# Cultural Orientation and Corruption

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Previous studies have shown that individuals in collectivist cultures may be more corrupt than those in individualist cultures when they are interacting with outgroup members. The countries that are least corrupt, according to the Transparency International Corruption Perceptions Index, tend to have horizontal individualist cultures, with Singapore being a prominent counterexample. Can findings at the cultural level of analysis be replicated at the individual level of analysis? To answer this question the authors examined the relationship between deception and cultural orientation in a Singaporean sample. The results indicate that, despite the fact that Singapore is very low in corruption on the Transparency International Corruption Perceptions Index, vertical collectivism was still able to account for the variance in deception. Theoretical and practical implications are discussed.

Keywords: Transparency International Corruption Perception Index, deception, cultural orientation

Culture is a shared pattern of categorizations, attitudes, beliefs, definitions, norms, values, and other elements of subjective culture (Triandis et al., 2001). Of the cultural dimensions first identified by Hofstede (1980), perhaps none have subsequently received as much attention as the concepts of individualism and collectivism. Collectivism can be defined as a social pattern consisting of closely linked

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individuals who see themselves as parts of one or more collectives, and individualism can be defined as a social pattern that consists of loosely linked individuals who view themselves as independent of collectives. In collectivist cultures people are interdependent with their in-groups (family, tribe, nation, etc.), give priority to the goals of their in-groups, shape their behavior primarily on the basis of in-group norms, and behave in a communal way (Mills & Clark, 1982). A defining character of people in collectivist cultures is their notable concern with relationships. Collectivists prefer methods of conflict resolution that do not destroy relationships (e.g., mediation), whereas individualists are willing to go to court to settle disputes (Leung, 1997).

Triandis (1995) distinguished four cultural patterns: horizontal individualism (HI), which deemphasizes hierarchical differentiation and reflects being unique, self-reliance, and independence from others; vertical individualism (VI), which emphasizes being independent as well as competitive, wanting to be the best to climb the hierarchy; horizontal collectivism (HC), which emphasizes being closely related to a group, empathy, sociability, and cooperation; and vertical collectivism (VC), which emphasizes sacrifice for the sake of the group, in-group cohesion, respect for in-group norms, and the directives of authorities.

Within a country there are *idiocentrics* (people whose values and behavior are similar to the values and behavior of people in individualist cultures) and *allocentrics* (people whose values and behavior are similar to the values and behavior of people in collectivist cultures (Triandis, Leung, Villareal, & Clack, 1985). Triandis (1995) has argued that there are idiocentrics and allocentrics in all cultures. However, there are more idiocentrics in individualist and more allocentrics in collectivist cultures. Furthermore, behavior depends not only on the cultural orientation but also on the situation. For instance, cooperation is maximal when allocentrics are in cooperative situations; idiocentrics do not cooperate much even in cooperative situations; allocentrics do not cooperate in noncooperative situations (Chatman & Barsade, 1995).

In recent years, researchers have come to discover systematic cross-national differences in many fundamental psychological effects, such as the construal of the self (Markus & Kitayama, 1991), the fundamental attribution error (Morris & Peng, 1994), intrinsic motivation (Iyengar & Lepper, 1999), confidence judgment (e.g., Li, Chen, & Yu, in press; Yates, Lee, & Bush, 1997; Yates, Lee, & Shinotsuka, 1996; Yates, Lee, Shinotsuka, Patalano, & Sieck, 1998), risk preference (Hsee & Weber, 1999; Rohrmann & Chen, 1999; Weber & Hsee, 1998; Weber, Hsee, & Sokolowska, 1998), and decision making in mixed-motive situations (Chen & Li, 2005). However, relatively little is known about cultural differences in the tendency to deceive.

Deception is a common behavior and occurs not only among humans but also among birds, elephants, primates, and even fireflies (Ford, 1996; Lewis & Saarni, 1993). The biology of deception has been an important evolution leading to man as a cognitive creative being. The biology of deception suggests that denial-like processes are at the core of the cognitive coping (Stefano & Fricchione, 1995). Ford,

King, and Hollender (1988) have documented some of the individual differences and situational conditions that predict lying. DePaulo and Bell (1996) have shown that people are likely to lie to help save face in important, close relationships. Aune and Waters (1994) found the more collectivistic Samoan participants indicated they would be more likely to attempt to deceive another when the deception was related to group or family concerns. In addition, Samoans were much more likely to attempt deception for authority-based concerns.

