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ARTICLE *in* INFANT AND CHILD DEVELOPMENT · JANUARY 2010

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Published in final edited form as:

Infant Child Dev. 2010 October ; 19(5): 498–515. doi:10.1002/icd.680.

Chinese Children's Moral Evaluation of Lies and Truths—Roles of Context and Parental Individualism–Collectivism Tendencies

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Abstract

The present study examined Chinese children's moral evaluations of truths and lies about one's own pro-social acts. Children ages 7, 9, and 11 were read vignettes in which a protagonist performs a good deed and is asked about it by a teacher, either in front of the class or in private. In response, the protagonist either tells a modest lie, which is highly valued by the Chinese culture, or tells an immodest truth, which violates the Chinese cultural norms about modesty. Children were asked to identify whether the protagonist's statement was the truth or a lie, and to evaluate how 'good' or 'bad' the statement was. Chinese children rated modest lies more positively than immodest truths, with this effect becoming more pronounced with age. Rural Chinese children and those with at least one nonprofessional parent rated immodest truths less positively when they were told in public rather than in private. Furthermore, Chinese children of parents with high collectivism scores valued modest lies more than did children of parents with low collectivism scores. These findings suggest that both macro- and micro-cultural factors contribute significantly to children's moral understanding of truth and lie telling.

Keywords

social development; moral development; lying; modesty; children; self presentation

The link between morality and honesty is a hotly debated topic in philosophy dating back to antiquity. One school of thought on this subject is an absolutist position espoused by St. Augustine (1952), Kant (1949), and Bok (1978). This position argues that lying is intrinsically wrong and never acceptable. Absolutists believe that people have a moral obligation to tell the truth and lying violates this contractual commitment. In contrast, an opposite position has been advocated by philosophers, such as Bentham (1843), Mill (1869), and Austin (1962) who take a more utilitarian approach. This position suggests that the moral implications of lying are context dependent. Furthermore, it has been argued that there are situations where lying may be socially appropriate and have positive valence (e.g. lying for politeness purposes) (Sweetser, 1987).

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Within these two extreme philosophical viewpoints, most individuals, regardless of culture, seem to adopt a more utilitarian approach. There is not only evidence that people lie for a variety of reasons on a daily basis (DePaulo & Bell, 1996; DePaulo & Kashy, 1998), but also that some lies are not viewed very negatively (Bussey, 1999; Perkins & Turiel, 2007) or may even be positively evaluated (Heyman, Sweet, & Lee, 2009; Lee & Ross, 1997). In some cases, an intentional false statement is even not considered a lie at all (Fu, Lee, Cameron, & Xu, 2001; Lee & Ross, 1997; Siegal, Surian, Nemeroff, & Peterson, 2000). Children have also been found to evaluate lies and truths positively or negatively based on audience (Banerjee, 2002; Watling & Banerjee, 2007), speaker belief and intention (Peterson, 1995; Siegal & Peterson, 1996, 1998), and punishment and outcome (Piaget, 1965). Therefore, children as young as preschool age can evaluate the pro-social and antisocial aspects of lying and truth telling.

Furthermore, cultural contexts differentially affect whether certain lies are evaluated more positively or negatively. Although lying to protect oneself after committing an antisocial deed is consistently found to be rated negatively by different cultures (Lee, Cameron, Xu, Fu, & Board, 1997; Lee, Xu, Fu, Cameron, & Chen, 2001), one type of lie that has been shown to vary across cultural contexts is falsehoods told to conceal one's own good deeds in order to be modest. For example, a study by Fu *et al.* (2001) showed adult participants stories in which a character performed a pro-social deed and either told a modest lie or told an immodest truth when asked about it. They found that Chinese adults consistently gave modesty-motivated lies positive ratings, whereas they gave truth telling negative ratings in the context of the study. Half of the Chinese adults did not even consider modest lies to be lies at all. In contrast, North American adults viewed modest lies as lies and gave them negative moral evaluations. This cross-cultural difference in moral judgments of modesty-related truths and lies has been referred to as the 'modesty effect' (Lee *et al.*, 1997, 2001).

There have been some developmental studies on the modesty effect. This effect has been consistently found to begin as early as 7–9 years of age (Lee *et al.*, 1997, 2001). For example, Lee *et al.* (1997) read children between 7 and 11 years in Mainland China and Canada vignettes, where a story character performs a pro-social act and either tells a modest lie or an immodest truth. Chinese children rated the protagonists' modest lies less negatively and immodest truths less positively than Canadian children. Furthermore, these differences increased with age: at age 7, Chinese children rated modest lies somewhat negatively and truth telling quite positively. As age increased, Chinese children rated modest lies increasingly more positively and immodest truths less positively, whereas the Canadian children's evaluations remained constantly highly negative for lying and highly positive for truth telling about one's own good deeds. Further studies (Barron & Sackett, 2008; Fu, Xu, Cameron, Heyman, & Lee, 2007; Heyman *et al.*, 2009; Lee *et al.*, 2001) replicated this modesty effect with children in Taiwan, Japan, and US, and also documented similar developmental differences.

