# **COGNITIVE SCIENCE**

# A Multidisciplinary Journal



Cognitive Science 39 (2015) 199-211

Copyright © 2014 Cognitive Science Society, Inc. All rights reserved.

ISSN: 0364-0213 print/1551-6709 online

DOI: 10.1111/cogs.12145

# An Indecent Proposal: The Dual Functions of Indirect Speech

Aleksandr Chakroff, Kyle A. Thomas, Omar S. Haque, Liane Young

<sup>a</sup>Department of Psychology, Harvard University
<sup>b</sup>Department of Psychiatry and Human Behavior, Brown University
<sup>c</sup>Department of Psychology, Boston College

Received 16 August 2013; received in revised form 12 December 2013; accepted 16 December 2013

#### **Abstract**

People often use indirect speech, for example, when trying to bribe a police officer by asking whether there might be "a way to take care of things without all the paperwork." Recent game theoretic accounts suggest that a speaker uses indirect speech to reduce public accountability for socially risky behaviors. The present studies examine a secondary function of indirect speech use: increasing the perceived moral permissibility of an action. Participants report that indirect speech is associated with reduced accountability for unethical behavior, as well as increased moral permissibility and increased likelihood of unethical behavior. Importantly, moral permissibility was a stronger mediator of the effect of indirect speech on likelihood of action, for judgments of one's own versus others' unethical action. In sum, the motorist who bribes the police officer with winks and nudges may not only avoid public punishment but also maintain the sense that his actions are morally permissible.

Keywords: Indirect speech; Moral psychology; Behavioral ethics; Evolutionary psychology; Self-deception

#### 1. Introduction

Imagine you are pulled over for speeding. You attempt to get out of the ticket, inquiring whether "there might be a way to take care of things right here, without all the paperwork." The officer sees the \$50 bill sticking conspicuously out of your wallet, takes the hint (and the cash), and moves on with his patrol. Linguists and psychologists have tried to understand why speakers might refrain from sending a message in the most clear and direct format possible, instead using *indirect speech* such as doublespeak, euphemism,

Correspondence should be sent to Aleksandr Chakroff, Department of Psychology, Harvard University, 1418 William James Hall, 33 Kirkland St., Cambridge, MA 02138. E-mail: chakroff@wjh.harvard.edu

and innuendo (Brown & Levinson, 1987; Horn, 2003; Lakoff, 1973; Lee & Pinker, 2010; Pinker, Nowak, & Lee, 2008), speech that violates tacit principles of cooperative communication (Grice, 1975), and carries the risk of obfuscating the intended message (Bonnefon, Feeney, & De Neys, 2011).

# 1.1. A first function: Reducing public accountability

On a recent evolutionary game theoretic account, indirect speech allows the speaker to make a risky proposition while at the same time minimizing risk. In particular, indirect speech allows the speaker to convey his intended message while increasing plausible deniability and reducing public accountability (Lee & Pinker, 2010; Pinker et al., 2008). Indirect speech may thus represent an adaptive strategy for acting unethically. Indeed, the use of indirect language (e.g., "the costume was torn" vs. "he tore the costume") to describe social and moral transgressions also shapes observers' judgments of blame and accountability for the very same action (Fausey & Boroditsky, 2011; Loftus & Palmer, 1974).

# 1.2. A second function: Increasing moral permissibility

Current accounts of indirect speech leave an important question unanswered. Do speakers deliberately employ indirect speech to reduce their public accountability and to avoid punishment? We propose a second function of indirect speech: to increase the perceived moral permissibility of unethical acts, which may lead to increased likelihood of conducting those very unethical acts. In general, people view themselves as moral individuals (Aronson, 1969; Janoff-Bulman, 1989; Taylor & Brown, 1988), who are motivated to behave in a way that allows them to preserve a positive moral self-concept (Bandura, 1999; Bryan, Walton, Rogers, & Dweck, 2011; Diener, Dineen, Endresen, Beaman, & Fraser, 1975; Mazar, Amir, & Ariely, 2008; Monin & Miller, 2001; Sachdeva, Iliev, & Medin, 2009; Shu & Gino, 2012; Tenbrunsel & Messick, 2004). Thus, people are more likely to act unethically when the unethical nature of their act is obscured (e.g., stealing \$10 in "tokens" vs. cash; Dana, Weber, & Kuang, 2007; Mazar et al., 2008; Paharia, Kassam, Greene, & Bazerman, 2009; Snyder, Kleck, Strenta, & Mentzer, 1979).