Triandis et al. (2001) investigated the relationship between culture, personality, and deception in a simulated international management negotiation at multiple levels of analysis. Results revealed that collectivist cultures are more corrupt than individualist cultures. The countries that are most corrupt, according to the Transparency International Corruption Perceptions Index,[1] tend to have vertical collectivist cultures. The countries that are least corrupt tend to have horizontal individualist cultures. In fact, the correlation between the Transparency International Corruption Perceptions Index (where large numbers indicate low corruption) and collectivism was $-.63$, $p < .0001$. The importance of the vertical–horizontal dimension is also reflected in the correlation of the Transparency International Corruption Perceptions Index with Hofstede's Power Distance, which was $-.70$, $p < .0001$. This indicates that horizontal cultures are less corrupt.

In the Triandis et al. (2001) study, when the data were arrayed according to the Country Individualism Index values (Hofstede, 1980), the countries with the more collectivist scores showed the most corruption. However, within a country, vertical individualism was also related to high corruption. This was interpreted as indicating that highly competitive individuals must win at all costs, even if that requires behaving in corrupt ways.

The Country Individualism Index employed in Triandis et al. (2001) study is a large-scale survey of beliefs and values in more than 40 countries, where higher scores, on a 100-point scale, indicate higher levels of individualistic orientation. The scores were 91 for the U.S., whereas the Chinese cultures scored high on collectivism (Hong Kong [25], Singapore [20], and Taiwan [17], in that order; China was not included in Hofstede's sample). Hofstede's data were collected in the 1960s. A more recent study examined the cultural orientation of Chinese Singaporeans (Li, Triandis, & Zhang, 2006) and found that they tend to have a collectivist culture.

This is true despite the fact that Singaporeans are now the most affluent among the four groups of Chinese (i.e., Chinese Singaporean, Hong Kong Chinese, Taiwan Chinese, and Chinese from China).[2] The cultural orientation of Singapore is consistent with that of the other Chinese societies.

An examination of the Transparency International Corruption Perceptions Index over time indicates that Singapore has maintained, for the past several years, a position among the least corrupt countries, whereas 9 out of the 10 of the least corrupt countries in the chart have individualist cultures. Thus Singapore constitutes the only exception.[3] If a collectivist culture is among the least corrupt, is there still at the individual level of analysis a relationship between collectivism and corruption?

Inspired by such questions, our original intent in this study was to reexamine the Triandis et al. study (2001) by just using a Singaporean sample. If the relationship between corruption and collectivism can be obtained at the individual level of analysis in Singapore, then the psychological relationship is valid, although the position of the culture can be an exception, perhaps because of something special that has occurred in Singapore (e.g., the regime of Lee Kuan Yew).

This study attempts to test whether there is a correlation between deception and collectivism at the individual level of analysis, within a Singaporean sample. Thus we tested two hypotheses:

H1:  The higher the vertical collectivism, the higher the probability of deception.
H2:  The higher the vertical individualism, the higher the probability of deception.


## STUDY

### Method

*Participants.*   As in previous cultural orientation studies, student participants were used. One hundred sixty-nine male and female Chinese Singaporean students from various disciplines at Nanyang Technological University and the National University of Singapore participated as volunteers.

*Materials and procedure.*   The materials were presented in English, which is the language of instruction in the universities where the participants were students. To measure the deception level, a scenario from Triandis et al. (2001) was

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[2]According to 1999 data, Singapore had the highest GDP per head (USD 28,500), followed by Hong Kong (USD 21,600), Taiwan (USD 13,100), and China (USD 786).