Why do Eastern Asian and Western children evaluate modesty-related lies and truths differently? Lee and colleagues (1997, 2001, 2007) speculated that these cross-cultural differences might stem from the differential emphasis on individualism and collectivism in the Eastern Asian and Western cultures. Although the exact nature of the individualism and collectivism constructs are still controversial (Brewer & Chen, 2007; Helwig, Arnold, Tan, & Boyd, 2003; Killen, Crystal, & Watanabe, 2002; Killen & Wainryb, 2000; Markus & Kitayama, 1991; Nucci & Turiel, 2000; Schwartz, 1990, 1992; Triandis, 1995), empirical evidence suggests that these constructs capture critical structural differences between eastern and western cultures (see Oyserman, Coon, and Kimmelmeier (2002) for a meta-analysis). According to Hofstede (1980), individualism is a worldview that focuses on individual rights above communal duties, emphasizes personal autonomy rather than inter-dependence, and bases personal identity on personal accomplishments instead of group harmony and goals. In contrast, collectivism represents a worldview that promotes closely linked community-oriented

activities, gives priority to the goals and interests of a collective over those of the self and immediate family, and bases personal identity on group harmony instead of personal accomplishments. Modern cultures have been characterized as incorporating and emphasizing different proportions of individualism and collectivism (Hofstede, 1980; Kagitcibasi, 1997; Triandis, 1995). East Asian cultures contain more characteristics of collectivism than of individualism, and are described by many as collectivist societies (Oyserman *et al.*, 2002). Western cultures (especially North American countries) tend to be more individualistic (Oyserman *et al.*, 2002). It is important to note that individualism and collectivism are not mutually exclusive and these constructs co-exist within a culture; however, the saliency and priority given to each construct has been found to differ across cultures (Brewer & Chen, 2007; Oyserman *et al.*, 2002).

The composition of individualistic and collectivist tendencies in a culture are thought to have direct psychological impact on the members of the culture (Oyserman *et al.*, 2002). One such psychological impact lies in interpersonal communication. Although both individualism and collectivism generally encourage honesty and discourage lying, the goals and conventions for interpersonal information exchange are dramatically different between the orientations. In predominantly individualistic societies, personal rights to information, autonomy, and self-esteem are primary concerns that tend to guide interpersonal communication (Killen & Wainryb, 2000; Krupfer, 1982; Neff & Helwig, 2002). As a result, the goal of personal growth in North American countries tends to be centered on developing a positive self image and therefore, valuing self-enhancement above humility (Wang & Leichtman, 2000). Individuals are thus encouraged to acknowledge, not minimize, their own personal achievements and good deeds. Conversely, in predominantly collectivist societies, the focus of information exchange is on whether a verbal statement serves to facilitate social cohesiveness and fulfill the goals of a collective (Bond, 1986). In the case of information about one's personal achievements and good deeds, disclosing it may have detrimental effects on group cohesion and the common goals of the group, whereas showing humility may enhance group harmony and facilitates group work (Bond, Leung, & Wan, 1982). Based on such cultural analyses, Lee *et al.* (2001) suggested that differential emphasis on individualism and collectivism in different societies may affect the way in which individuals disclose information about themselves during interpersonal communication. Thus, developmental changes related to the modesty effect may reflect the difference in the socialization of individualism and collectivism in Eastern Asian and North American societies.

Although this cross-cultural analysis is consistent with the existing findings concerning the modesty effect, it is speculative. In fact, no direct empirical evidence exists that supports a direct linkage between a culture's relative emphasis on collectivism or individualism, and their members' moral judgments of truthful and untruthful communication in general and the modesty-related lies and truths in particular. Research to establish such linkage is significant for a number of reasons. First, the establishment of such linkage would provide a truly cultural explanation of the modesty effect. To date, the modesty effect is simply a cross-national, not cross-cultural, effect. Indeed, Eastern Asians and Euro-Americans have consistently evaluated the modesty-related lies and truths differently, but there is currently no empirical research linking cultural practices to modest-lie evaluations. Second, the existence of such linkage in the developmental domain would provide evidence to delineate the role of the culture-specific process of socialization in the acquisition of moral values. Third and more generally, there has been extensive evidence suggesting that a society's individualistic and collectivistic tendencies have direct psychological consequences on individuals in the society (Oyserman *et al.*, 2002). The establishment of this linkage would extend this suggestion to the domain of interpersonal communication, which to date has not been extensively explored.

