The Social Psychology of Corruption

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Chapter 4

The Look Over Your Shoulder:

Corruption and Cheating Decreases in the Presence of Another Person

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> "No one believes justice to be a good when it is kept private, since, wherever either person thinks he can do injustice with impunity, he does it."
>
> - Plato, The Republic 360c

Remember when you were a child and faced a tempting situation, like stealing a piece of candy that you were not allowed to eat. Picture it lying on the shelf, within reach! What was the first thing you did when deciding whether to take it or not? You likely looked over your shoulder to inspect the social environment for cues of other people being present. Seeing another person that is equipped with the authority to punish your misbehaviour – like a parent – probably greatly reduced the chances of you taking the candy. Yet, what if the other person has no such means to sanction but is simply present?

To find an answer to this question we turn to behavioural ethics, the branch of experimental research on human behaviour in ethical dilemmas – situations in which behaving ethically clashes with immanent self-interest (Eisenberger & Masterson, 1983; Gino et al., 2011; Shalvi et al., 2016). Thanks to recent methodological advances, thousands of participants around the world have been placed in such trade-off situations to find out when and how people break ethical (and legal) rules (Ariely, 2012). One of the main conclusions stemming from extensive research is that many people cheat but only to the extent that they can justify it – to themselves but also to others (Shalvi, Gino, Barkan, & Ayal, 2015). Although these studies underline the importance of "others", the overwhelming majority have studied individuals in isolation and if any, only used non-human cues of observation such as cameras or watching eyes (Cai, Huang, Wu, & Kou, 2015).

To fill that gap, we conducted two experiments to explore three main questions: First and most basically, do people act more honestly in the actual presence of another person? The second question targets the relationship towards that other: does unethical behaviour increase

or decrease when a friend versus a stranger is watching you? Third, we study the effect of different payoff-structures for that other person: are participants more willing to break ethical rules if others co-benefit from it? Put differently, if the other person is not a mere observer but a potential "partner in crime", does the level of unethical behaviour increase? In the following sections, we outline the theoretical underpinnings for these research questions and derive specific hypotheses.

How others impact (unethical) behaviour

Let us briefly go back to the initial example: one main explanation why a child might forgo the opportunity to take the candy when somebody is around lies in the other person's ability to sanction and punish. More authority and means to sanction have a larger deterrent effect on unethical behaviour (Becker, 1968). Hence, in the most extreme case, the other person discourages unethical behaviour directly through social control (Gottfredson & Hirschi, 1990). With a threat of punishment lurking in the back of the mind, the likelihood of violating an ethical norm drops significantly. For example, a parent in visible sight likely deters the tempted child to take the candy in fear of being scolded. This direct deterrent influence of potential punishment by others has been theoretically outlined (Treviño, 1986) and empirically illustrated: for example, people cheat less frequently if their behaviour is traceable and punishable by others (Mazar et al., 2008b), like a supervisor (Pascual-Ezama, Prelec, & Dunfield, 2013). Hence, in the presence of others, who might (formally) sanction a wrong-doer, ethical misconduct decreases.

Would the presence of another person who has neither the means nor the authority to punish suffice to activate psychological mechanisms that curb unethical behaviour? One reason why it indeed might be enough for another person to simply "be there" lies in the immense importance that people generally ascribe to what others think of them (i.e. their

reputation). People usually want to appear in a favourable light towards others (Goffman, 1959) and abide to the respective social norms (Reno et al., 1993). Evolutionarily, this mutual monitoring of behaviour in a group has assured cooperation in societies, especially when controlling institutions, are not available or unable to be effective (Alexander, 1987; D'Arms, 2000; Haidt, 2007).