[3]According to Transparency International Corruption Perceptions Index 2002, Singapore ranks fifth among the world's least corrupt (Available from www.who.int/emc-hiv/fact_sheets/pdfs/india_en.pdf also see the *Today,* August 29, 2002; p. 20).

used. The scenario pertains to an organizational setting and calls for four re-sponses. It reads as follows:

> Imagine you are the "chief negotiator" of a team of 10 negotiators from Com-pany X. The negotiation is with Company Y, and the contract under negotia-tion is concerned with supplying materials to Y. You are told that a rival, Com-pany Z, is competing with your company, X for the contract. The production capacity of Z is 10% higher than X. Because Y is eager to get the materials on time, they would be attracted to Z's larger capacity. However, no one outside of your company knows exactly what X's capacity is, and it is common in the industry for delays to occur. Thus, X's 10% lower capacity may not be de-tected for a long time, if ever. Furthermore, you are sure that if you have se-cured the contract, your company can find many excuses to explain the delays. You know that if you were to exaggerate your company's production capacity, you would have an excellent chance of winning the contract.
>
> Your company has allowed 15% of the value of the contract for expenses toward getting the contract. The availability of such an expense account is common practice in most contract-based dealings. You have been told that you may use this money at your discretion or to give it to the Y chief negotia-tor as a gift so as to increase your chances of getting the contract.

> Q1:  How likely would it be for MOST CHIEF NEGOTIATORS in a similar
>       situation to use this money as a gift for the Y chief negotiator?
>       *(Please indicate your decision by circling a number on the 9-point
>       scale given below)*
>           Not at all likely   1   2   3   4   5   6   7   8   9   Very likely
> Q2:  How likely is it that YOU would use the money as a gift to the Y chief
>       negotiator?
>           Not at all likely   1   2   3   4   5   6   7   8   9   Very likely
> Q3:  What would MOST NEGOTIATORS do in a similar situation? Claim
>       that your company's   production is_____ (*ranging from –10% to
>       +10%*), as compared to Z's  production capacity?
> Q4:  As X's  chief negotiator, you are going to claim that your company capacity
>       is_____ (*ranging from –10% to +10%*) of Z's  production capacity.

For exploratory purposes, a parallel scenario that pertains to family settings was used in this study. The scenario also calls for four responses. It reads as follows:

> Imagine that you have a brother (A) who wishes to pursue his studies abroad. A charitable organization, X, has offered an overseas scholarship. Due to the nature of the organization, the selection will be based on the highest number of hours  contributed  to  volunteering  activities  by  either  the  applicant  or

his/her family members. You have been an active member of the Welfare Service Club (WSC) and other organizations for the past few years. Therefore, this is a great chance for your brother to clinch this scholarship.

Now you are told that another volunteer, B, is competing with your brother for this opportunity to pursue further studies. You know that B has clocked 10 hours of volunteer work more than yourself. But no one else knows precisely the number of hours you have clocked. If your brother managed to clinch the scholarship, you could put in more hours to iron out the difference. If you were to exaggerate the number of hours you have contributed to volunteering activities, your brother would have an excellent chance of securing the scholarship.

Q1: How likely would it be for MOST APPLICANTS in a similar situation to lie about the number of hours contributed to volunteer activities? *(Please indicate your decision by circling a number on the 9-point scale given below)*
    Not at all likely    1    2    3    4    5    6    7    8    9    Very likely

Q2: How likely is it that YOU would lie about the number of hours contributed to volunteer activities?
    Not at all likely    1    2    3    4    5    6    7    8    9    Very likely

Q3: What would MOST APPLICANTS do in a similar situation? Claim that the number of hours they contributed to volunteering activities was_____ (*ranging from 0 to +10 hours*), as compared to B?

Q4: As applicant A's brother/sister, you are going to claim that the number of hours you contributed to volunteering activities was_____ (*ranging from 0 to +10 hours*) as compared to B.

In constructing such parallel scenarios, the variable "would use a discretionary fund as a gift" serves as a measure of a "bribe" in individualist cultures while the variable "to lie about the number of hours contributed to volunteer activities" is perceived as "normal" behavior in collectivist cultures.

Following the measurement of deception, two methods were used to assess the tendencies toward idiocentrism or allocentrism.

The Singelis, Triandis, Bhawuk, and Gelfand (1995) 32-item INDCOL scale was used to measure cultural orientation. This scale measures four types of cultural orientations: HI (e.g., "I often do my own thing"), VI (e.g., "Winning is everything"), HC (e.g., "The well-being of my co-workers is important to me"), and VC (e.g., "I usually sacrifice my self-interest for the benefit of my group"). Each cultural orientation was measured as the average of eight such statements on a 9-point Likert-type scale ranging from 1 (*strongly disagree*) to 9 (*strongly agree*).