The current study aimed to examine the relationship between individualism/collectivism and children's moral judgments of modesty-related lie and truth telling. Here, Chinese children aged 7, 9, and 11 were asked to read vignettes where the protagonist either lies or tells the truth after their own pro-social or antisocial deed. Children are asked to identify if the statement is a lie or the truth and then rate the positivity or negativity of the response. These age groups were selected to facilitate comparisons with prior developmental research on this topic (Lee *et al.*, 1997, 2001). Additionally, prior research suggests that significant changes take place in the way that children evaluate the morality in terms of modesty-related lies and truths across this age span (Lee *et al.*, 2001). As has been found in the previous studies, it is expected that 9 and 11 year olds, but not 7 year olds, would positively endorse modest lies with regards to committing a pro-social deed and rate immodest truths negatively.

In addition to re-examining the modesty effect in Chinese children, the role of individualistic and collectivistic tendencies was assessed in two ways. First, vignette situations included modest lies and immodest truths told in both public and private settings (e.g. a story character who committed a pro-social deed denied or admitted it in front of a group of people or just one person). This experimental manipulation captures an important function of information exchange in East Asian societies mentioned above which is driven by collectivistic emphasis in these societies. In other words, individuals are expected to consider the impact their verbal statements will have on other group members (Bond, 1986; Chen, Brockner, & Katz, 1998; Gudykunst & Matsumoto, 1996). One important factor for such consideration is to distinguish between private speech and public pronouncement (Bond *et al.*, 1982). Research has shown that this distinction is considered in nearly all types of social contexts in the East Asian societies (Su, 1993), where one may behave or speak differently publicly versus privately, if the action may impact negatively on group harmony or on the common goals of the group. This differs from the motivations from Western societies which seem to base behaviors on protecting the self from negative social evaluations or avoiding hurting another's feelings (Eskritt & Lee, 2009; Watling & Banerjee, 2007). East Asian individuals are expected to act modestly in front of others to facilitate group harmony and cohesion as opposed to acting immodestly, which may make others feel less accomplished and would therefore violate social norms. For this reason, the socialization of collectivism in the East Asian children involves the emphasis on the public and private distinction and the expectation that they must act modestly in front of others and are discouraged from behaving immodestly in public (Price, 1992; Qi & Tang, 2004; Wu, 1996). Given this emphasis, we hypothesized that Chinese children would evaluate modest lies told in public more positively than those told in private, whereas they would evaluate immodest truths more negatively in public than in private.

The second approach to test the relationship between individualism/collectivism and children's moral judgments of modesty-related lies and truths was to assess the tendencies of the parents with the use of an Individualism–Collectivism scale. If cultural individualism and collectivism have any impact on children's moral judgments of modesty-related lies and truths, this impact should be manifested in terms of parental individualistic and collectivistic tendencies, as parents are the primary socialization agents during development. More specifically, we expected that Chinese parents expressing high collectivistic and low individualistic tendencies would have children who would highly value modest lies and give immodest truths negative ratings. Chinese parents expressing high individualistic and low collectivism tendencies would have children who would place a lower value on modest statements and higher value on immodest responses. This should be particularly true for children's evaluations of modest lies and immodest truths in the public situation. Furthermore, Chinese children's ratings of modest lies is not only expected to be related to parental values, but also parental socialization; it is expected that children who are from more traditional rural locations and who have parental figures who are nonprofessionals will place a higher value on modest lies.

METHOD

Participants

One hundred and forty-six Chinese children participated in this study with 53 7 year olds ($M = 7.21$, $S.D. = 0.41$; 24 females), 46 9-year olds ($M = 9.36$, $S.D. = 0.37$; 24 females), and 47 11 year olds ($M = 11.21$, $S.D. = 0.38$; 21 females). All participants were Han Chinese from an eastern coastal province with 47.2% recruited from an urban city and 52.8% from a rural area just outside the city. Furthermore, 39.6% of the children were from families whose parents were professionals or merchants, whereas 60.4% were nonprofessionals. In terms of parental education attainment, 26% were at the elementary school level, 51% at the middle school level, 14% at the high school level, 7% at the college level, and 2 parents at the postgraduate level. According to the census data, these characteristics reflect the demographic nature of the area from which the sample was drawn.

Procedure

An experimenter met with children individually in their schools. Children were initially told that they would be read several stories and then asked about what the story character said. Participants were then trained to use a 7-point Likert scale. This type of scale is frequently and successfully used with children as young as 4 (Bussey, 1999; Lee *et al.*, 1997, 2001; Peterson, Peterson, & Seeto, 1983), suggesting that it is an appropriate scale for the present study. The points on the scale ranged from *very, very bad* (three black crosses) to *very, very good* (three stars). Once an understanding of the scale was achieved, the experimenter read a total of eight stories to the participants. The stories were displayed on a computer screen controlled by an experimenter and accompanied by colorful illustrations. Each story described an event where the protagonist performed a pro-social or antisocial deed. The protagonist was asked about the deed by their teacher either privately (i.e. with only the teacher present) or publicly (i.e. in front of the class). Subsequently, the protagonist either lied or told the truth about performing the deed. The English versions of the modesty-related stories are shown in the Appendix.