# 1.3. The present research

Prior work has found support for the first function of indirect speech: reducing public accountability for the speaker's socially risky or unethical behavior (Lee & Pinker, 2010; Pinker et al., 2008). Here, we investigate whether indirect speech also serves a second function: increasing the perceived moral permissibility of the behavior. We expect that reduced moral permissibility will track with greater reported likelihood of the speaker's acting unethically (Batson, Kobrynowicz, Dinnerstein, Kampf, & Wilson, 1997; Jordan & Monin, 2008).

We address the hypothesis in two studies, building on past research showing that people judge themselves and others to be less publicly accountable for risky propositions made using indirect versus direct speech, and that people are also more likely to use indirect speech for unethical versus morally neutral propositions (Lee & Pinker, 2010). We ask whether indirect speech increases participants' reported likelihood of making unethical propositions (Study 1) or reported likelihood of acting unethically more generally (Study 2). We investigate whether participants' moral judgments of the propositions has a unique role in mediating the effect of indirect versus direct speech on one's own reported likelihood of unethical behavior.

#### 2. Study 1: Indirect speech and the likelihood of unethical propositions

People may be more willing to use indirect speech when proposing potentially immoral acts (e.g., threats, bribes, and unsolicited sexual advances) versus morally neutral acts (e.g., asking a favor; Lee & Pinker, 2010). Consistent with these findings, pilot data from 80 participants indicated that they *personally* feel less publicly accountable when using indirect versus direct speech to make unethical propositions (F(1, 78) = 79.41, p < .001,  $\eta_p^2 = .50$ ; see supplementary Study 1). Study 1 examines whether subjective perceptions of reduced accountability are also accompanied by perceptions of increased moral permissibility, as well as a greater reported likelihood of making unethical propositions. Study 1 then measures the extent to which accountability and moral permissibility judgments predict the likelihood of making unethical propositions.

# 2.1. Method

We tested 160 participants using Amazon Mechanical Turk (80 male;  $M_{\rm age} = 31.6$ ,  $SD_{\rm age} = 11.8$ ). Participants were English speakers from the United States and were paid 51 cents for their time. Five participants were removed for attempting to participate in the experiment twice. Study 1 followed a 2 (directness: indirect vs. direct)  $\times$  2 (role: self vs. other) mixed-effects design. Directness was manipulated within subjects, and role was manipulated between subjects. Participants read four scenarios describing a protagonist making an unethical proposition (e.g., bribing a maitre d'; see supplementary material for full text). The protagonist in all four scenarios was either *oneself* or a *stranger*. Below each scenario were two propositions one might use: a *direct* proposition (e.g., "Hey, any chance I can pay you to get seated early?") and an *indirect* proposition (e.g., "Hey, any chance we can get some great service tonight?"). Order of direct and indirect propositions was counterbalanced across scenarios.

For each scenario, participants rated (a) the protagonist's (e.g., their own or another's) likelihood of making each proposition, (b) the protagonist's accountability (e.g., "If (you/Steve) were caught doing this, how likely would (you/Steve) be to get off the hook?"), and (c) the moral permissibility of the action. Each set of judgments (likelihood, accountability, permissibility) was collected in a separate block, with block order randomized

across participants.<sup>1</sup> In a final block, participants rated their confidence that the protagonist's proposition conveyed its intended message (e.g., "How certain are you that the behavior described above was an instance of attempted bribery?"). This final measure served to confirm the effectiveness of the directness manipulation (see Bonnefon et al., 2011). Judgments were made using 101-point slider scales.