Triandis, Chen, and Chan's (1998) 16 scenarios were presented with a 4-answer multiple choice response format. Each response had been pretested to reflect VI,

HI, VC, or HC tendencies. The percentages of the participants who endorsed each response were used as a basis for the computation of the relative preferences for individualist or collectivist answers. Participants are required to imagine themselves in 16 hypothetical situations and to circle the best option, which they consider is most appropriate for them. One of such hypothetical situations reads as follows:

You and your friends decided spontaneously to go out to dinner at a restaurant. What do you think is the best way to handle the bill?

HC  Split it equally, without regard to who ordered what.
VI  Split it according to how much each person makes.
VC  The group leader pays the bill or decides how to split it.
HI  Compute each person's charge according to what that person ordered.

Each student responded to the two deception scenarios (both in the organization and family settings), the 32-item Singelis et al. scales, and the 16 Triandis et al. scenarios. After the completed questionnaires were collected, the students were debriefed.

## RESULTS

### The Two Deception Scenarios

The deception measuring results are depicted in Figure 1 with mean deception ratings being a function of the deception scenario (lie for organization vs. lie for family) and deception index (likelihood that others would deceive vs. likelihood that oneself would deceive vs. extent to which others would deceive vs. extent to which oneself would deceive). Repeated measures analysis of variance (ANOVA) conducted on the rating data indicated that there is a significant effect of deception scenario, with deception being rated higher for family than for organization, $F(1, 168) = 14.28$, $p < .001$, and a significant effect of the deception index, $F(3, 504) = 45.14$, $p < .001$, but there is no interaction, $F(3, 504) = 2.31$, $ns$.

### The 16 Scenarios and the 32-Item INDCOL

Mean scores for the 16 scenarios (average percentages supporting each option) and the 32-item INDCOL (average rating) are depicted in Figure 2. Repeated measures ANOVA conducted on the 16 scenarios data indicated that there is a significant effect of cultural orientation, $F(3, 1701) = 96.90$, $p < .001$. Tests of within-subjects contrasts indicated that the lowest score of VC (13%) is significantly different from the other three scores (HI, HC, and VI), $p < .01$. Table 1 presents the Singapore percentages reflected in the answers to the 16 scenarios, together with the
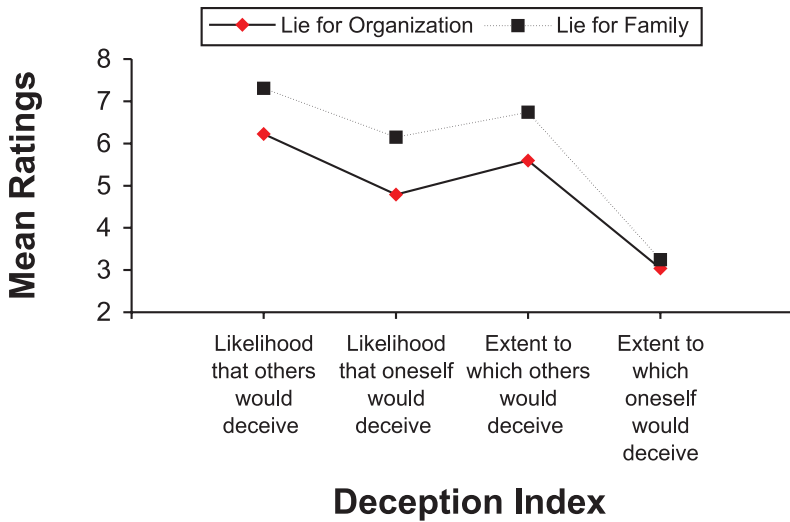
FIGURE 1    Mean deception ratings as a function of deception scenario (lie for organization vs. lie for family) and deception index (likelihood that others would deceive vs. likelihood that oneself would deceive vs. extent to which others would deceive vs. extent to which oneself would deceive). Smaller values denote lower level of deception, whereas larger values denote higher level of deception.

data published by Triandis, Chen, and Chan (1998) for eight countries. The cultural orientation data were obtained from four individualist countries (United States, Australia, Germany, The Netherlands) and four collectivist countries (Japan, Greece, Hong Kong, Korea). The four individualist countries average higher on HI (47.25%) than the four collectivist countries (34.75%), whereas the collectivist countries are higher than the individualists on HC (33.50% vs. 27.75%) and VC (11.75% vs. 8.25%). It can be seen that our Singaporean profile was closer to the four collectivist countries' average (especially, even closer to the Hong Kong data) than to the four individualist countries' average.