Empirical findings show that reputational concerns can propel cooperation (Fehr & Fischbacher, 2003; Van Vugt, Roberts & Hardy, 2007) and enforce social and moral norms (Haidt, 2003; McElreath & Boyd, 2008; Wu, Balliet, & Van Lange, 2016). They also impact unethical behaviour: people cheat less when they stand to lose their reputation (Ayal & Gino, 2011; Gino, Gu, & Zhong, 2009) and conversely show a heightened willingness to engage in corruption when others do so as well (Bicchieri & Xiao, 2009; Köbis et al., 2015). The concern for one's reputation and the salience of social norms increase when people's public self-awareness is activated – that is, when they feel observed by others (Batson et al., 1999; Wicklund, 1975). Previous lab research has triggered public self-awareness in multiple ways. Some studies have used moral reminders like prompts stating "Don't be a cheater" (Shu, Gino, & Bazerman, 2011), while others have asked for personal identification of the participants to make them more aware of their identity (Diener, Fraser, Beaman, & Kelem, 1976). More recently, studies have investigated whether the mere image of eyes suffices to illicit such norm adherence. Although some studies suggested that cues of watching eyes can reduce selfish behaviour (Haley & Fessler, 2005; Manesi, Van Lange, & Pollet, 2016; Nettle et al., 2013), research looking specifically at unethical behaviour shows no attenuating effect of such artificial social cues (Cai et al., 2015).

Hence, much of the previous research has made assumptions about these social factors of unethical behaviour without studying the actual presence of another person. Conversely, whereas the presence of others has been extensively investigated in the context of

performance – e.g. social facilitation (Guerin, 1993) – it has not been investigated in the context of morality, ethics, and cheating. Yet, in everyday life situations that allow the crossing of moral boundaries we frequently are observed by others who are unlikely to punish us (think for example of free-riding in public transport). How does this influence our ethical behaviour? We put this assertion to the test and studied whether the presence of another person suffices to curb unethical behaviour. Although no formal means of regulation exist, we argue that the importance of appearing moral towards others will lead to lower levels of unethical behaviour. Hence our first hypothesis states:

H1: People engage in more unethical behaviour when being alone compared to when another person is present.

Study 4.1

Besides testing whether the presence of another person influences unethical behaviour we also sought to examine whether the quality of the relationship with that other person matters for the decision to breach ethical norms. Extending previous research (Kroher & Wolbring, 2015), we manipulated the degree of proximity between the participant and the passive observer – either being a stranger like in previous research or a close friend. If we find that people are more likely to cheat in the presence of a close friend compared to a stranger it would indicate that being in the presence of a close other leads to more disinhibition (Prentice-Dunn & Rogers, 1982), and thus more unethical behaviour. However, if participants are more willing to engage in corruption in the presence of a stranger, it would indicate that people could feel more pressure to uphold a positive image towards someone they actually know. This would confirm previous work that shows that people care more about their reputation toward in-group members than strangers (Balliet et al., 2014). Acting unethically in

the presence of a close other than a stranger poses a bigger potential reputational threat. Hence, we formulate two competing hypotheses:

H2a: People in the presence of a close other engage in more unethical behaviour than people in the presence of an unknown other.

H2b: People in the presence of a close other engage in less unethical behaviour than people in the presence of an unknown other.

In Study 4.1, we examined corruption as a form of unethical behaviour and tested whether people are less likely to engage in corruption if another person is present in the cubicle. We further examined whether close others have a stronger corruption-curbing effect than strangers.

Method

Participants and design. In total, 96 participants (M_{age} = 22.60, SD_{age} = 2.55; 64.1% = female) took part in the study conducted in a psychology laboratory in the Netherlands. Demographic information for seven participants was not recorded and coded as missing. Participants either received course credit or money (€2) as a compensation for participation. Our faculty's ethical review board (VCWE) approved all studies reported in this manuscript. Thus, in both studies, prior to completing any scales, participants signed a written informed consent form and upon completion of the study, were debriefed and thanked for their participation.

Procedure. After giving informed consent, participants first answered several questions unrelated to the purpose of this study and then played the corruption game in one of three experimental conditions (outlined in more detail below). Study 4.1 manipulated the presence of another person with three conditions in the following way. First, in the Alone condition (*n* = 31) participants played the corruption game while being alone in a research cubicle. Second,

in the Close Other condition (n = 35), participants were instructed to bring a close same-sex friend with them to the lab. Together with that friend, participants were placed in the cubicle and played the corruption game. Third, in the Stranger condition (n = 30), participants were randomly paired with another participant, who they did not know prior to the experiment. Instructions on the computer screen explained the upcoming task. The data was collected within a two-week data collection window in which we aimed for the maximum cell size possible.

