



FlashReport

The effects of culture and friendship on rewarding honesty and punishing deception

Cynthia S. Wang^{a,b,*}, Angela K.-y. Leung^c, Ya Hui Michelle See^a, Xiang Yu Gao^a^a National University of Singapore, Singapore^b University of Michigan, USA^c Singapore Management University, Singapore

ARTICLE INFO

Article history:

Received 18 January 2011

Revised 5 April 2011

Available online 6 May 2011

Keywords:

Reward

Punishment

Honesty

Deception

Culture

Social mobility

ABSTRACT

The present research explores whether the type of relationship one holds with deceptive or honest actors influences cross-cultural differences in reward and punishment. Research suggests that Americans reward honest actors more than they punish deceptive perpetrators, whereas East Asians reward and punish equally (Wang & Leung, 2010). Our research suggests that the type of relationship with the actor matters for East Asians, but not for Americans. East Asians exhibit favoritism toward their friends by rewarding more than punishing them, but reward and punish equally when the actors are strangers (Experiment 1 and 2); Americans reward more than they punish regardless of the type of relationship (Experiment 2). Furthermore, the findings were replicated when the proposed mechanism – social mobility – was manipulated within the same culture (Experiment 3). We discuss the implications of these findings for understanding how friends versus strangers are rewarded and punished in an increasingly relationally complex world.

© 2011 Elsevier Inc. All rights reserved.

Given the recent international economic turmoil, questions have arisen whether more rewards and punishments should be used to regulate behaviors. Wang and Leung (2010) showed that the use of rewards and punishments is influenced by culture: North Americans reward honesty more than they punish deception, but East Asians reward and punish equivalently. These cultural differences were explained by using the theoretical framework of social mobility (e.g., Chen, Chiu, & Chan, 2009; Oishi, 2010; Schug, Yuki, Horikawa, & Takemura, 2009). Building on this social mobility perspective, this paper examines how the type of relationship one holds with the honest or deceptive actor influences cross-cultural differences in reward and punishment.

Countries vary in levels of mobility. Individuals in highly mobile countries can easily enter into and exit from relationships (Schug et al., 2009), jobs (Chen et al., 2009), or residences (Oishi, 2010; Oishi & Kisling, 2009). Relationships in mobile cultures (e.g., America; Whyte, 1956) are more transient than those in stable cultures (e.g., East Asia), and therefore, involve less collective duties (Ho, Rousseau, & Levesque, 2006). In a mobile culture, when wrongdoers engage in misconduct, individuals can avoid them due to their less binding social network, thus sparing the use of punishment (Wang & Leung, 2010). On the other hand, when others are honest, it is wise to invest in maintaining positive relationships with them due to the fragility of relationships in mobile cultures (Macy & Sato, 2002; Schug, Yuki,

& Maddux, 2010). Indeed, people engage in active self-disclosure efforts to cultivate vulnerable relationships in relationally mobile cultures (Schug et al., 2010). We propose that an alternative way to signal relationship commitment is through the use of more reward and less punishment. This theorizing is supported by evidence that Americans reward more than they punish strangers (Wang, Galinsky, & Murnighan, 2009; Wang & Leung, 2010).

Given Americans' generous behavior toward strangers, one compelling question is whether such generosity is similar or amplified for friends. In a mobile environment, individuals can easily establish positive relationships and exit from negative ones with both friends and strangers, so we expect behavior toward friends versus strangers to be less demarcated. Indeed, compared to Chinese, Americans feel less of a sense of duty toward in-group members (such as friends) and less concern for in-group harmony (Oyserman, Coon, & Kimmelmeier, 2002). Furthermore, when Asian–American biculturals were primed with American (vs. Asian) culture, cooperative behavior was less differentiated between friends and strangers in a Prisoner's Dilemma game (Wong & Hong, 2005), suggesting that highly mobile individuals are less sensitive to the friend–stranger distinction.

However, less mobile individuals (e.g., East Asians), on one hand, feel obligated to maintain collective social order; but on the other hand, are not inclined to reward honest strangers with whom they cannot establish a relationship easily, suggesting that they punish and reward strangers equivalently (Wang & Leung, 2010). From the social mobility perspective, it is possible that less mobile individuals are more sensitive to the friend–stranger distinction because they cannot enter into or exit from relationships easily. As they are motivated to maintain strong ties with their in-group members (Leung, 1997), they

* Corresponding author at: University of Michigan, National Center for Institutional Diversity, 3338 School of Education Building, 610 East University Avenue, Ann Arbor, MI 48109–1259, USA.