Repeated measures ANOVA conducted on the 32-item INDCOL data indicated that there is a significant effect of cultural orientation, $F(3, 492) = 60.46$, $p < .001$. Tests of within-subjects contrasts indicated that the lowest score of vertical individualism (5.75) is significantly different from the other three scores (HI, HC, and VC), $p < .01$.

The results from 16 scenarios and the 32-item INDCOL show that VI is lower than VC with one measure and higher than VC with the other measure. Specifically, the VC score is higher than the VI score, $F(1, 567) = 9.98$, $p < .01$, when using the 32-item INDCOL, whereas the VC score is lower than the VI score, $F(1, 164) = 142.21$, $p < .01$, when using the 16 scenarios. This suggests that VI and VC cannot be discriminated in this sample. Because Singapore is high on VC, the high
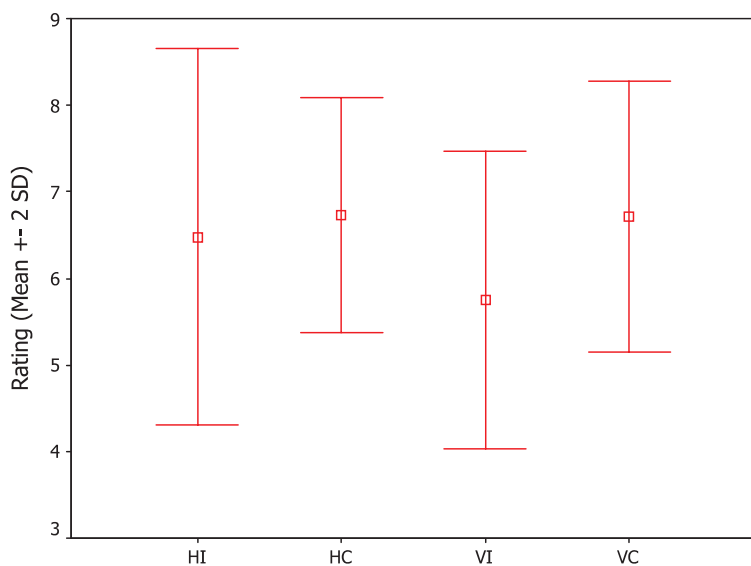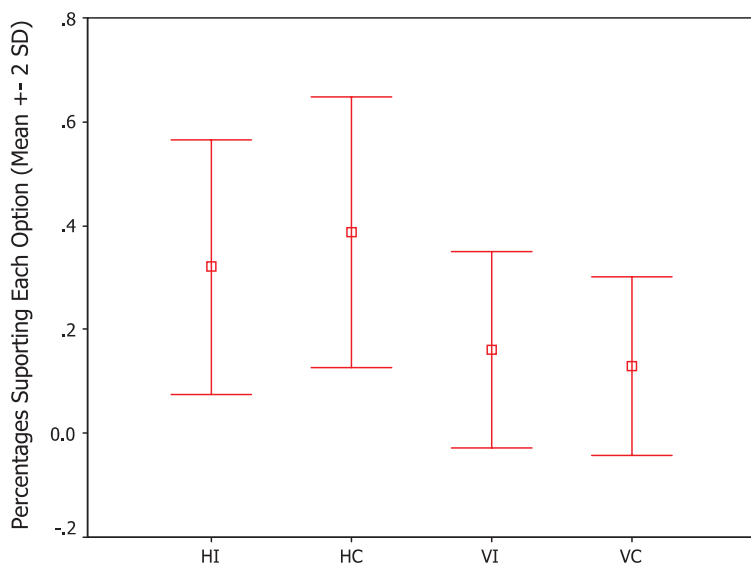
FIGURE 2    Mean scores for the 32-item INDCOL (average rating) and the 16 scenarios (average percentages supporting each option).