The following is an example of a vignette where the protagonist performs a pro-social deed and when asked about it in a private setting, tells a lie:

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, he said to his class, 'Oh, I see that someone has cleaned the classroom'. When nobody was around, the teacher asked Alex, 'Did you clean the classroom?' Even though Alex had cleaned the classroom, he said to his teacher, 'No, I didn't do it'.

Following each story, children were first asked a *classification* question, where the participant classified the protagonist's response as 'a lie', 'the truth', or 'something else'. This measure was included to determine how pro-social and antisocial truths and lies would be classified and to ensure understanding of the veracity manipulations. Participants were then required to make an *evaluative judgment* concerning the protagonist's response. Participants were asked to use the Likert scale to demonstrate how 'good' or 'bad' what the protagonist said was. The stories were presented in a randomized order. Furthermore, the computer program randomized the story contents (i.e. the event depicted in the stories) with the truth-lie factor (i.e. whether the story character tells the truth or a lie) and public-private factor (i.e. whether the statement is made in public or private) between participants to prevent the story contents from having undue influence on the results.

Parents filled out the Auckland Individualism and Collectivism Questionnaire to determine parental tendencies (Shulruf, Hattie, & Dixon, 2007) and their responses were compared with

children's ratings of truth and lie telling after committing pro-social deeds. This 30-item questionnaire was developed based on the major constructs identified by Oyserman *et al.* (2002) and provided a measurement of three factors related to individualism (competitiveness, uniqueness, and responsibility) and three factors related to collectivism (advice, harmony, and closeness). The reliability between these factors and their relationship to individualism and collectivism tendencies has been found to be high (see Shulruf *et al.* (2007) for a review). Thus, based on responses to the questions, a raw collectivism score and a raw individualism score can be obtained. The minimal score for the raw collectivism score is 17 and the maximal score is 102, with higher scores indicating greater collectivistic tendency. The minimal score for the raw individualism score is 13 and the maximal score is 78, with higher scores indicating greater individualistic tendencies. To ensure comparability between the two scores for the purposes of this study, the raw scores are scaled with linear transformations to obtain a collectivism score $((\text{raw collectivism score} - 17)/102)$ and an individualism score $((\text{raw individualism score} - 13)/78)$. Again, higher scores indicate greater collectivistic or individualistic tendencies of the individual.

RESULTS

Consistent with the previous literature, preliminary analysis revealed that there were no significant effects of gender. As such, data were combined for this factor in subsequent analyses.

Children's Classifications of Truthful and Untruthful Statements

Table 1 shows the percentage (frequency) of children who categorized the statements as the truth, a lie, and something else. Chi-square analyses on children's responses to the classification question revealed that children classified truthful statements as the truth and untruthful statements as lies 90% of the time with no significant differences between the two story types (i.e. whether the protagonist makes a statement to conceal or reveal a transgression or a good deed) and the two settings (i.e. public or private). This is consistent with literature that in the elementary school years, children consistently categorize truthful statements as 'truths' and untruthful statements as 'lies' regardless of whether the statements are told to reveal or conceal one's transgression or pro-social deeds (Lee *et al.*, 2001).

Children's Moral Evaluations

Children's moral evaluations were converted from the Likert scale to the following rating system: very, very good = 3, very good = 2, good = 1, neither good nor bad = 0, bad = -1, very bad = -2, and very, very bad = -3. Therefore, children received a score ranging between -3 and 3 for each story type. As existing evidence suggests that children tend to give negative ratings to lying and positive ratings to truth telling, no omnibus ANOVA was conducted to compare children's ratings of lying versus telling the truth. Instead, a 3 (Age Groups: 7, 9, 11 years) \times 2 (Setting: Public versus Private) repeated measures ANOVA with the Setting factor as the repeated measures was conducted for each of the four story categories (Truth telling about Pro-social Deeds, Lie telling about Pro-social Deeds, Truth telling about Antisocial Deeds, and Lie telling about Antisocial Deeds) with children's moral evaluations of the story character's statement as the dependent variable.

Truth telling about pro-social deeds (immodest truth telling)—The ANOVA yielded a marginally significant effect of Setting, $F(1, 143) = 3.85, p = 0.052, \eta^2 = 0.03$. In general, children rated telling the truth about one's pro-social behavior less positively in public than in private (Table 2). Furthermore, there was also a significant main effect of Age Groups, $F(2, 143) = 11.79, p < 0.05, \eta^2 = 0.14$. Pairwise comparisons revealed that with increased age, children's ratings of truth telling in modest situations became less positive, as 11 year olds

($M = 1.25$, $S.D. = 1.42$) rated immodest responses significantly less positively than 9 year olds ($M = 2.13$, $S.D. = 1.26$), $p < 0.001$, and 7 year olds ($M = 2.43$, $S.D. = 1.07$), $p < 0.001$. These results extended those of the previous studies (Heyman *et al.*, 2009; Lee *et al.*, 1997, 2001) and suggest that children's evaluations of immodest responses vary not only as a function of age, but also the setting in which immodest truth telling takes place (Figure 1).