Measures

Corruption Game. In order to assess corrupt behaviour, we used a recently developed corruption game (Köbis et al., 2015; Köbis, van Prooijen, et al., 2017). The basic structure of the game is a three-player normal form auction game in which two competing players are bidding for a total good (g) of credits administered by the third player (see Figure 3.1). Each round both bidding players are endowed with the same budget (b). From this budget (b) both players make competing bids (k) in an auction fashion for the good (g). The action space for each player is restricted to six options ranging from bidding nothing (k = 0) to allocating everything (k = b). Credits not allocated in a bid are kept by the player. Hence, the credit after bidding a is b-k. The single highest bid (b1 vs. b2) wins the good (g). If both players offer the same bid, the good is split equally between the two, hence if b1 = b2 → g/2 for both players. All possible outcomes of this bidding process are shown in a payoff matrix (see Table 3.1). As can be seen in the pay-off matrix, bidding the maximum of k = b is the dominant strategy of the game, constituting the strict Nash equilibrium. That means, that for both players allocating their entire endowment in the bidding yields the best payoff independent on the bid of the other player.

To transform the fair auction into a model of corruption we include asymmetry among the players. Namely, an extra endowment of (e) is given to one of the players, who therefore becomes the potentially corrupt player (PCP). This player can in turn use this money to directly transfer it to the Institution Player to circumvent the even splitting of the good with the other bidding player who does not have this option (= the Fair Player). The Potentially Corrupt Player can thus decide to initiate a corrupt transaction with the Institution Player resulting in negative externalities for the Fair Player.

The participant took the role of the Potentially Corrupt Player and the Fair Player was simulated by a computer program to act strictly rational to reduce complexity. We addressed social desirability concerns and increased comprehensibility by translating the basic structure of the game into a real-life economic framework, for more details see (Köbis et al., 2015). We set up two test questions using example cases to ensure that participants sufficiently understood the rules of the game. Giving a wrong answer to the test questions resulted in the display of an explanation. The vast majority of the participants (> 88.0%) answered both questions correctly – independent of the condition they were in (p =.60).

After making sure that participants understood the logic of the game, they faced the decision whether to bribe the Institution Player and thus to gain an advantage over the Fair Player in the game. The only difference between the conditions was whether they made that decision (a) alone in the cubicle, (b) in the presence of a stranger or (c) in the presence of a well-known friend.

Demographics. After the game, we assessed standard demographics of age and gender.

Results

In the first step of the analysis, we tested whether the level of corruption differed between the Alone and both "presence of another person" conditions. We conducted a binary logistic regression analysis with a dichotomous dummy variable (Alone = 0 vs. presence of another person = 1) as a predictor and the dichotomous decision whether to bribe a public official in the corruption game as a dependent variable. The analysis revealed significant group differences (B = 1.28, *Wald* = 4.80, p = .028, *Exp(B)* = 3.25), indicating that the odds of bribing were 3.25 times higher when the participants faced this decision alone compared to when another person was with them in the cubicle. This result confirms the first hypothesis.

We then tested the second hypothesis whether the degree of closeness of the other person had an additional effect on the level of bribery by conducting another binary logistic regression analysis, this time with the three-stepped independent variable (Alone vs. Close Other vs. Stranger) as a predictor. The analysis revealed a significant group difference between the Alone and Close Other Condition (B = 1.24, *Wald* = 4.32, p = .038, *Exp(B)* = 3.46; see Table 4.2). The odds of bribery were 3.46 times higher in the Alone condition compared to the Close Other condition. We also find a marginally significant difference between the Alone and the Stranger condition (B = 1.10, *Wald* = 3.12, p = .075, *Exp(B)* = 3.01), indicating that the odds of bribery were 3.01 times higher when participants were alone than when an unknown other was present in the cubicle. Interestingly, the binary logistic regression reveals no differences between the two "presence of another person" conditions (*Exp(B)* = 1.15, p = .78). Hence, we find no support for Hypothesis 2a or 2b.

Table 4.2. Overview of the bribery decisions across the three treatments in Study 4.1.