#### 2.2. Results and discussion

Dependent measures (confidence, likelihood, moral permissibility, accountability) were analyzed in separate 2 (directness: indirect vs. direct)  $\times$  2 (role: self vs. other) mixed-effects anovas. Means for all measures are shown in Fig. 1.

# 2.2.1. Confidence (manipulation check)

Participants reported less confidence that indirect propositions conveyed the intended message, relative to direct propositions (main effect of directness, F(1, 153) = 131.52, p < .001,  $\eta_p^2 = .46$ ). This main effect indicates that the directness manipulation served its intended effect. Importantly, we found no main effect of role (F(1, 153) = 1.05, p = .31,  $\eta_p^2 = .01$ ), nor a role  $\times$  directness interaction (F(1, 153) = 0.04, p = .84,  $\eta_p^2 < .001$ ). We note also that confidence judgments do not account for the primary effects of interest reported below. In particular, when controlling for confidence judgments, all key results reported below remain significant, including the effects of directness on likelihood (F(1, 152) = 11.70, p = .001,  $\eta_p^2 = .07$ ), moral permissibility (F(1, 152) = 15.08, p < .001,  $\eta_p^2 = .09$ ), and accountability (F(1, 152) = 14.49, p < .001,  $\eta_p^2 = .09$ ).

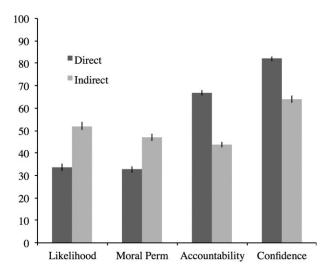


Fig. 1. Values indicate mean judgments of public accountability, moral permissibility, and likelihood of unethical propositions, as well as the confidence in the intended message. Results are displayed separately for direct and indirect speech conditions, but collapsing across role (self vs. other). Error bars indicate  $\pm SEM$ .

#### 2.2.2. Likelihood

As predicted, participants reported a greater likelihood of making indirect versus direct propositions (main effect of directness, F(1, 153) = 183.65, p < .001,  $\eta_p^2 = .55$ ), an effect that did not differ for self versus other (directness × role interaction, F(1, 153) < 0.01, p > .99,  $\eta_p^2 < .001$ ). Participants also judged that they would be less likely than others to make unethical propositions (main effect of role, F(1, 153) = 54.72, p < .001,  $\eta_p^2 = .26$ ).

# 2.2.3. Moral permissibility

As predicted, participants judged that indirect versus direct propositions were more morally permissible (main effect of directness, F(1, 153) = 134.38, p < .001,  $\eta_p^2 = .47$ ), an effect that did not differ for self versus other (directness × role interaction, F(1, 153) = 1.29, p = .26,  $\eta_p^2 = .01$ ). Participants also judged others' propositions to be less morally permissible than their own propositions (main effect of role, F(1, 153) = 7.11, p = .008,  $\eta_p^2 = .04$ ). This main effect of role (self vs. other), for likelihood ratings above and moral permissibility ratings here, is broadly consistent with prior work showing that people tend to think of themselves as more moral than others (Epley & Dunning, 2000).

#### 2.2.4. Accountability

Participants reported reduced public accountability for indirect versus direct propositions (main effect of directness, F(1, 153) = 210.89, p < .001,  $\eta_p^2 = .58$ ). In this study, however, the effect was stronger for judgments of one's own versus others' propositions (role × directness interaction, F(1, 153) = 8.00, p = .005,  $\eta_p^2 = .05$ ). There was no significant main effect of role (F(1, 153) = 1.93, p = .17,  $\eta_p^2 = .01$ ).