Lie telling about pro-social deeds (modest lie telling)—The ANOVA revealed significant effects of Age Group, $F(2, 143) = 30.28$, $p < 0.05$, $\eta^2 = 0.30$. The significant age effect was primarily due to children rating lie telling in modesty situations less negatively as age increases. Children's ratings changed from marginally negative at 7 years of age ($M = -0.51$, $S.D. = 1.41$) to increasingly positive at ages 9 ($M = 0.63$, $S.D. = 1.29$), $p < 0.001$, and 11 ($M = 1.61$, $S.D. = 1.37$), $p < 0.001$ (Figure 1).

Truth telling about antisocial deeds—The ANOVA revealed significant effects of Setting, $F(1, 143) = 7.04$, $p < 0.05$, $\eta^2 = 0.05$. Children rated 'confessing' to an antisocial deed to be more positive when performed in private situations compared with public situations (Table 2). No significant age effects were found.

Lie telling about antisocial deeds—The ANOVA did not yield any significant effects related to age or setting. Children of all age groups consistently rated lying about committing an antisocial deed to be negative. These results were consistent with the existing studies (Lee *et al.*, 1997, 2001) and showed that children in the present study used the rating scale comparably.

Chinese Parents' Demographic Characteristics and Their Children's Moral Evaluations

Repeated measures analyses of variance were performed on children's moral evaluations of pro-social truth and lie telling in public and private with one of the parental demographic characteristics (rural versus city, and professional versus nonprofessional) and age groups as the between-subject factors and setting as the within-subject factor. We only examined the effects that were related to the demographic factors to avoid a potential increase in Type I error rate, because the other effects (e.g. the main age and setting effects) were already examined in the ANOVAs reported earlier. In addition, an omnibus ANOVA for the three demographic factors could not be run because of empty cells (e.g. no parents from the rural areas were professionals). Some children's parents failed to provide either the residential locale or professional status information and thus their data were excluded from the subsequent analyses.

Residential locale—A 3 (Age Groups) \times 2 (Residential Locale: Rural versus City) \times 2 (Setting: Public versus Private) repeated measures ANOVA was performed on Chinese children's moral evaluations of immodest truth-telling stories. The Residential Locale by Setting effect was significant, $F(1, 100) = 5.12$, $p < 0.05$, $\eta^2 = 0.05$. Simple effect analyses revealed that this significant interaction was mainly due to the fact that children from rural households tended to give significantly less positive ratings to immodest truth telling in public ($M = 1.42$, $S.D. = 2.17$) than in private ($M = 2.14$, $S.D. = 2.17$), $p < 0.03$, whereas the ratings of the children from the city households did not differ in their ratings in the public ($M = 2.20$, $S.D. = 1.53$) and private settings ($M = 2.17$, $S.D. = 1.33$), $p < 0.88$ (Figure 2).

The same ANOVA was performed on children's moral evaluations of modest lie telling in private and public. No Residential Locale-related effects were significant.

Professional status—A 3 (Age Groups) \times 2 (Professional Status: Professional versus Non-professional) \times 2 (Setting: Public versus Private) repeated measures ANOVA was performed on Chinese children's moral evaluations of immodest truth-telling stories. The Professional

Status by Setting effect was also significant, $F(1, 100) = 4.44, p < 0.05, \eta^2 = 0.04$. Simple effect analyses revealed that this significant interaction was mainly due to the fact that the Chinese children with at least one parent being a nonprofessional tended to give significantly less positive ratings to immodest truth telling in public ($M = 1.52, S.D. = 2.31$) than in private ($M = 2.19, S.D. = 1.99$), $p < 0.03$, whereas the ratings of the children with at least one parent as a professional did not differ in their ratings in the public ($M = 2.13, S.D. = 1.54$) and private settings ($M = 2.09, S.D. = 1.33$), $p < 0.87$ (Figure 3).

The same ANOVA was performed on children's moral evaluations of modest lie telling in private and public. No Professional Status-related effects were significant.

Parental education level—A 3 (Age Groups) \times 2 (Setting: Public versus Private) \times 1 (years of education: continuous variable) repeated measures ANOVA was performed on children's moral evaluations of pro-social truth- and lie-telling stories. No parental educational level-related effects were significant.