	Decision			
	No Bribery		Bribery	
	N	%	*N*	%
Alone Condition	5	16.1	26	83.9
Close Other Condition	14	40.0	21	60.0
Stranger Condition	11	36.7	19	63.3

Discussion

Our results suggest that participants were more likely to engage in bribery when being alone compared to when another person was with them in the cubicle. The presence of another person reduced the frequency of bribes even though that other person had no (formal) means of sanctioning the behaviour of the participant. Interestingly, we do not find group differences between close others and strangers. This finding suggests that the presence of another person reduces bribe levels in the game independent on the relationship to the other person.

Study 4.2

In Study 4.1 the other person had no stake in the game. Would the results change if the other person stands to gain from the unethical behaviour? Such local social utility has been shown to increase cheating levels (Shalvi et al., 2016; Weisel & Shalvi, 2015), while reducing both experienced guilt (Gino et al., 2013) and perceived unethicality of cheating (Wiltermuth, 2011). We therefore hypothesized the following:

H3: Cheating levels are higher when the other person stands to gain from cheating compared to when the other person does not stand to gain from cheating.

We also improved the methodology. First, to test whether the obtained "presence of another person" effect generalizes from bribery to cheating, we used the well-established die rolling paradigm in which the participants roll a die in private and report the outcome to the experimenter (Fischbacher & Föllmi-Heusi, 2013; Shalvi et al., 2012). If participants reported to have rolled a six, they received €1.5.

We also used a confederate to take the role of the other person in the cubicle. This procedure allowed to reduce unexplained variance due to interpersonal dynamics in the lab. For example, by giving the confederate a behavioural script that prevented any communication with the participants, we can rule out that communication between participant and observer influenced the obtained results.

The third main difference to Study 4.1 lies in the payoff structure. We manipulated whether the other person stood to gain from the participants' cheating or not. In the Observer condition the behaviour of the participant did not affect the other person (= only the participant potentially gained €1.5). Yet, in the Partner in Crime condition, the other person could gain the same amount of money as the participant (= both participant and second person won €1.5). Like in Study 4.1, the Alone condition existed in which participants faced the same ethical dilemma by themselves.

Method

Participants. In total, 134 participants (M_{age} = 23.19, SD_{age} = 7.07; 61.2% female) took part in a lab study and were randomly assigned to one of the three conditions (Alone, n = 45; Observer, n = 45; Partner in Crime, n = 44). We aimed for a cell size of 45 participants per cell.

Procedure. We used the intra-university sign up system (Sona) to enable participants to enrol for the experiment. Upon arrival in the lab, participants were led to the cubicle. In the

Alone condition, participants gave informed consent and completed the tasks outlined below. In the two "presence of another person" conditions (Observer and Partner in Crime), a second person was also led to the cubicle. This second person was a female confederate. The experimenter told the participant that this experiment required a second person to be present in the cubicle for the first part of the study. The experimenter also stated that further instructions would be given on the screen. As an explanation for the presence of the additional person in the cubicle the same instruction text as in Study 4.1 was used.

After giving informed consent, the experiment began with the instructions to die-rolling task. In the Alone and Observer condition the instructions read "In the following task you get the chance to **win an extra €1,5 for you**". In the Partner in Crime condition, the instructions stated: "in the following task you get the chance to **win an extra €1,5 for you and the second person in the room**". In all three conditions, instructions informed participants that they would be forwarded to a website (random.org) on which they would throw a virtual die to determine whether they win the €1.5. After rolling the die participants reported the number they rolled to the experimenter and were paid out in case they reported a six. In the two "presence of another person" conditions the other person left the cubicle. By themselves, the participants then filled in a short questionnaire entailing post-game questions and demographic information (for more details see information on the online repository).

Measures

Die-Rolling Paradigm. We used a modified version of the standard die-rolling paradigm (Fischbacher & Föllmi-Heusi, 2013). In this paradigm, a person rolls a six-sided die in private. Rolling a six resulted in an extra win of 1.5€. Since the die roll happened outside of the view of the experimenter, participants could misreport the number they rolled. The modifications to the original version of the die rolling paradigm were the following: instead of rolling the die under a cup, participants rolled a virtual die, similar to a previous study

(Kocher, Schudy, & Spantig, 2016). Also, the instructions informed participants that they would be forwarded to an external website (www.random.org) on which they could roll the die by clicking on a "throw die" button and report the rolled number to the experimenter. The rules clearly instructed participants to only roll the die once. The program recorded the number of times they rolled the die.