## 2.2.5. Relationships between measures

Regression models predicting reported likelihood of making an unethical proposition from judgments of perceived accountability and moral permissibility<sup>2</sup> were conducted separately for self and other. For judgments of others, the likelihood of making unethical propositions was predicted best by perceived accountability ( $\beta = .38$ , p = .002), followed by perceived moral permissibility ( $\beta = .24$ , p = .04). By contrast, judgments of one's own likelihood of making a proposition were best predicted by the perceived moral permissibility of the act ( $\beta = .62$ , p < .001), followed by the perceived accountability for the act ( $\beta = .20$ , p = .02). This pattern of results is consistent with work showing people tend to think of their own ethical behavior as internally generated, and others' ethical behavior as driven by external sanctions (Sanderson & Darley, 2002). We created regressors for role, coding self-judgments as 1 and other-judgments as 0, and entered this into a single linear regression, along with interaction terms between role and moral permissibility, and between role and accountability. Critically, the role × moral permissibility term was significant ( $\beta = .30 p = .001$ ), indicating that moral permissibility played a significantly greater role in predicting one's own versus another's likelihood of making unethical propositions, that is, a moderation by role. The role x accountability interaction term was not significant ( $\beta = -.04$ , p = .66), demonstrating that accountability was similarly predictive of one's own and another's likelihood of making unethical propositions.

The moderation by role (self vs. other) for moral permissibility suggests a unique role for perceived moral permissibility in predicting one's own reported likelihood of making unethical propositions. Yet this analysis does not speak to the potential for moral permissibility to mediate the effect of directness (direct vs. indirect speech) on the likelihood of making a proposition. We tested for mediation of directness on likelihood by both moral permissibility and accountability (cf. Preacher, Rucker, & Hayes, 2007), discovering that this effect was mediated both by public accountability (Indirect Effect = -7.55, Sobel Z = -5.35, p < .001) and by moral permissibility (Indirect Effect = -7.46, Sobel Z = -4.52, p < .001). We then tested for moderation of both mediators by role. Fig. 2 displays the amount of variance in likelihood judgments explained via both mediators, separately for judgments of one's own and another's likelihood of making an unethical proposal. As stated earlier, interaction terms between role and each mediator assess moderated mediation. Critically, indirect speech increased one's own likelihood of making a proposition more by increasing moral permissibility, compared to the analogous effect for others, indicating this mediation was moderated by role (Indirect Effect for self = -9.23, other = -3.22; Interaction Effect = .34, t(303) = 3.43, p < .001). In contrast, the effect of directness on likelihood was mediated by accountability to a similar extent for judgments of oneself versus another (Indirect Effect for self = -7.15, other = -7.59; Interaction Effect = -.15; t(303) = -1.46, p = .15), indicating no moderation by role.

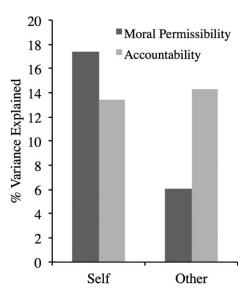


Fig. 2. Values indicate the percent variance in proposition likelihood judgments explained by the speech directness manipulation via accountability and moral permissibility, reported separately for judgments of self and other.

# 3. Study 2: Indirect speech beyond unethical propositions

In Study 1, participants judged people (both themselves and others) as more likely to make unethical propositions using indirect versus direct speech. Indirect speech was associated with people's perceptions of not only *reduced accountability* but also *increased moral permissibility* of unethical action, both of which mediated the effect of directness on likelihood judgments. Critically, moral permissibility played a larger role in mediating the effect of directness on judgments of *one's own* likelihood of making an unethical proposition, relative to judgments of *another's* likelihood of acting (see Fig. 2).

If indirect speech affects one's own likelihood of making an unethical proposition by increasing the perceived moral permissibility of the speech act, indirect speech may serve to obscure the unethical nature of an act in other contexts as well. Study 2 therefore tests whether indirect speech increases the reported likelihood of acting unethically, when indirect speech is used to *describe* an unethical behavior but is not part the behavior itself (as in the case of indecent proposals). In particular, Study 2 examines whether participants report a greater likelihood of acting unethically when the acts are described to participants using indirect versus direct speech, and whether this effect is mediated by changing perceptions of moral permissibility of the acts,<sup>3</sup> as in Study 1.