TABLE 1
Profiles (Average Percentages Supporting Each Option) of Countries
Obtained With the 16 Scenarios (Countries Were Rank-Ordered
According to Hofstede's Individualism Index)

| Country | HI | | HC | | VI | | VC | |
|---|---|---|---|---|---|---|---|---|
| | M | SD | M | SD | M | SD | M | SD |
| USA (Illinois) | 43 | | 25 | | 21 | | 9 | |
| Australia | 46 | | 29 | | 15 | | 10 | |
| The Netherlands | 52 | | 27 | | 15 | | 6 | |
| Germany | 48 | | 30 | | 13 | | 8 | |
| Japan | 41 | | 28 | | 22 | | 12 | |
| Greece | 39 | | 32 | | 19 | | 10 | |
| Hong Kong | 25 | | 41 | | 19 | | 15 | |
| Singapore | 32 | .12 | 39 | .13 | 16 | .09 | 13 | .09 |
| Korea | 34 | | 33 | | 20 | | 10 | |

VI score may reflect the Singapore emic concept of *kiasu* (see, e.g., Li & Fang, 2002). The literal English translation is "the fear of losing out."

## The Relationship Between Deception and Cultural Orientation

To examine the relationship between deception and cultural orientation, a stepwise multiple regression analysis was run with each of the eight deception indexes (2 [lie for organization vs. lie for family] × 4 [likelihood that others would deceive vs. likelihood that oneself would deceive vs. extent to which others would deceive vs. extent to which oneself would deceive]) as the dependent variable and the four types of cultural orientation (individualism and collectivism measured by the 32-item INDCOL + individualism and collectivism measured by the 16 scenarios) as independent variables. There are four regressions in which none of the four independent variables is eligible for inclusion in the equation. All of these are regressions in which either "extent to which others would deceive" or "extent to which oneself would deceive" serves as the dependent variable. Table 2 shows the results of the rest of the four regression analyses.

It can be seen from the upper panel of Table 2 that the variation of "likelihood that *others* would deceive" in organizational settings could be predicted by the collectivism (HC and VC) measured by the 32-item INDCOL. That is, the $R$ of the independent variable of collectivism measured by the 32-item INDCOL on the dependent variable of "likelihood that others would deceive" is 0.19, where the $R^2$ is .036, suggesting that more than 3% of the variation of "likelihood that others would deceive" could be predicted by collectivism measured by the 32-item

TABLE 2
Regression Results of Respondents' Deception Index (Likelihood That Others Would Deceive vs. Likelihood That Oneself
Would Deceive Vs. Extent to Which Others Would Deceive Vs. Extent to Which Oneself Would Deceive)

| Dependent Variable | df | Sum of Squares | Mean Square | F | B | SE | β | β In | Partial | Minimum Tolerance | t | p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | ANOVA | | | |
| Y1 | | | | | | | | | | | | |
| Regression | 1 | 20.45 | 20.45 | 6.057 | | | | | | | 0.015 | |
| Residual | 163 | 550.26 | 3.38 | | | | | | | | | |
| Variable in the equation | | | | | | | | | | | | |
| Independent variable | | | | | | | | | | | | |
| Constant | | | | | 2.37 | 1.57 | 1.50 | | | | | 0.135 |
| $X_2$: Collectivism[a] | | | | | 0.072 | 0.029 | 0.19 | | | | 2.46 | 0.015 |
| Variable not in the equation | | | | | | | | | | | | |
| Independent variable | | | | | | | | | | | | |
| $X_1$: Individualism[a] | | | | | | | | 0.06 | 0.06 | 0.94 | 0.79 | 0.43 |
| $X_3$: Individualism[b] | | | | | | | | −0.07 | −0.07 | 0.95 | −0.88 | 0.38 |
| $X_4$: Collectivism[b] | | | | | | | | 0.07 | 0.07 | 0.94 | 0.86 | 0.39 |
| Y2 | | | | | | | | | | | | |
| Regression | 1 | 32.40 | 32.40 | 5.62 | | | | | | | 0.019 | |
| Residual | 163 | 939.18 | 5.76 | | | | | | | | | |
| Variable in the equation | | | | | | | | | | | | |
| Independent variable | | | | | | | | | | | | |
| Constant | | | | | 1.41 | 1.44 | | 0.99 | 0.326 | | | |
| $X_1$: Individualism[a] | | | | | 0.069 | 0.029 | 0.18 | 2.37 | 0.019 | | | |
| Variable not in the equation | | | | | | | | | | | | |
| Independent variable | | | | | | | | | | | | |
| $X_2$: Collectivism[a] | | | | | | | | 0.09 | 0.09 | 0.94 | 1.08 | 0.28 |
| $X_3$: Individualism[b] | | | | | | | | −0.08 | −0.08 | 0.91 | −1.04 | 0.29 |
| $X_4$: Collectivism[b] | | | | | | | | 0.08 | 0.08 | 0.89 | 0.99 | 0.32 |