Parental Individualism and Collectivism Scores and Children's Moral Evaluations

In total, 134 (91.78%) of parents whose children participated in the modesty evaluations filled out the individualism and collectivism questionnaire. Of parents who completed the survey, 55.97% were fathers ($N = 75$), 38.80% were mothers ($N = 52$), 4.48% ($N = 6$) were other guardians, and one person's status was unknown. Independent sample *t*-tests were conducted. The fathers' collectivism scores ($M = 74.71, S.D. = 7.01$) and individualism scores ($M = 27.98, S.D. = 12.79$) did not differ significantly from those of the mothers' (collectivism score: $M = 72.66, S.D. = 7.26$; individualism score: $M = 28.37, S.D. = 14.19$). The rural residents' scores (collectivism score: $M = 73.74, S.D. = 6.47$; individualism score: $M = 28.94, S.D. = 15.98$) also did not differ significantly from those of the city residents (collectivism score: $M = 74.59, S.D. = 8.43$; individualism score: $M = 29.74, S.D. = 13.30$). Furthermore, the professional parents' scores (collectivism score: $M = 75.21, S.D. = 8.21$; individualism score: $M = 30.40, S.D. = 13.69$) did not differ significantly from those of the nonprofessional parents (collectivism score: $M = 73.42, S.D. = 6.86$; individualism score: $M = 28.61, S.D. = 15.40$). Overall, the Chinese parents had high collectivistic and low individualistic tendencies as would be expected based on the existing literature (Oyserman *et al.*, 2002; Shulruf *et al.*, 2007).

Four hierarchical regression analyses were run with children's moral evaluations of the story characters in each of the four pro-social stories as the predictor. The child age group factor was entered first, followed by the parents' individualism scores and collectivism scores, and then followed by the three parental demographic variables (residential locale, professionalism, and education level), as the predicted variables. For the story about modest lie telling in the public, the first model with the child age group as the predictor was significant, $\Delta F(2, 132) = 20.35, p < 0.001, R^2 = 0.17$. For the second model with the individualism and collectivism scores, the parents' collectivism and individualism scores together significantly predicted children's moral evaluation scores above and beyond the effect of age, $\Delta F(2, 99) = 4.67, p < 0.01, R^2 = 0.07$. Further inspection of the model revealed that the parents' collectivism scores had a unique significant correlation with their children's moral evaluation scores above and beyond the common contributions of the individualism and collectivism scores (Table 3). As predicted, the more collectivistic the parents rated themselves, the more positively their children rated telling a modest lie in the public situation. Parental demographic variables did not significantly predict children's evaluations above and beyond the contributions of child age group, parental collectivism, and individualism scores. This finding suggests that parental collectivism and individualism tendencies perhaps play a more unique and direct role than parental demographic variables in children's moral valuations about modesty.

Additional regression analyses with children's moral judgments for the other three stories showed that children's moral judgment scores were not significantly related to their parents' individualism and collectivism scores nor to parental demographic variables.

DISCUSSION

The present study investigated how children from China rate modesty-related lies and truths and considered how these evaluations were related to contextual factors, such as setting, and socialization factors, such as parental individualism and collectivism tendencies, their residential locale, and professional status. Results revealed Chinese children rated modest lies and immodest truths differently. With increased age, children were increasingly more inclined to evaluate modest lies more positively and immodest truths more negatively, which is consistent with past research (Fu *et al.*, 2007; Lee *et al.*, 2001). Such results replicated past findings with Mainland Chinese and Taiwanese children (Lee *et al.*, 1997, 2001).

More importantly, the present study revealed for the first time that children's ratings of modesty-related truths and lies differ depending on the context in which the truths and lies are told. Whether the immodest truth took place in public or private influenced evaluations; children rated immodest truths told in public less positively. As mentioned earlier, modesty in the Chinese society serves mainly a public function whereby individuals are expected to act modestly in front of others so as to facilitate group work, harmony, and cohesion. Acting immodestly in public is considered a violation of social norms and thus, children are socialized to behave modestly in front of others. Clearly, Chinese children are sensitive to the social and cultural requirement of modesty and evaluated immodest truths differentially depending on the context, with this trend increasing with age. However, future studies should consider different types of audiences to further clarify this public/private distinction; previous studies (Banerjee, 2002; Watling & Banerjee, 2007) found an impact of audience between adults and children. As the present study only considers children's rating when the audience is a single adult or when one adult and multiple children, additionally combinations (e.g. a single child, multiple adults) could further enhance our understanding of the public and private distinction and the impact of modesty evaluations for Chinese children (Helwig *et al.*, 2003).

Interestingly, setting was also found to be a significant factor when evaluating confessions of committing an antisocial act; children of all age groups rated confessing in private as being more positive than in public. This tendency may also be accounted for by the collectivistic tendencies of the culture. By refraining from confessing in public, the person who committed the act is not given attention and continues to appear as part of the group. Furthermore, as confessing in private was highly valued, the moral evaluation of 'confessing' may not be driven by self-preservation, but instead also by a collectivistic concern.

