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"I Can't Lie to Your Face": Minimal Face-to-Face Interaction

Promotes Honesty

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Abstract

Scholars have noted that face-to-face (FTF) interaction promotes honesty because it provides opportunities for conversation in which parties exchange information and build rapport. However, it is unclear whether FTF interaction promotes honesty even in the absence of opportunities for back-and-forth conversation. We hypothesized a *minimal interaction effect* whereby FTF interaction promotes honesty by increasing potential deceivers' consideration of their own moral-interest. Using a modified version of the deception game (Gneezy, 2005), we held constant information exchange and manipulated whether it was delivered via a restricted FTF interaction or anonymously. In support of our hypothesis, the minimal FTF interaction increased honesty relative to an anonymous interaction. This effect was mediated by the greater activation of potential deceivers' moral-interest under FTF interaction than under anonymity. We also ruled out alternate accounts involving interpersonal liking, expected counterpart trust, and retaliation fear as honesty-promoting mechanisms.

Keywords: deception, communication medium, anonymity, moral disengagement

"I Can't Lie to Your Face":

Minimal Face-to-Face Interaction Promotes Honesty

Ample evidence suggests that face-to-face (FTF) interaction promotes a host of social benefits relative to anonymous interactions, including increased honesty (Citera, Bearegard, & Mitsyua, 2005; Rockmann & Northcraft, 2008; Valley, Moag, & Bazerman, 1998). The honesty-promoting quality of FTF interaction has primarily been explained as a result of its communication richness relative to other forms of interaction (e.g., Swaab, Galinsky, Medvec, & Diermeier, 2012). However, others have argued that FTF interaction might activate more moral concerns than do anonymous communications (e.g., Rockmann & Northcraft, 2008). Though evidence has supported the former account of how FTF interaction promotes honesty, to our knowledge no research to date has provided an adequate test of the latter account of FTF's honesty-promoting virtues. Reliance on paradigms involving unrestricted back-and-forth communication render it difficult to determine whether simply delivering information to a potential deception target via FTF interaction is sufficient to promote honesty by attuning decision makers to their moral-interest as opposed to their self-interest. To test whether a minimal FTF interaction promotes honesty via the activation of moral-interest, we use a research paradigm that omits the back-and-forth conversation typical of FTF interaction. In so doing, we sought to understand the mechanism by which FTF interaction promotes honesty.

The communication richness account of FTF interaction holds that the mere presence of visual and auditory cues increases the rate at which critical social information is transmitted between parties (Walther, 1992, 1994), which improves coordination (Turnbull, Strickland, & Shaver, 1976) and reduces the likelihood of miscommunication (Kruger, Epley, Parker, & Ng, 2005). These factors are critical for the development of rapport (i.e., mutual liking and positive

feelings towards others), each of which should enhance cooperation and reduce the likelihood of

deception (Drolet & Morris, 2000; Morris, Nadler, Kurtzberg, & Thompson, 2002; Rockmann &

Northcraft, 2008). In addition to promoting rapport, FTF interaction also allows for others to

observe the deceiver, which may temper individuals' tendency to deceive due to concerns about

their leakage of deception-signaling nonverbal cues in the face of persistent questioning (Buller

& Burgoon, 1996; Valley, Moag, & Bazerman, 1998). Given that prior research comparing

deception in FTF to other forms of interaction has used contexts involving extended back-and-

forth conversations such as negotiations and group meetings, these findings are unsurprising. By

providing more opportunities to ask questions and to share information (Dennis, Fuller, &

Valacich, 2008), FTF interactions facilitate rapport development and enhance concerns about

deceptive information being scrutinized.

Given that extended FTF interaction may both enhance opportunities for rapport-building

and increase concerns about being distrusted, it is unclear whether the absence of an opportunity

for verbal dialogue should necessarily influence the likelihood of deception. Are people less

likely to deceive others in FTF interactions—even in the absence of conversation? The goal of

the current research is to examine whether FTF interaction promotes honesty even in the most

minimal of FTF interactions. We hypothesized a *minimal interaction effect*, whereby FTF

interaction promotes honesty by comparing deception rates under anonymity to deception rates

in an impoverished form of FTF interaction with minimal communication—all the while holding

constant verbal content across communication mediums.