Demographics. We assessed standard demographics of age, gender, education level, employment status and country of birth.

Results

First, we tested whether participants appeared to have cheated in the die rolling paradigm by comparing the expected distribution of reported numbers with the observed distribution of reported numbers. If participants reported the number they rolled honestly each number would be reported with a likelihood of 16.66% (black bar graph in Figure 4.1). A χ^2-test reveals that the distribution of reported numbers significantly deviates from this expected distribution (χ^2 (5, N = 134) = 13.50, p =.019). Participants reported "6" more often than would be expected by chance – an indication of cheating (see grey bar graphs in Figure 4.1).

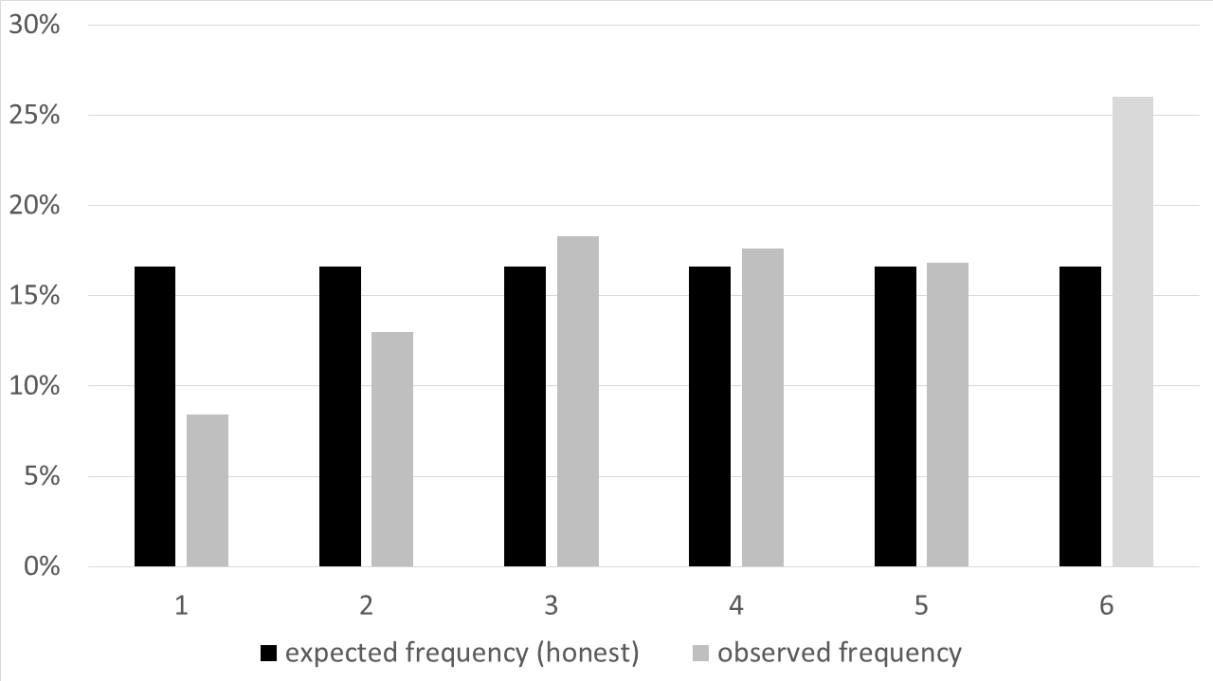

Figure 4.1. Expected and reported die rolls across all three conditions

Note. The grey bars indicate the expected die rolls if participants report the numbers honestly, the green bar shows the actual reported numbers.

As a next step, we analysed whether the degree of cheating differed between the experimental conditions by conducting separate χ^2-test of the distribution of reported numbers for each condition. In the Alone condition, the χ^2 test reveals significant deviations from the expected distribution (χ^2 (5, N = 45) = 17.14, p = .004; black bars in Figure 4.2), which suggests that participants cheated more than could be expected on the basis of chance alone. In the two "presence of another person" conditions, the observed distributions do not differ significantly from the expected distribution (χ^2 < 7.66, *ps* > .17; dark grey and striped bars in Figure 4.2). This finding suggests that participants on average did not cheat in these conditions.