E-mail address: cswang@nus.edu.sg (C.S. Wang).

need to recognize the boundary between their ingroup and outgroup, and then discriminately show more favoritism toward their ingroup but less so for their outgroup.

In particular, in collectivistic cultures (which are generally less mobile), a concern for preserving in-group harmony and willingness to sacrifice for in-group members emerge (Leung & Bond, 1984; Wong & Hong, 2005). For example, biculturals primed with Asian (vs. American) culture were more cooperative toward friends but not strangers in a Prisoner's Dilemma game (Wong & Hong, 2005). Moreover, when interacting with out-group members (e.g., strangers), East Asians show a stronger tendency to come into conflict (Leung, 1988). These findings suggest that low mobility is related to a higher sensitivity to the friend–stranger distinction.

In summary, we systematically examine East Asians' and Americans' rewards and punishments in reaction to an actor who is either a friend or a stranger. Based on the social mobility perspective, we predict that East Asians (Experiments 1 and 2) will be more sensitive to the friend–stranger distinction, thereby displaying favoritism toward friends with more reward than punishment, but displaying impartiality toward strangers with equivalent reward and punishment. However, Americans (Experiment 2) will be less sensitive to the friend–stranger distinction and thus display their default tendency to reward more than punish regardless of their relationship with the actors. Experiment 3 also directly tests our propositions based on the social mobility framework, exploring for the first time how social mobility serves as a mechanism that drives disparate reward and punishment patterns.

Experiment 1

Extending Wang and Leung's (2010) findings, Experiment 1 tested East Asians' responses to deception and honesty from a stranger versus a friend. We predicted that East Asians would reward and punish in equivalent amounts when the actor is a stranger (replicating Wang & Leung, 2010), but would reward more than they punish friends.

Method

Participants and design

Ninety-eight Chinese students (47 females) from Xi'an Medical University and Xi'an Jiao Tong University¹ completed the 2 (Behavior: deception/honesty) × 2 (Relationship: stranger/friend) between-participants study as a course requirement.

Procedure

Adapting Wang and Leung's (2010) procedures, participants read (in Chinese) about someone who behaved dishonestly or honestly, which caused the participant to gain or lose ¥500. The *deception–stranger* condition read: “You and another individual recently completed a business deal; you have just discovered that the other individual was dishonest about some key information. As a result, you only received ¥1000. You would have received 50% more if the other individual had been honest.” Thus, in the *deception–stranger* condition, they expected ¥1500 and suffered a ¥500 loss. The *honesty–stranger* condition read: “You and another individual recently completed a business deal; you have just discovered that the other individual was honest about some key information. As a result, you received ¥1000. You would have received 50% less if the other individual had been dishonest.” Thus, participants received ¥1000

¹ Participants were undergraduates (engineering and English majors) and business graduate students. The reward/punishment responses did not differ by university, major, or year in school (all interactions, $F_s < 1$).

from interacting with an honest individual; they expected ¥500 and received a ¥500 gain. In the *deception–friend* and *honesty–friend* conditions, participants read the same scenarios, except that the actor was a friend that they named beforehand.

Participants could then spend hypothetical money to reward (following honesty) or punish (following deception) the actor at a cost to test how participants would reciprocate at their own expense (e.g., Pillutla & Murnighan, 1996). The cost was set at a tenth of the reward/punishment amount (e.g., Wang et al., 2009; Wang & Leung, 2010). The dependent measure was the amount spent to reward or punish presented on 11-point scales from ¥0 to ¥1000, in ¥100 increments.

Results and discussion

The reward/punishment amount was submitted to a Behavior × Relationship between-participants ANOVA. A two-way interaction emerged, $F(1,94) = 8.27, p = .005$ (see Fig. 1). Participants rewarded ($M = 733.33, SD = 261.41$) more than they punished ($M = 188.46, SD = 295.74$) friends, $t(94) = 5.60, p < .001, d = 1.95$, but rewarded and punished strangers equally ($M_{\text{reward}} = 600.00, SD_{\text{reward}} = 300.00$ vs. $M_{\text{punish}} = 442.31, SD_{\text{punish}} = 430.97$), $t(94) = 1.69, p = .10$. The current findings in the stranger condition replicated past research (Wang & Leung, 2010), and importantly, Experiment 1 extended previous findings by revealing that Chinese reward more than they punish their friends.