#### 3.1. Method

We tested 140 participants using Amazon Mechanical Turk (55 male;  $M_{\text{age}} = 34.3$ ,  $SD_{\text{age}} = 13.3$ ). Participants were English speakers from the United States and were paid 50 cents for their time. Twenty-two participants were removed from analysis due to failing an attention check. Study 2 followed the same logic as Study 1, using a 2 (directness: indirect vs. direct) × 2 (role: self vs. other) mixed-effects design. Again, directness was manipulated within subjects, and role was manipulated between subjects. Participants read eight scenarios describing a protagonist who acted unethically, described in morally neutral terms (e.g., glanced at someone else's test answers, and changed some of your own answers; see supplementary material for full text). The protagonist in all scenarios was either oneself or a stranger. Each participant saw four direct and four indirect items; assignment of item directness was counterbalanced. Directness was specified as follows. Each question contained a re-description of the act, using either indirect speech (e.g., "How likely would you be to do this: to check your answers") or direct speech (e.g., "to cheat on the test"). For each scenario, participants rated (a) the protagonist's (e.g., their own or another's) likelihood of making each proposition, and (b) the moral permissibility of the action. Participants made either all likelihood or all permissibility ratings first; order was counterbalanced across participants. Participants then re-read all scenarios and delivered ratings for the second measure. There was no significant effect of order on likelihood (F(1, 116) = 2.61, p = .11,  $\eta_p^2 = .02$ ) or moral permissibility (F(1, 116) = 1.41, p = .24,  $\eta_p^2 = .01$ ), so subsequent analyses collapse across order. All judgments were made using 7-point Likert scales.

#### 3.2. Results and discussion

Likelihood and moral permissibility judgments were analyzed in separate 2 (directness: indirect vs. direct)  $\times$  2 (role: self vs. other) mixed-effects ANOVAS.

#### 3.2.1. Likelihood

Similar to Study 1, participants reported a greater likelihood of unethical action when the act was described with indirect versus direct speech (main effect of directness, F(1, 116) = 4.306, p = .04,  $\eta_p^2 = .036$ ); this effect did not differ for self versus other (role × directness interaction, F(1, 116) = 2.61, p = .11,  $\eta_p^2 = .02$ ). Also, as in Study 1, participants judged that they themselves would be less likely to act unethically compared to others (main effect of role, F(1, 116) = 124.72, p < .001,  $\eta_p^2 = .52$ ).

## 3.2.2. Moral permissibility

Similar to Study 1, participants judged that unethical acts described using indirect speech were more morally permissible than those described using direct speech (main effect of directness, F(1, 116) = 26.56, p < .001,  $\eta_p^2 = .19$ ); this effect did not differ for self versus other (directness × role interaction, F(1, 116) = 0.77, p = .38,  $\eta_p^2 = .01$ ). Unlike Study 1, however, participants judged their own and others' unethical acts as similarly morally permissible (main effect of role, F(1, 116) = 0.34, p = .56,  $\eta_p^2 = .003$ ).

## 3.2.3. Relationships between measures

Mediation analyses (cf., Preacher et al., 2007) revealed that, as in Study 1, the effect of directness on likelihood was mediated by moral permissibility (Indirect Effect = -.28, t(233) = 5.0, p < .001). Critically, and as in Study 1, this mediation was moderated by role, such that indirect speech increased *one's own* likelihood of making a proposition more by increasing *moral permissibility*, compared to the analogous effect for others (Indirect Effect for self = -.32, 37% variance explained; other = -.09, 10% variance explained; Interaction Effect = -.19, t(232) = -4.08, p < .001).

In sum, people reported being more likely to engage in an unethical act when the very same act was re-described using indirect versus direct speech. These results provide a conceptual replication of Study 1 and also demonstrate that indirect speech can affect the likelihood of unethical behavior even when the speech manipulation does not apply to the behavior itself (e.g., a speech act that is an unethical proposition, as in Lee & Pinker, 2010). Also as in Study 1, the effect of directness on one's own reported likelihood of action was mediated by the perceived moral permissibility of the action.