We suggest that even in the absence of conversation, FTF interaction curtails deception

by encouraging individuals to consider their own moral-interest in favor of self-interest. This

may be the case for two reasons. First, visual anonymity promotes the depersonalization of

others (Coleman, Paternite, & Sherman, 1999; Lea, Spears, & de Groot, 2001; Postmes & Spears, 2002; Moore, Kurtzberg, Thompson, & Morris, 1999), which is a primary route to moral disengagement (Bandura, 1999). Consistent with this account, anonymity promotes a variety of anti-social behaviors (Diener, Fraser, Beaman, & Kelem, 1976; Festinger, Pepitone, & Newcomb, 1952; Milgram, 1974; Zimbardo, 1969).

A second possibility is that other features of live FTF interaction may attune people to social norms dictating that they behave ethically, independently of visual access to others (cf. Schweitzer, Brodt, & Croson, 2002). In particular, it may be the case that people anticipate feeling worse about lying when speaking in the physical presence of a target as opposed to deceiving the target through some other medium—even when they have visual access to the target. For example, there is a widely held lay perception that liars can be differentiated from truth tellers by their gaze aversion (Rotenberg & Sullivan, 2003; Vrij & Granhag, 2007). Though gaze aversion is not a reliable cue to deception (DePaulo et al., 2003), it is elicited by feelings of shame (Keltner & Harker, 1998), so faulty lay theories about gaze as a valid cue to deception may reflect individuals' own anticipation of shame when verbally deceiving a target in his or her presence. Such anticipatory shame may discourage individuals from moral disengagement.

Though it is unclear which of these accounts may explain deception in FTF interactions relative to anonymity, they both suggest that even a minimal FTF interaction should be sufficient to limit the moral disengagement that often precedes deception. We therefore predict that FTF interaction should curtail deception due to its ability to promote a focus on moralistic considerations. Whereas mechanisms like perceived counterpart distrust and rapport may explain reduced deception in situations with extensive opportunities for conversation, we perceived them

as unlikely to promote honesty in minimal FTF interactions. Instead, we expected FTF

interaction to promote honesty via the activation of individuals' moral-interest.

Method

       We adapted the deception game developed by Gneezy (2005) and modified by Cohen,

Gunia, Kim-Jun, and Murnighan (2009). This dyadic paradigm involves a single exchange of

information where a sender who is knowingly advantaged by an information asymmetry

communicates a minimal amount of information, either deceptive or truthful, to a receiver.

       Participants. We recruited 187 individuals from a participant pool at the University of

California, Berkeley. One participant failed to complete a pre-game information exchange form

and six failed to complete a post-game questionnaire, so these participants are not considered in

our analyses. Among the remaining 180 participants, 49.4% were male.

       Procedure. After arriving at the experimental laboratory, participants were informed that

they would engage in a one-shot strategic game with another research participant in an adjacent

room and that their payment would depend entirely on the choices made by both players. To

reduce participants' concerns about being subject to retaliatory actions should they deceive their

counterpart, the experimenter emphasized that monetary payouts would occur at the end of each

session in private. After receiving instructions and exchanging information about themselves

with their counterpart, participants played the game by deciding whether to send the counterpart

a truthful or deceptive message.

       Interaction medium manipulation. We randomly assigned participants to one of two

interaction medium conditions. As an initial step, participants exchanged minimal demographic

information (age and gender). In so doing, they were familiarized with the type of interaction

they could expect when playing the strategic game. Unbeknownst to participants, their

counterpart was nonexistent, as they either received pre-filled information sheets delivered from another room (anonymous condition) or exchanged information sheets with a confederate who came from an adjacent room and met them in a hallway (FTF condition).[1] We counterbalanced whether participants received an information sheet from a male or a female who was twenty-one years old.

In the anonymous interaction condition, participants never saw their counterpart, as an experimenter delivered their information sheets to the adjacent room and returned with pre-filled information sheets. Once the game began, they circled their message of choice and an experimenter ostensibly delivered the message to their counterpart.