TABLE 2 (*Continued*)

| Dependent Variable | df | Sum of Squares | Mean Square | F | B | SE | β | β In | Partial | Minimum Tolerance | t | p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | *ANOVA* | | | | | | | | |
| Y3 | | | | | | | | | | | | |
|   Regression | 1 | 29.49 | 29.49 | 13.38 | 0.000 | | | | | | | |
|   Residual | 163 | 359.35 | 2.21 | | | | | | | | | |
|   Variable in the equation | | | | | | | | | | | | |
|     Independent variable | | | | | | | | | | | | |
|       Constant | | | | | 4.08 | 0.89 | | 4.60 | 0.000 | | | |
|       $X_1$: Individualism[a] | | | | | 0.066 | 0.018 | 0.28 | 3.66 | 0.000 | | | |
|   Variable not in the equation | | | | | | | | | | | | |
|     Independent variable | | | | | | | | | | | | |
|       $X_2$: Collectivism[a] | | | | | | | | 0.11 | 0.11 | 0.94 | 1.35 | 0.18 |
|       $X_3$: Individualism[b] | | | | | | | | 0.07 | 0.06 | 0.91 | 0.82 | 0.41 |
|       $X_4$: Collectivism[b] | | | | | | | | –0.06 | –0.06 | 0.89 | –0.81 | 0.42 |
| Y4 | | | | | | | | | | | | |
|   Regression | 1 | 60.54 | 60.54 | 14.70 | 0.000 | | | | | | | |
|   Residual | 163 | 671.25 | 4.12 | | | | | | | | | |
| Variable in the equation | | | | | | | | | | | | |
|   Independent variable | | | | | | | | | | | | |
|     Constant | | | | | 1.53 | 1.21 | | 1.26 | 0.210 | | | |
|     $X_1$: Individualism[a] | | | | | 0.094 | 0.025 | 0.29 | 3.83 | 0.000 | | | |

Variable not in the equation
 Independent variable

| | | | | | |
|---|---|---|---|---|---|
| X$_2$: Collectivism[a] | 0.05 | 0.05 | 0.94 | 0.67 | 0.50 |
| X$_3$: Individualism[b] | | −0.02 | −0.02 | 0.91 | −0.31 | 0.76 |
| X$_4$: Collectivism[b] | | 0.01 | 0.01 | 0.89 | 0.11 | 0.91 |

*Goodness of fit*

| | *Multiple R* | *R$^2$* | *Adjusted R$^2$* | *SE* |
|---|---|---|---|---|
| Y1 | 0.19 | 0.036 | 0.030 | 1.837 |
| Y2 | 0.18 | 0.033 | 0.027 | 2.40 |
| Y3 | 0.27 | 0.076 | 0.070 | 1.48 |
| Y4 | 0.29 | 0.083 | 0.077 | 2.03 |

*Note.* ANOVA = analysis of variance; Y1 = Reported likelihood that "Most Chief Negotiators" would use a discretionary fund as a gift; Y2 = Reported likelihood that oneself would use a discretionary fund as a gift; Y3 = Reported likelihood that most applicants in a similar situation would lie about the number of hours contributed to volunteer activities; Y4 = Reported likelihood that oneself would lie about the number of hours contributed to volunteer activities.
[a]32-item INDCOL. [b]16 scenarios.

INDCOL. Moreover, when the eight types of cultural orientation (HI, VI, HC, and VC measured by the 32-item INDCOL + HI, VI, HC, and VC measured by the 16 scenarios) were entered separately as independent variables, only VC measured by the 32-item INDCOL was significantly eligible for inclusion in the equation. Such a finding is consistent with previous findings (Triandis et al., 2001) that the greater the collectivism, especially the greater VC, the greater the tendency to lie.