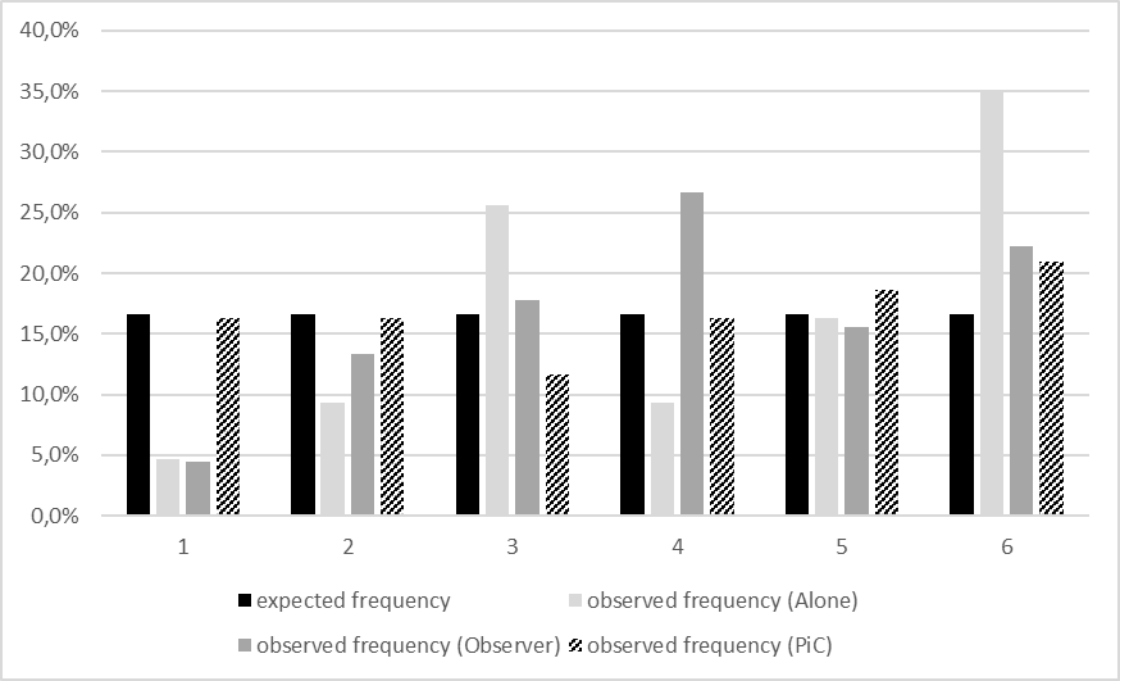

Figure 4.2. Expected die rolls and reported die rolls, separated for all three conditions.

Note. The expected frequency of each die roll is marked with grey bars. The observed frequency of reported die rolls is marked in blue (Alone condition), purple (Observer condition) and yellow (Partner in Crime condition).

We then compared the level of rule bending first between the Alone and the two "presence of another person" conditions. Rule-bending was operationalized by analysing the number of times the participants rolled the die. If they rolled the die more than once – thus more than allowed by the rules – and if they then reported a six we interpreted their behaviour as cheating through rule bending. That is, participants rolled the die until they rolled a six.

We created a binary variable in which this form of cheating was recorded (0 = no cheating through rule bending; 1 = cheating through rule bending). Similar to Study 4.1, we conducted a binary logistic regression analysis, in which both "presence of another person" conditions were collapsed and compared to the Alone condition. The analysis revealed a significant difference (B = 1.52, *Wald* = 5.62, *Exp (B)* =4.45, p = .018). That means, that the odds of cheating by rule bending were 4.45 times higher in the Alone condition compared to the two "presence of another person" conditions. This again supports the first hypothesis.

Testing the third hypothesis, we ran a second logistic regression analysis in which we compared the two "presence of another person" conditions. We find no significant difference between the two presence of another conditions (p = .98), which indicates that Hypothesis 3 is not supported. Hence, we find that cheating through rule bending is significantly more likely to occur when alone in the cubicle compared to either of the two conditions in which another person is co-present in the lab, independent on the payoff scheme for the second person.