Significant effects between urban and rural children in China were also found. Specifically, children from the rural area tended to evaluate immodest truths told in public more negatively than children from the city. Variation between rural and urban locations within China is a phenomenon that is being increasingly documented in research. For example, Chinese children from urban areas have been found to place a higher value on self-determination and independence (Lahat, Helwig, Yang, Tan, & Liu, 2008; Helwig, Yang, Tan, Liu, & Shao, in press). Such differences may be due to the emphasis on traditional values reflected in rural areas, while children in urban locations are increasingly exposed to rapid economic development and the associated western influences. This again reinforces that idea of differential emphasis on individualistic and collectivistic tendencies across and within cultures, with different levels of explicit socialization in different regions. It seems likely that the current generation of Chinese children, particularly those in urban centers, may be increasingly exposed to more 'Western' ideals via parents, teachers, peers, and the media. These Western

exposures may affect their views on the relationship between the self and the collective, and subsequently on their valuation of modesty.

In addition to rural and urban differences, children's evaluations were also related to the professional status of their parents. Chinese children with at least one nonprofessional parent were more likely to give immodest truths told in public a less positive evaluation than Chinese children with at least one professional parent. These findings are consistent with children from rural and city locations and it appears as though children with nonprofessional parents maintain more traditional values. Professionals may receive training and be exposed more to situations where competition and promoting one's achievements will be advantageous to their own prosperity. Urban centers in China are interacting with the Western cultures more than ever. It is possible that global competition and interactions are beginning to change the professional work life in Chinese cities. Professionals may begin to value modesty less and self-promotion more in order to gain a competitive edge. Such changes in values may be passed on to children by their professional parents. This speculation, however, needs to be verified in future studies with moral evaluation data directly from the professional and nonprofessional parents.

While differences were noted between children in terms of residential locale and parent professional status, these differences were only noted for ratings of immodest truths in public. Furthermore, children seem to view modest lie telling positively regardless of public or private setting. This may be because modest lie telling is expected, but that immodest truth telling violates cultural norms. It appears as though Chinese children who are exposed to a more traditional Chinese upbringing may be sensitive to the potentially negative social impact of public immodesty, whereas modest behaviors in both private and public are laudable. This finding suggests that Chinese children exposed to traditional upbringing appeared to be sensitive to the social contextual factor of their society's modesty norms. Such findings are also in line with previous research that finds specific modesty norms in the West, but enforces the idea that these tendencies may differ depending on explicit socialization, as is the case in China.

Lee and colleagues (Fu *et al.*, 2007; Lee *et al.*, 1997, 2001) speculated that the root of the modesty effect is due to the socialization of collectivism ideals in the Chinese culture. The present findings provide some support this suggestion. Specifically, higher parental collectivism and lower parental individualism scores were significantly correlated with children's increasingly positive evaluations of modest lies. Furthermore, high collectivism scores have a unique contribution to positive modest lie evaluations above and beyond the combined contributions from individualism and collectivism scores. This study is the first of its kind to establish the link between collectivism and modest lie evaluations. The results suggest that collectivistic tendencies among parents may be a significant contributor to the development of modest ideals in children. Furthermore, this is consistent with the idea that parents are important socializing agents and that the emphasis placed on collectivism promotes the development of moral valuation of modesty.

While our study succeeded in establishing a relationship between modesty evaluations and parental collectivistic tendencies, further research is needed to clarify a number of issues. First, it is unclear why differences in setting were not associated with differences in collectivism and individualism scores. It may be that by including different parental measures of collectivism or that by measuring children's own individualistic and collectivistic tendencies, we might see such differences.

Second, we were able to link Chinese children's ratings of modest lies in public to their parents' collectivism and individualism scores together and collectivism uniquely. However, parental individualism and collectivism scores were not found to be related to children's moral

evaluations of immodest truths, or to modest lies in private. This lack of significant finding is puzzling. It might be understandable that children's evaluations of immodest truth and modest lies in private were not related to parental individualism and collectivism scores, because parents might have promoted modesty in private to a less extent than that in public. However, the lack of significant relationships between children's evaluations of immodest truths in public and their parents' individualism and collectivism scores were unexpected, an issue to be explored in future studies. One possibility is that parents with high collectivism scores and low individualism scores might have placed more emphasis on promoting public modesty than discouraging public immodesty. This possibility can be tested empirically with both naturalistic observations and experimental manipulations (e.g. observing parental reactions when child confederates are coached to show immodesty or modesty in private or public in front of their unknowing parents).