In the FTF interaction condition, participants privately met their counterpart in the hallway. Confederates were instructed to adopt a neutral demeanor and remain silent while exchanging information sheets. These instructions assured that there was no actual conversation between participants and confederates. When it came time to play the game, participants were instructed to once again privately meet their counterpart in the hallway and read their message of choice aloud verbatim.

Honesty. We operationalized honesty as participants' choice between selecting a truthful or deceptive message. Participants knew about the following payment options:

>*Option A: $10 to you and $12 to the other player*
>
>*Option B: $12 to you and $10 to the other player*

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[1] We used four confederates (demographic composition: one female Asian, one female Caucasian, one male Asian, and one male Caucasian) who were unaware of experimental hypotheses. No confederates reported recognizing their counterpart. To maintain appearances, confederates were seated in a room adjacent to participants in both interaction medium conditions.

Knowing that their counterpart had no knowledge of the payments associated with each option, participants selected from the following messages:

Option A will earn you more money than Option B [truthful option]

Option B will earn you more money than Option A [deceptive option]

Moral-interest. Participants' motives were assessed in a post-message questionnaire to reduce the possibility of leading questions influencing message selection. Notably, because payoffs in the game are ultimately driven by counterparts' choices, honesty can either be motivated by strategic concerns (i.e., reverse-psychology if a counterpart is perceived as untrusting) or moral concerns (Cohen et al., 2009; Sutter, 2009). Thus, we assessed the extent to which participants' decisions were driven by these concerns.

Consistent with Cohen et al. (2009), who found evidence that moral-interest predicts deception, we asked participants to explain their message selection and coded these explanations for self-interest versus moral-interest. Three independent coders blind to experimental hypotheses and participants' interaction conditions coded each explanation for whether it reflected strategic self-interest (coded 0; i.e., "Player 2 does not know that one person will receive more money and has no reason not to believe the message"), a combination of self-interest and moral-interest (coded 1; i.e., "$2 is not worth the lie, and if the other player does not trust me, I get paid"), or purely moral-interest (coded 2; i.e., "I don't like to lie"). The three coders' ratings were reliable ($\alpha = .98$) and thus combined into a single measure of moral-interest.

Controls. Similarly to Cohen et al. (2009), we accounted for the possibility that honesty was driven by strategic reverse-psychology as opposed to moral-interest by asking participants to indicate the degree to which they expected their counterpart to trust their message on a scale ranging from 1 (*extremely distrusting*) to 7 (*extremely trusting*). We were also concerned that

liking for one's counterpart could potentially account for honesty in the deception game, both

because it is a key element of rapport (Tickle-Degnen & Rosenthal, 1990) that could be enacted

by even a minimal FTF interaction and because the personalization of others that accompanies

FTF interaction could make counterparts more likable. Thus, we asked participants to indicate

how likable they considered their counterpart on a scale ranging from 1 (*not at all likable*) to 7

(*extremely likable*). Finally, though we attempted to remove the possibility of participants fearing

retaliation from their counterpart by emphasizing that payment options would not be known and

that final payments would be distributed in private, we still controlled for retaliation fear in case

our experimental procedure did not sufficiently reduce this concern in FTF participants.

Participants indicated how likely their counterpart would be to retaliate if they knew they had

been deceived on a scale ranging from 1 (*extremely unlikely*) to 7 (*extremely likely*).

Results. Conditional means and standard deviations are summarized in Table 1. See

Table 2 for a correlation matrix of dependent and control variables.

Deception. Participants were more honest in the FTF interaction (84%) than they were in

the anonymous interaction (65%), $\chi^2(1, N = 180) = 8.93, p = .003, \Phi = .22$.[2,3]

Moral-interest. We first analyzed post-message rationales by conducting a test to assess

whether participants' explanations reflected greater moral-interest in FTF interactions.

Consistent with our prediction, participants considered moral-interest in the FTF condition more

so than in the anonymous condition (see Table 1), $\eta_p^2 = .11$. To ensure that this effect was

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[2] When including all 187 participants in analyses, the effect of interaction medium remains significant, $\chi^2(1, N = 187) = 9.30, p = .002$. The rate of honesty in the anonymous condition is similar to that previously reported under analogous conditions (Cohen et al., 2009; Gneezy, 2005; Sutter, 2009).