General Discussion

Our findings suggest that looking over your shoulder and seeing another person curbs the willingness to bribe and cheat. The physical presence of another person, who importantly had no means of sanctioning, attenuated unethical behaviour. This effect occurred across two studies using different behavioural paradigms. Introducing the actual presence of another person to the rapidly growing stream of behavioural ethics research, our experiments provide some of the first empirical insights into the *real* social aspects of dishonesty. Importantly, others curtailed unethical behaviour independent of the level of proximity (close other vs. stranger) or local social utility (other benefitting or not). With most of our behaviour occurring in the presence of others and contrarily the overwhelming majority of experimental social science research investigating individuals making decisions in isolation, these insights bear relevance for the advancement of the understanding of unethical behaviour and might provide useful insights for the design of interventions.

So why exactly does the presence of another person reduce unethical behaviour? For one, others trigger the salience of social norms as they increase public self-awareness. When in the presence of another person one might simply be more aware and concerned about the prevalent social norms (Köbis et al., 2016; Reno et al., 1993). Violating the existing social norms, results in reputational loss because both bribing a public official in the corruption

game and deceiving the experimenter about the die roll in the die rolling paradigm are considered as unethical (Köbis et al., 2015; Shalvi et al., 2015). We find indirect evidence for this assumption using two different paradigms.

Limitations and future research. However, the studies presented here did not assess perceived social norms, public self-awareness or reputational concerns as possible moderator variables. Instead, this set of findings first establishes the existence of the effect without focusing on the process through which it arises. Hence, future research specifically targeted at this aspect needs to establish these underlying dynamics of the effect more directly. Another limitation of the current studies lies in potential experimental demand effects (Orne, 1962). We placed participants in a somewhat odd situation compared to the average experiment conducted in social science laboratories. Hence, participants might have wondered why that other person was present with them. Manipulating the presence of others in a more natural and / or subtle way (Rajecki, Ickes, Corcoran, & Lenerz, 1977) is a promising avenue for future research.

On a related note, future research could also investigate whether knowledge by the other person was a crucial explanatory factor for the reduction of unethical behaviour. That is, do participants act more ethically because the other can see that they did so? Or would the mere presence of others suffice to curb unethical behaviour? The "die-under-the-cup"-paradigm provides a useful method to test the mere presence in the context of cheating as only the participant can actually see the rolled number through the hole in the cup (Shalvi et al., 2011, 2012).

Other avenues for future research include the combination of both treatments used in our studies. For example, will cheating and bribery increase if a close other can gain from it? Also, how does the presence of another person compare to other previously used cues of public self-awareness like images of eyes on the wall or mirrors in the room? Finally, does the

"presence of the other"-effect increase in rural areas in which reputational concerns are relatively stronger compared to urban areas (Henrich et al., 2001)?

Practical Recommendations and Conclusion. The obtained findings of the "presence of another person"-effect allow for some speculative thoughts on ways to reduce unethical behaviour in the society. In line with the policy recommendation of the four-eye principle (Poerting & Vahlenkamp, 1998), it may indeed be advisable to assign multiple decision-makers to sensitive tasks. The policy of letting those responsible for cash flow operations in organizations work in dyads rather than alone represents one such example. Or closer to home, academic fraud might be attenuated by encouraging students and scientists to work together on data collection (and analysis). Generally, the present findings suggest that removing the "illusion of anonymity" (Yap, 2016) by relatively simple tools could effectively reduce unethical behaviour.

Our findings also emphasize the importance of the *social* aspect of social science research. Experimental research on corruption and cheating has largely studied decisions in isolation (Serra & Wantchekon, 2012). The few exceptions (Weisel & Shalvi, 2015) highlight the importance that "others" can play. As some of the first studies, our studies investigate unethical behaviour in the actual presence of others. It demonstrates a very basic yet extremely relevant aspect of social life in general and unethical behaviour in particular: the importance of the presence of other people. The look over your shoulder might be a first glance into how others can curb unethical behaviour even without any means to formally sanction.