#### 4. General discussion

The current results suggest that indirect speech increases one's own reported likelihood of unethical behavior by increasing the perceived moral permissibility of the behavior. Before we discuss the implications of these results, we offer a brief summary. In Study 1,

people reported being more likely to make indirect versus direct unethical propositions. This effect was mediated by participants' judgments of public accountability and moral permissibility. Crucially, however, moral permissibility played a significantly larger role in mediating the effect of directness on one's own versus another's likelihood of making unethical propositions. Study 2 investigated the impact of indirect speech on reported likelihood of unethical behavior, even when indirect speech was used merely to describe unethical acts. Indirect speech again increased the reported likelihood of unethical behavior, and again the effect of speech "directness" on one's own likelihood of action was mediated by perceived moral permissibility.

The current findings suggest at least two distinct functions for indirect speech use. Notably, on previous accounts (e.g., Lee & Pinker, 2010; Pinker et al., 2008), reductions in the perceived accountability for an unethical act were thought to be directly linked to the increased likelihood of performing the act. However, the current approach suggests important differences between judgments of self and other: Moral permissibility may play a greater role in affecting the likelihood of one's own versus others' actions. Furthermore, the manipulation of speech directness was shown to influence the reported likelihood of acting unethically—even when the speech manipulation was merely imposed on a re-description of the act and did not constitute part of the act itself. This finding indicates that indirect speech can impact behavior even when not explicitly used in a proposal. Again, the effect of indirect speech on the likelihood of unethical action was mediated by the perceived moral permissibility of the act. Critically, this latter effect held only when determining one's own reported likelihood of acting unethically—a relationship absent from judgments about third parties. In other words, we ourselves may be more likely to behave unethically when using indirect speech, because indirect speech changes how we see the moral status of our own behavior.

## 4.1. Reconciling the dual functions

Private and public accounts of indirect speech use are compatible at different levels of explanation (Mayr, 1982; Tinbergen, 1963). The ultimate adaptive function of indirect speech use may be to minimize the potential costs of engaging in risky behaviors with substantive potential benefits (Pinker et al., 2008). This goal could be achieved through conscious, explicit manipulation of one's public accountability, or through a motivation to preserve one's own self-image (Batson et al., 1997; DeScioli & Kurzban, 2009; Johnson & Fowler, 2011; Kurzban & Aktipis, 2007). Notably, an effective approach to presenting a credible positive image to others is simply to believe it oneself (Trivers, 2000; Von Hippel & Trivers, 2011). Thus, in everyday social interactions, the benefits of indirect speech use may be realized not through a conscious, effortful application of Machiavellian social strategies, but rather through the simple desire to act in morally permissible ways. Striving to maintain a positive view of one's own moral behavior may serve the ultimate goal of maintaining a positive public image. Therefore, indirect speech use may represent a case study in the complementary ultimate adaptive functions and proximate psychological drivers of human behavior.

# 4.2. Limitations and future directions

We report two limitations of the present research. First, although people are more willing to use indirect speech for unethical acts versus morally neutral acts (Lee & Pinker, 2010), the present research did not solicit speech acts from participants. Future research should explore whether people *use* indirect speech because of anticipated effects on moral permissibility and/or accountability. A second limitation regards the relationship between moral permissibility and likelihood of unethical action. It is not clear whether participants construed "moral permissibility" in public ("what *others* think is right") or private ("what *I* think is right") terms. Notably, however, one might expect a strong relationship between public permissibility and accountability, as measured in the present work. That permissibility, but not accountability, predicted judgments of one's own unethical action more than others' action, indicates that permissibility and accountability may track different constructs—similar perhaps to private and public permissibility. Future work should examine more closely participants' judgments of private permissibility, which may be more relevant to the goal of positive self-concept maintenance (Mazar et al., 2008), a construct we did not directly measure or manipulate.

#### 4.3. Conclusions

Indirect speech may facilitate socially risky and in some cases unethical behavior, serving to reduce one's accountability for making unethical proposals, while also casting the proposed behaviors in a more favorable moral light. Crucially, it is the latter effect on moral permissibility that predicts people's reported willingness to behave unethically. In sum, the motorist who bribes the police officer with winks and nudges may do so not only to avoid public punishment but also to maintain the sense that his actions are morally permissible by his own lights.