[3] Because our hypothesized effects remain significant when controlling for participant and target gender (all $ps < .01$), we do not include them as factors in our analyses.

independent of expected trust, liking, and retaliation fear, we conducted a follow-up ANCOVA with these three variables included as covariates. The effect of interaction medium on moral-interest remained significant, $F(1, 175) = 14.31$, $p < .001$.

   Mediation analyses. We conducted one set of mediation analyses to examine whether moral-interest mediated higher rates of honesty under FTF interaction and another set to examine whether such mediation is robust to alternative explanations involving perceived counterpart trust, liking for one's counterpart, and retaliation fear. As illustrated by Figure 1, the main effect of interaction medium was no longer significant when controlling for the influence of moral-interest ($p = .15$). To test for mediation, we used a mediation procedure outlined by MacKinnon and Dwyer (1993) for estimating the indirect effects associated with binary response variables. A bootstrap procedure with 10,000 replications revealed a significant indirect effect of moral-interest, 95% $CI = [.07, .22]$. Furthermore, in a separate mediation analysis, the indirect effect of moral-interest remained significant when controlling for the influence of expected distrust, liking of counterpart, and retaliation fear, 95% $CI = [.05, .20]$. Taken together, these findings suggest that the activation of moral-interest mediated the link between interaction medium and honesty.

General Discussion

   Though prior research has established that FTF interactions involving back-and-forth conversation promote honesty, the current research is to our knowledge the first to examine whether minimal FTF interaction promotes honesty. Whereas back-and-forth conversations enhance the ability of FTF interaction to promote honesty via the development of rapport and individuals' concerns about their lies being scrutinized, we hypothesized that even in brief interactions involving a single one-sided communication, FTF interaction promotes honesty. While our data cannot assert whether visual anonymity or some other aspect of FTF

communication is responsible for driving the effect, we find that even in an impoverished interaction absent opportunities for a back-and-forth exchange of information, people are less likely to deceive others in FTF than anonymous interactions. Furthermore, we provide evidence that this effect is driven by potential deceivers' increased focus on their own moral-interest in FTF interaction. Scholars have touted the benefits of FTF interactions due to their ability to enhance opportunities for rapport-building (e.g., Drolet & Morris, 2000; Moore et al., 1999; Morris et al., 2002) and their tendency to raise concerns about being scrutinized (e.g., Valley et al., 1998), but we suggest that even the briefest of FTF interactions may promote honesty due to their activation of moral-interest.

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Table 1

Conditional means and standard deviations

| | FTF | | Anonymous | | | |
Variable	Mean	SD	Mean	SD	t(1, 178)	
Honesty	0.84	0.37	0.65	0.48	----	
Moral-interest	1.47	0.53	1.07	0.63	4.58	p < .001
Expected trust	5.43	1.40	5.07	1.53	1.41	p = .16
Liking of counterpart	5.35	1.02	4.67	1.17	4.08	p < .001
Retaliation fear	3.47	1.84	3.98	1.57	2.02	p = .05

Table 2

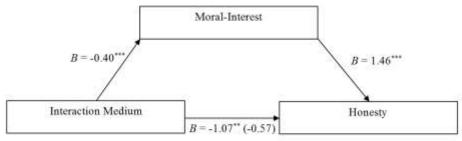*Means, standard deviations, and correlations between variables*

Variable	1	2	3	4	5
1. Honesty	---				
2. Moral-interest	.38***	---			
3. Expected trust	.01	.11	---		
4. Liking of counterpart	.06	.17*	.46***	---	
5. Retaliation Fear	-.22**	-.18*	-.15*	-.05	---

Note: Honesty = 1 if truthful message was sent, 0 if deceptive message was sent.

*** $p < .001$. ** $p < .01$. * $p < .05$.

Figure Captions

Figure 1. Moral-interest mediates the effect of interaction medium on honesty.

Note: Interaction Medium = 0 if face-to-face, 1 if anonymous. Honesty = 1 if truthful message was sent, 0 if deceptive message was sent.
*** $p < .001$. ** $p < .01$

1