Analyzing the interaction differently, participants punished friends less than strangers, $t(94) = 2.76, p = .007, d = .69$. Their tendency to reward friends more than strangers was not significant, $t(94) = 1.36, p = .18$, although the means were in the predicted direction.

In Experiment 2, we set out to complement these within-culture findings with between-culture findings and used a different East Asian sample (Singaporeans) from Experiment 1. We expected that Americans would reward more than they punish, regardless of the relationship with the actor. However, East Asians would reward more than they punish friends, but reward and punish strangers in equivalent amounts.

Experiment 2

Participants and design

Participants were 302 undergraduate students who completed the 2 (Behavior: deception/honesty) × 2 (Relationship: stranger/friend) × 2 (Culture: American/East Asian) between-participants design as a requirement for an introductory management course. One hundred and thirty-eight Caucasian students (88 females) were from the University of Texas at Austin and 164 students (93 females;

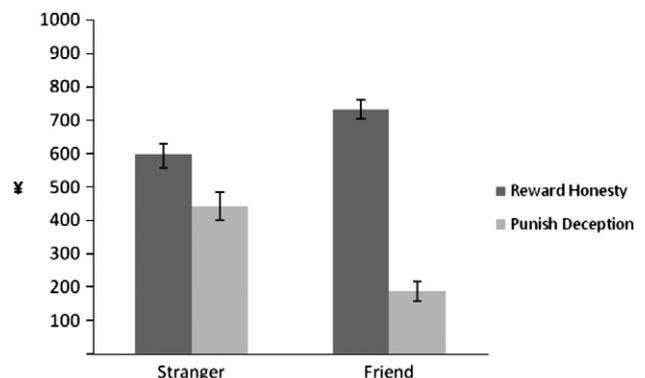


Fig. 1. The effects of partner's behavior and relationship on amount of response (Chinese participants), Experiment 1.

97% Chinese, 3% Malay/Other) were from the National University of Singapore.

Procedure

The procedure was the same as in Experiment 1. The scenarios were presented in English and the currency used was dollars.

Results and discussion

The reward/punishment amount was submitted to a Behavior \times Relationship \times Culture between-participants ANOVA. A significant three-way interaction emerged, $F(1,294) = 9.76, p = .002$ (see Fig. 2). Decomposing the interaction by Culture, we found that Americans rewarded ($M = 65.22, SD = 32.54$) more than they punished ($M = 36.06, SD = 37.89$), $F(1,134) = 21.89, p < .001, d = .83$. As predicted, this effect was not moderated by whether the actor was a stranger or a friend, $F(1,134) = 1.65, p = .20$.

East Asians rewarded ($M = 67.60, SD = 34.91$) more than punished ($M = 30.79, SD = 37.73$), $F(1,160) = 44.04, p < .001, d = 1.01$. Unlike Americans, this effect was qualified by a significant Behavior \times Relationship interaction, $F(1,160) = 39.21, p < .001$. East Asians rewarded ($M = 47.50, SD = 34.55$) and punished ($M = 45.56, SD = 41.86$) strangers in equivalent amounts, $t(160) = .26, p = .80$, but rewarded ($M = 82.56, SD = 27.00$) more than they punished friends ($M = 15.68, SD = 25.64$), $t(160) = 9.48, p < .001, d = 2.54$. These findings replicate those obtained in Experiment 1, suggesting that the pattern of results is robust. Additionally, East Asians punished their friends less than strangers, $t(160) = 4.29, p < .001, d = .86$, as in Experiment 1. Furthermore, East Asians rewarded friends more than strangers, $t(155) = 4.57, p < .001, d = 1.15$.

Having established cross-cultural differences in reward/punishment amounts for friends versus strangers, we tested the role of social mobility more directly by manipulating Americans' perception of social mobility in Experiment 3.