Future studies should also be run with participants from Western countries as well as other Asian countries that have previously demonstrated the modesty effect. The extent and nature of collectivism and individualism in different countries varies and the relationships between modesty and individualism/collectivism may also vary in other cultures (Oyserman *et al.*, 2002). Additional work could also include immigrants from Asia in the western countries to determine the impact of enculturation on children's moral understanding of modesty and related lies and truths. In addition to attempting to extend findings to other populations, future research should also consider the constantly changing environment and experiences of children when attempting to conduct cross-cultural research on this issue. For example, over the last decade, China has experienced unprecedented rapid economic and social changes. While it is known that such changes have impacted on Chinese people's valuation of such personality traits as shyness (Chen, Cen, Li, & He, 2005), the impact of these changes on Chinese children's moral evaluation of modesty and related truths and lies awaits further investigation.

In summary, the present study examined Chinese children's evaluations of modesty-related lie and truth telling following pro- and antisocial acts. Children rated modest lies to conceal one's own pro-social acts more positively with age, whereas immodest truth telling about committing the act was rated as less positive with age. Children of parents who had higher collectivism scores assigned significantly more positive ratings to modest lies than children of parents who had lower collectivism scores. Furthermore, parental background was significantly related to their children's evaluations: rural Chinese children and those with at least one nonprofessional parent rated immodest truths told in public less positively than those told in private. Current findings suggest that both macro-cultural factors (societal) and micro-cultural factors (home) contribute significantly to children's moral understanding of truth and lie telling.

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APPENDIX: SAMPLE SET OF MODESTY-RELATED STORIES

The following is the text from a sample set of four stories that were presented to participants. The following examples are scenarios where the protagonist has performed a good deed (pro-social condition only).

Lying About a Pro-Social Act (Modest Lies)

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 gave some money to Timmy. When Timmy found the money and told his teacher, 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, 'Mark, did you give the money to Timmy?' Even though Mark had given the money to Timmy, Mark said to his teacher, 'No, I didn't do it.'

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, he said to his class, 'Oh, I see that someone has cleaned the classroom.' When nobody was around, the teacher asked Alex, "Did you clean the classroom?" Even though Alex had cleaned the classroom, he said to his teacher, 'No, I didn't do it.'

Telling the Truth About a Pro-Social Act (Immodest Truths)

Public

Kelly knew that her friend, Anne, had lost her money for the class trip. Now Anne 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 gave money to Anne. When Anne found the money and told her teacher, 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, 'Kelly, did you give the money to Anne?' Kelly had given the money to Anne, so Kelly said to her teacher, 'Yes, I did.'

Private

When Jenny was out at recess, she saw that the school yard 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 noticed that the schoolyard is now nice and clean.' When nobody was around, the teacher asked Jenny, 'Did you clean the schoolyard?' Jenny had cleaned the schoolyard, so Jenny said to her teacher, 'Yes, I did.'

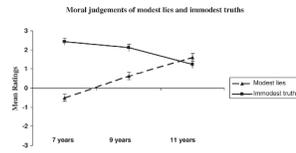


Figure 1. Mean ratings (standard errors) of children’s evaluations of modest lies and immodest truths by age.

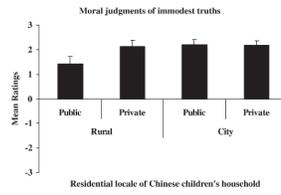


Figure 2. Children's rating of immodest truths by residential locale.

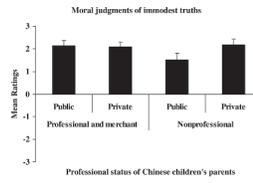


Figure 3. Children's ratings of immodest truths by parent professional status.

Table 1

The frequency of children's classifications of protagonist's statements as truths or lies

	Truth	Lie
Truth telling in public about pro-social acts	97.4	2.6
Truth telling in private about pro-social acts	99.3	0.7
Lie telling in public about pro-social acts	6.1	93.9
Lie telling in private about pro-social acts	6.6	93.4
Truth telling in public about antisocial acts	97.4	2.6
Truth telling in private about antisocial acts	98.5	1.5
Lie telling in public about antisocial acts	1.8	98.2
Lie telling in private about antisocial acts	1.8	98.2

Table 2

Children's average morality ratings of truth and lie telling following a pro-social or antisocial act

	<i>M</i>	<i>S.D.</i>
Evaluations of immodest truth telling in public after committing an pro-social act	2.00	1.39
Evaluations of immodest truth telling in private after committing an pro-social act	2.39	0.97
Evaluations of modest lie telling in public after committing an pro-social act	0.63	1.80
Evaluations of modest lie telling in private after committing an pro-social act	0.61	1.85
Evaluations of truth telling in public after committing an antisocial act	1.27	1.55
Evaluations of truth telling in private after committing an antisocial act	1.30	1.54
Evaluations of lie telling in public after committing an antisocial act	-2.41	1.11
Evaluations of lie telling in private after committing an antisocial act	-2.41	1.12

Table 3

Values for predictors of modest lie telling in public

Predictors	Beta	p-value	Part correlation
Age Groups	0.44	<0.001	0.45
Parent Individualism Scores	0.12	0.19	0.13
Parent Collectivism Scores	0.21	0.03	0.22