Table 2 also shows that the variation of "likelihood that *oneself* would deceive" in organizational settings could be predicted by individualism (HI and VI) rather than collectivism (HC and VC) measured by the 32-item INDCOL. The *R* of the independent variable of individualism measured by the 32-item INDCOL on the dependent variable of "likelihood that *oneself* would deceive" is 0.18, where the $R^2$ is .033. It is interesting to see that, when the eight types of cultural orientation (HI, VI, HC, and VC measured by the 32-item INDCOL + HI, VI, HC, and VC measured by the 16 scenarios) were entered separately as independent variables, it was still VC measured by the 32-item INDCOL that was the only variable eligible for inclusion in the equation, indicating that either individualism or VC are significant predictors of the "*oneself* would deceive" dependent variable.

The regression results in the family settings are shown in the lower panel of Table 2. The results are clearer than those in organizational settings. That is, both the variables of "likelihood that *others* would deceive" and "likelihood that *oneself* would deceive" in family settings could be predicted by the individualism indexes (HI and VI) measured by the 32-item INDCOL. When the eight types of cultural orientation were entered separately as independent variables, it was found that VI always has a larger beta weight than HI (for the dependent variable "Reported likelihood that MOST APPLICANTS in a similar situation would lie about the number of hours contributed to volunteer activities," $\beta_{VI\ 32\text{-item INDCOL}} = 0.21$, $p < .01$, whereas $\beta_{HI\ 32\text{-item INDCOL}} = .099$ [*ns*]; for the dependent variable "Reported likelihood that ONESELF would lie about the number of hours contributed to volunteer activities," $\beta_{VI\ 32\text{-item INDCOL}} = 0.18$, $p < .03$, and $\beta_{HI\ 32\text{-item INDCOL}} = 0.17$, $p < .05$).

The Triandis et al. (2001) study found not only that collectivism was related to deception at the cultural level but also that VI was related to deception at the individual level of analysis. This finding, together with the previous one (Triandis et al., 2001), suggests that at the individual level of analysis it is not the individualism, as such, but the competitiveness (I want to be the best) of VI that is the major cause of the observed deception.

## DISCUSSION

Our findings are that deception was higher in the family scenario than in the organization scenario, indicating that the family is more ego involving than the organization. A positive correlation between deception and VC was found when the business negotiation in the organization scenario was used, whereas a positive cor-

relation between deception and individualism was found when the family setting scenario was used.

Triandis et al. (2001) found two things: At the cultural level of analysis, collectivism predicts deception; at the individual level of analysis vertical individualism predicts deception. At the cultural level, a deception that helps the ingroup (in the organizational setting, Company X) is excused; at the individual level the focus on winning results in forgetting about the immorality of deception.

This study was necessarily done at the individual level of analysis. Yet even in this study, within-culture collectivism does predict one of the deception measures. But the clearer finding is that individualism, especially vertical individualism, which is highly related to competitiveness, is a predictor of deception. It is as if the individual is focused on winning, and if deception is necessary to do so one will deceive. One is reminded of the recent scandals at the New York Stock Exchange, where several companies (e.g., Enron, WorldCom) were found cheating to increase the value of their stock. Extreme competitiveness has its downside.

The results are clearer for a family than for an organizational setting, presumably because the family is especially important in collectivist cultures, such as Singapore's. Previous work, such as Hui and Triandis (1986), indicated that the family is especially important in collectivist cultures, thus these results are as expected.

The replication of findings at the cultural level within culture is especially desirable, because one avoids many of the methodological pitfalls of cross-cultural research, such as the lack of measurement equivalence, translation problems, response sets and differences in social desirability associated with culture, and so on. Of course, replication in this case is not total, but even partial replication increases our certainty that we can pay attention to a finding.

## Business Implications

The topic of deception seems important for management around the world. People need to be aware of cultural differences to get maximum benefit from increasing globalization and international affairs. This research examines cultural orientation differences in the propensity to lie in negotiation and family contexts. We hope that our findings will help decision makers in practical applications.

For example, after knowing that there still is at the individual level of analysis a relationship between collectivism and corruption, a negotiator should be aware that predictions based on stereotypes can be seriously misleading. This is true even if the collectivist culture is among the least corrupt. Moreover, after knowing our findings, a VC-orientated candidate should be recommended and chosen as a negotiator to get maximum benefit for the organization. If the organization is a family-owned business, an individualist-orientated candidate turns out to be appropriate too. Thus, people doing business across cultures should probably adjust their natural deceptive tendencies accordingly.

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