Experiment 3

Participants and design

Two-hundred and seven American undergraduate students (121 females) from the University of Texas at Austin completed a 2 (Behavior: deception/honesty) \times 2 (Relationship: stranger/friend) \times 2

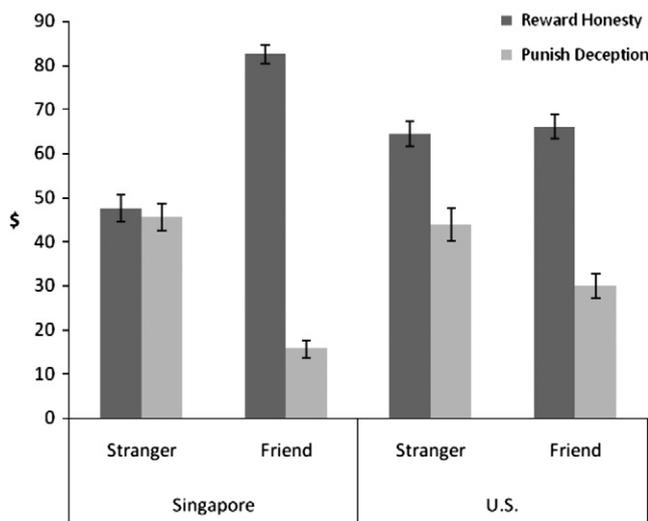


Fig. 2. The effects of partner's behavior, relationship, and culture on amount of response, Experiment 2.

(Mobility: low/high) between-participants experiment as a requirement for an introductory management course.

Procedure

Participants were randomly assigned to a low or high mobility condition. Low mobility participants received a scenario adapted from Chen et al. (2009): "...Due to its government's labor policies, the job mobility in Country X is extremely low...The majority of the people in Country X have worked in only 1 or 2 jobs in the same occupation throughout their lifetime. About one third of the people who are older than 50 years of age still remain in their first job." Two graphs were displayed to provide evidence for low mobility. High mobility participants received information that "people in Country X have worked in 3 to 6 jobs in different occupations throughout their lifetime. The percentage of people who remain in their first job decreases drastically after the age of 30." Two supporting graphs were shown. Participants wrote an essay imagining that they were a citizen of Country X and were preparing themselves for the job market. Next, similar to Experiments 1 and 2, participants read about either a friend or stranger who behaved deceptively or honestly.

Results and discussion

The reward or punishment amount was submitted to a Behavior \times Relationship \times Mobility between-participants ANOVA. As predicted, a significant three-way interaction emerged, $F(1,199) = 6.43, p = .01$ (see Fig. 3).

High mobility participants rewarded honesty ($M = 76.48, SD = 29.53$) more than they punished deception ($M = 40.80, SD = 40.14$), $F(1,100) = 27.17, p < .001, d = .98$. This effect was not moderated by whether the actor was a stranger or a friend, $F(1,100) = .97, p = .33$.

Among low mobility participants, however, a significant Behavior \times Relationship interaction emerged, $F(1,99) = 21.43, p < .001$. Individuals rewarded ($M = 59.29, SD = 37.61$) and punished ($M = 67.20, SD = 36.80$) strangers in equivalent amounts, $t(99) = .84, p = .40$, but they rewarded ($M = 75.60, SD = 26.63$) more than they punished friends ($M = 20.80, SD = 34.75$), $t(99) = 5.64, p < .001, d = 1.77$. In other words, low mobility participants marginally rewarded their friends more than strangers, $t(99) = 1.73, p = .09, d = .50$ and punished their friends less than strangers, $t(99) = 4.78, p < .001, d = 1.30$. Therefore,

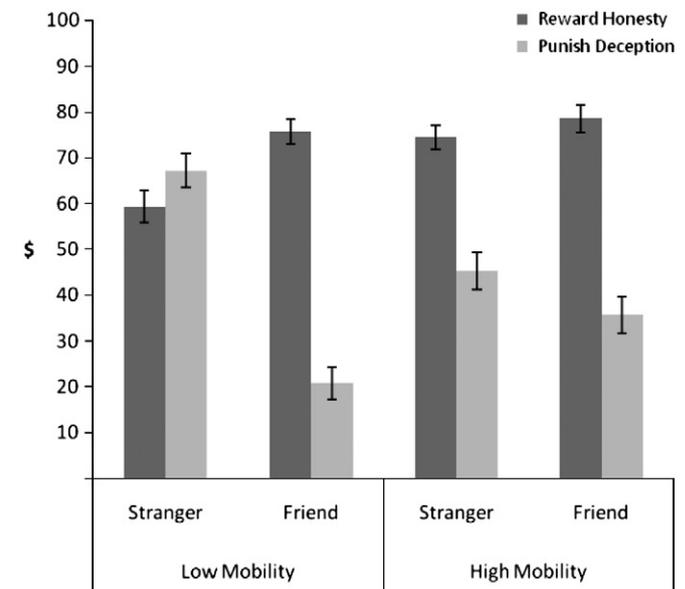


Fig. 3. The effects of partner's behavior, relationship, and social mobility on amount of response, Experiment 3.