# Acknowledgments

Many thanks to Steven Pinker, Aaron Kay, and Adam Waytz for comments on a previous draft of this manuscript and Delphine Courvoisier for statistical advice. This project was made possible by funding from the John Templeton Foundation and the Alfred P. Sloan Foundation.

#### **Notes**

- 1. Block order information was not saved for this study.
- 2. Likelihood, permissibility, and accountability judgments followed distributions that were not significantly skewed (All 95% CIs contain 0) but were significantly platy-kurtic (likelihood = -.83, permissibility = -.6, accountability = -.69; all absolute

- 95% CIs > 0), leading to violations of normality (All Shapiro–Wilks > .9, p < .01), albeit within a conventionally acceptable range for regression (kurtosis  $\pm$  1; e.g., Muthén & Kaplan, 1985). Permissibility and accountability judgments were collinear (VIF = 1.35), but within an acceptable range (VIF < 10; e.g., Hair, Anderson, Tatham, & Black, 1995; Neter, Wasserman, & Kutner, 1989).
- 3. Separate data collected using the same stimuli as Study 2 revealed a marginal effect of directness on likelihood, a marginal effect on accountability, and no significant relationship between accountability and likelihood, for self/other judgments. See supplementary Study 2.
- 4. Likelihood judgments followed a significantly platykurtic (-.97), but not skewed (.14) distribution, while moral permissibility judgments were positively skewed (.69), but had a normal level of kurtosis (.42). As in Study 1, all judgments followed distributions within acceptable ranges for regressions (e.g., Muthén & Kaplan, 1985).

#### References

- Aronson, E. (1969). The theory of cognitive dissonance: A current perspective. *Advances in Experimental Social Psychology*, 4, 1–34.
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3(3), 193–209.
- Batson, C. D., Kobrynowicz, D., Dinnerstein, J. L., Kampf, H. C., & Wilson, A. D. (1997). In a very different voice: Unmasking moral hypocrisy. *Journal of Personality and Social Psychology*, 72(6), 1335.
- Bonnefon, J. F., Feeney, A., & De Neys, W. (2011). The risk of polite misunderstandings. *Current Directions in Psychological Science*, 20(5), 321–324.
- Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage* (Vol. 4). Cambridge, England: Cambridge University Press.
- Bryan, C. J., Walton, G. M., Rogers, T., & Dweck, C. S. (2011). Motivating voter turnout by invoking the self. *Proceedings of the National Academy of Sciences*, 108(31), 12653–12656.
- Dana, J., Weber, R. A., & Kuang, J. X. (2007). Exploiting moral wiggle room: Experiments demonstrating an illusory preference for fairness. *Economic Theory*, *33*(1), 67–80.
- DeScioli, P., & Kurzban, R. (2009). Mysteries of morality. Cognition, 112(2), 281–299.
- Diener, E., Dineen, J., Endresen, K., Beaman, A. L., & Fraser, S. C. (1975). Effects of altered responsibility, cognitive set, and modeling on physical aggression and deindividuation. *Journal of Personality and Social Psychology*, *31*, 328–337.
- Epley, N., & Dunning, D. (2000). Feeling "holier than thou": Are self-serving assessments produced by errors in self-or social prediction? *Journal of Personality and Social Psychology*, 79(6), 861.
- Fausey, C. M., & Boroditsky, L. (2011). Who dunnit? Cross-linguistic differences in eye-witness memory. Psychonomic Bulletin & Review, 18(1), 150–157.
- Grice, H. P. (1975). Logic and conversation. In P. Cole and J. Morgan (Eds.), *Studies in syntax and semantics III: Speech acts* (pp. 183–198). New York: Academic Press.
- Hair Jr., J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis* (3rd ed.). New York: Macmillan.
- Horn, L. R. (2003). Implicature. In L. R. Horn & G. Ward (Eds.), *Handbook of pragmatics* (pp. 3–28). Malden, MA: Blackwell.

