though Alex had cleaned the classroom, he said to his teacher, “No, I didn’t do it.”

Antisocial Deed (Control) Stories

Truth value: truth; setting: public

A new boy, named Jimmy, had just joined Paul’s class. Paul decided that he didn’t like him. Paul went over to Jimmy, and when the teacher wasn’t looking, Paul pushed Jimmy to the ground and made him cry. The teacher walked by and saw that Jimmy was hurt. She asked Paul in front of the class, “Do you know who just hurt Jimmy?” Paul pushed Jimmy and made him cry, so he said to his teacher, “Yes, I did it.”

Truth value: truth; setting: private

Shelly wanted to draw some pictures so she took one of the books from the library and scribbled all over the pages. When her teacher noticed the scribbled pages, she said to the class, “I see that someone has scribbled all over the pages in this book.” When nobody was around, the teacher asked Shelly, “Do you know who scribbled on the pages?” Shelly had drawn pictures all over the pages in the book, so she said to her teacher, “Yes, I did it.”

Truth value: lie; setting: public

Katie wanted to play with the jump rope during gym class, but she discovered that one of her classmates, Sherry, was already playing with it. Katie told Sherry that she wanted the jump rope. When Sherry said no, Katie pushed her to the ground and made her cry. Then the teacher came in and found that Sherry had been hurt. The teacher asked Katie in front of the class, “Do you know who just hurt Sherry?” Even though Katie had pushed Sherry and made her cry, Katie said to her teacher, “No, I didn’t do it.”

Truth value: lie; setting: private

Ryan wanted to make paper airplanes so he tore some pages out of a storybook from the library. When his teacher noticed the missing pages in the book, she said to the class, “I see that someone has torn some pages from this book.” When nobody was around, the teacher asked Ryan, “Do you know who tore out the pages?” Even though Ryan tore some pages out of the storybook, Ryan said to his teacher, “No, I didn’t do it.”

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