Table 1
Meta-analysis summary.

Hypotheses	Effect size estimates (<i>r</i>) in Experiments 1–3			Summary			
	1	2	3	<i>M</i>	<i>Z</i>	<i>p</i>	CI _{95%}
East Asian/low mobility participants reward friends more than strangers	.23	.50	.24	.33	3.16	.002	.13, .54
East Asian/low mobility participants punish friends less than strangers	−.13	−.39	−.33	−.30	−2.91	.004	−.50, −.10
<i>N</i>	94	160	108				

Note. *M* represents the weighted average of the effect sizes. Heterogeneity tests were not significant.

we demonstrate for the first time that social mobility has a causal role that drives disparate reward and punishment patterns for friends versus strangers.

General discussion

The current research sheds light on how East Asians and Westerners react differently to honest and deceptive friends and strangers, revealing social mobility as one causal mechanism that contributes to this cross-cultural difference. The first two experiments documented that East Asians reward more than they punish friends, but reward and punish strangers equivalently. Americans, however, reward more than they punish regardless of whether the actor is their friend or a stranger, as shown in Experiment 2. Notably, in Experiment 3, the reward/punishment decisions of participants primed with high mobility mirrored those of Americans in Experiment 2; similarly, the reward/punishment decisions of participants primed with low mobility mirrored those of East Asians in both Experiments 1 and 2. A meta-analysis that tested the overall effect sizes across the experiments (Table 1) showed that culture/mobility has divergent effects depending on type of relationship with the actor: East Asian/low mobility participants rewarded their friends more and punished them less than they did toward strangers.

The current research is the first to illuminate an underlying mechanism that explains the cross-cultural disparity in rewarding and punishing friends and strangers. The present findings suggest that greater levels of social mobility are associated with rewarding honesty more than punishing deception regardless of the relationship with the actor. However, the type of relationship matters at lower levels of mobility, with people rewarding more than punishing friends, but rewarding and punishing strangers equivalently. To individuals in more mobile societies, their relationships with both friends and strangers are voluntarily formed. They can actively establish and maintain these voluntarily formed relationships via rewards and at the same time they can easily exit from negative relationships instead of putting themselves under emotional stake to deliver punishments. Thus, in reaction to both friends and strangers alike, they can afford to reward more than they punish. Contrariwise, to individuals in less mobile communities, the binding relationship with their friends is coupled with the shared expectations of maintaining in-group harmony and mitigating interpersonal conflict whenever possible. Thus, socially immobile individuals might be obliged to reward more than they punish their friends. For strangers with non-binding relationships, they are rewarded to the same extent as they are punished.

The psychological reality afforded by different levels of social mobility is relevant not only when we compare across different cultures, but also when we analyze different collectives within the same culture. Individuals in the same culture have different levels of perceived social mobility as they are not equally residentially mobile (Oishi, 2010), professionally mobile (Chen et al., 2009), or relationally mobile (Schug et al., 2010). Without taking into account the more nuanced socio-psychological mechanism of social mobility, our predictions would be erroneous if we merely adhere to the cultural

stereotypes of how East Asians and Westerners generally reward and punish friends and strangers. More interestingly, as individuals are likely to be a part of distinct residential, professional, and relational networks characterized by different levels of mobility, it follows that how they react to, for example, a deceptive neighbor they meet in the residential community could be very different from how they react to a deceptive coworker they meet at work.

Limitations and future considerations

Our experiments have limitations to take into account. First, as the experiments were scenario-based, one possibility is that participants' responses might have reflected cultural expectations. Future research could address this limitation by using paradigms with real monetary stakes (e.g., with actual costs to punish/reward; Wang et al., 2009; Wang & Leung, 2010).

Moreover, future research should explore how different types of deception and honesty may affect punishment and reward responses; for example, deceived individuals who do not lose any money may respond quite differently than deceived individuals in our experiments, in which the act of deception resulted in a financial loss (i.e., they received 50% less than expected).