- Janoff-Bulman, R. (1989). The benefits of illusions, the threat of disillusionment, and the limitations of inaccuracy. *Journal of Social and Clinical Psychology*, 8(2), 158–175.
- Johnson, D. D., & Fowler, J. H. (2011). The evolution of overconfidence. Nature, 477(7364), 317-320.
- Jordan, A. H., & Monin, B. (2008). From sucker to saint: Moralization in response to self-threat. *Psychological Science*, 19(8), 809–815.
- Kurzban, R., & Aktipis, C. A. (2007). Modularity and the social mind: Are psychologists too self-ish? *Personality and Social Psychology Review*, 11(2), 131–149.
- Lakoff, R. (1973). The logic of politeness; or minding your P's and Q's. In C. Colum, T. C. Smith-Stark, & A. Weiser (Eds.), *Papers from the ninth regional meeting of the Chicago Linguistics Society* (pp. 292–305). Chicago, IL: Chicago Linguistics Society.
- Lee, J. J., & Pinker, S. (2010). Rationales for indirect speech: The theory of the strategic speaker. *Psychological Review*, 117(3), 785.
- Loftus, E. F., & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning and Verbal Behavior*, *13*(5), 585–589.
- Mayr, E. (1982). The growth of biological thought: Diversity, evolution, and inheritance. Cambridge, MA: Harvard University.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6), 633–644.
- Monin, B., & Miller, D. T. (2001). Moral credentials and the expression of prejudice. *Journal of Personality and Social Psychology*, 81(1), 33.
- Muthén, B., & Kaplan, D. (1985). A comparison of methodologies for the factor analysis of non-normal likert variables. *British Journal of Mathematical and Statistical Psychology*, 38(1), 171–189.
- likert variables. British Journal of Mathematical and Statistical Psychology, 38(1), 171–189.

  Neter, J., Wasserman, W., & Kutner, M. H. (1989). Applied linear regression models. Homewood, IL: Irwin.
- Paharia, N., Kassam, K. S., Greene, J. D., & Bazerman, M. H. (2009). Dirty work, clean hands: The moral psychology of indirect agency. *Organizational Behavior and Human Decision Processes*, 109(2), 134–141.
- Pinker, S., Nowak, M. A., & Lee, J. J. (2008). The logic of indirect speech. *Proceedings of the National Academy of Sciences*, 105(3), 833–838.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185–227.
- Sachdeva, S., Iliev, R., & Medin, D. L. (2009). Sinning saints and saintly sinners: The paradox of moral self-regulation. *Psychological Science*, 20(4), 523–528.
- Sanderson, C. A., & Darley, J. M. (2002). "I am moral, but you are deterred": Differential attributions about why people obey the law. *Journal of Applied Social Psychology*, 32(2), 375–405.
- Shu, L. L., & Gino, F. (2012). Sweeping dishonesty under the rug: How unethical actions lead to forgetting of moral rules. *Journal of Personality and Social Psychology*, 102(6), 1164.
- Snyder, M. L., Kleck, R. E., Strenta, A., & Mentzer, S. J. (1979). Avoidance of the handicapped: An attributional ambiguity analysis. *Journal of Personality and Social Psychology*, 37(12), 2297.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, *103*(2), 193.
- Tenbrunsel, A. E., & Messick, D. M. (2004). Ethical fading: The role of self-deception in unethical behavior. *Social Justice Research*, 17(2), 223–236.
- Tinbergen, N. (1963). On aims and methods of ethology. Zeitschrift für Tierpsychologie, 20(4), 410-433.
- Trivers, R. (2000). The elements of a scientific theory of self-deception. *Annals of the New York Academy of Sciences*, 907(1), 114–131.
- Von Hippel, W., & Trivers, R. (2011). The evolution and psychology of self-deception. *Behavioral and Brain Sciences*, 34(1), 1.

# **Supporting Information**

Additional Supporting Information may be found in the online version of this article:

**Supplementary Study 1:** Reduced accountability for self and other.

**Supplementary Study 2:** Predicting likelihood of unethical action from accountability.

Study 1: Scenarios and measures.

Study 2: Scenarios and measures.

Supplementary Study 1: Scenarios and measures.

Supplementary Study 2: Scenarios and measures.