Similar patterns of effects emerged in Experiments 1 and 2, while measuring cultural responses, and in Experiment 3, while manipulating social mobility. Whereas Experiment 3 suggests that social mobility could be a mechanism driving cross-cultural differences in reward and punishment, it is possible that the social mobility effect is an independent one from the cultural responses. Future research could investigate more directly whether social mobility is the central mechanism driving the cultural responses in reward and punishment, as well as explore other socio-psychological mechanisms relevant to decisions to reward and punish.

Conclusion

The current research proposes a novel perspective to understand the psychological dynamics underlying individuals' reward and punishment behaviors by taking into account the psychological reality given rise by social mobility in different cultures. The mechanism of social mobility is particularly relevant to the modern world in which individuals are likely to form compartmentalized relationship networks that are differentially mobile. Understanding how social mobility comes into play in different cultures' relationship networks (e.g., friends vs. strangers) will give us a more complete picture of understanding people's choices to reward benevolent behaviors and punish unethical transgressions.

References

- Chen, J., Chiu, C. -Y., & Chan, F. S. -F. (2009). The cultural effects of job mobility and the belief in a fixed world: Evidence from performance forecast. *Journal of Personality and Social Psychology*, 97, 851–865. doi:10.1037/a0015950.
- Ho, V. T., Rousseau, D. M., & Levesque, L. L. (2006). Social networks and the psychological contact: Structural holes, cohesive ties, and beliefs regarding employer obligations. *Human Relations*, 59, 459–481. doi:10.1177/0018726706065370.

- Leung, K. (1988). Some determinants of conflict avoidance. *Journal of Cross-cultural Psychology, 19*, 125–136. doi:10.1177/0022002188019001009.
- Leung, K. (1997). Negotiation and reward allocations across cultures. In P. C. Earley, & M. Erez (Eds.), *New perspectives on international industrial organizational psychology* (pp. 640–675). San Francisco, CA: Jossey Bass.
- Leung, K., & Bond, M. H. (1984). The impact of cultural collectivism on reward allocation. *Journal of Personality and Social Psychology, 47*, 793–804. doi:10.1037/0022-3514.47.4.793.
- Macy, M., & Sato, Y. (2002). Trust, cooperation and market formation in the US and Japan. *Proceedings of the National Academy of Sciences, 99*, 7214–7220. doi:10.1073/pnas.082097399.
- Oishi, S. (2010). The psychology of residential mobility: Implications for the self, social relationships, and well-being. *Perspectives on Psychological Science, 5*, 5–21. doi:10.1177/1745691609356781.
- Oishi, S., & Kisling, J. (2009). The mutual constitution of residential mobility and individualism. In R. S. Wyer Jr., C. -Y. Chiu, Y. Y. Hong, & S. Shavitt (Eds.), *Understanding culture: Theory, research, and application* (pp. 223–238). New York: Psychology Press.
- Oyserman, D., Coon, H., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3–72. doi:10.1037/0033-2909.128.1.3.
- Pillutla, M. M., & Murnighan, J. K. (1996). Unfairness, anger, and spite: Emotional rejections of ultimatum offers. *Organizational Behavior and Human Decision Processes, 68*, 208–224. doi:10.1006/obhd.1996.0100.
- Schug, J., Yuki, M., Horikawa, H., & Takemura, K. (2009). Similarity attraction and actually selecting similar others: How cross-societal differences in relational mobility affect interpersonal similarity in Japan and the United States. *Asian Journal of Social Psychology, 12*, 95–103. doi:10.1111/ajsp.2009.12.issue-210.1111/j.1467-839X.2009.01277.x.
- Schug, J., Yuki, M., & Maddux, W. (2010). Relational mobility explains between- and within-culture differences in self-disclosure to close friends. *Psychological Science, 21*, 1471–1478.
- Wang, C. S., Galinsky, A. D., & Murnighan, J. K. (2009). Bad drives psychological reactions but good propels behavior: Reactions to honesty and deception. *Psychological Science, 20*, 634–644. doi:10.1111/j.1467-9280.2009.02344.x.
- Wang, C. S., & Leung, A. K. -y. (2010). The cultural dynamics of rewarding honesty and punishing deception. *Personality and Social Psychology Bulletin, 36*, 1529–1542. doi:10.1177/0146167210385921.
- Whyte, W. H. (1956). *The organization man*. New York: Simon & Shuster.
- Wong, R. Y. -M., & Hong, Y. (2005). Dynamic influences of culture on cooperation in the prisoner's dilemma. *Psychological Science, 16*, 429–434. doi:10.1111/j.0956-7976.2005.01552.x.