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# The social determinants of unethical behavior

Marie Claire Villeval<sup>1</sup>

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## **Abstract**

This review explores the social determinants of unethical behavior through a review of the recent experimental literature. It examines how decision-making environments, encompassing institutional frameworks, organizational structures, incentive schemes, peer influences, and social norms, affect unethical behaviors such as lying, corruption, tax evasion, or asset destruction. Key areas include the cultural roots of unethical behavior, the influence of markets and organizational cultures on moral values, the impact of competitive and cooperative incentive schemes, and the role of peer effects and social norms, social image and guilt. By analyzing the interaction between social determinants and individual behavior, the chapter highlights the complex dynamics that lead to unethical actions and suggests ways to harness these determinants to foster ethical conduct. The chapter concludes on interventions aimed at promoting ethical behavior, such as moral appeals and norm nudges.

**Keywords:** Unethical behavior, dishonesty, moral values, social norms, experiments

**JEL codes:** C91, C92, C93, D73, H26, K42

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## 1. Introduction

Individuals often experience a tension between their individual selfish interests and their moral standing within their community and society. On the one hand, pursuing self-interest may lead them to seize opportunities to increase their earnings through unethical means such as stealing, lying, or bribing. On the other hand, upholding moral standards requires respecting the law and adhering to the injunctive societal norms of honesty. People balance this trade-off in various ways. Some exploit every opportunity for gain, some never cheat despite temptation, and others behave conditionally based on context. In more extreme cases, some individuals are even willing to sacrifice money to satisfy anti-social preferences, such as the sheer enjoyment of destroying others' assets.

The distribution of behavioral types (opportunists, steadfastly honest individuals, conditionally honest individuals, and people with antisocial preferences) is influenced by culture, empirical social norms, and prevailing societal institutions. At the individual level, the trade-off between social image, norm compliance, and monetary interest is shaped by both personal and social determinants.

This chapter explores the substantial influence of various social determinants on unethical behavior through a review of recent experimental literature. The unethical behaviors analyzed in this chapter encompass those driven by anti-social preferences (such as sabotage in competitions or asset destruction), lying, cheating, bribery, tax evasion, and all other actions that consciously produce negative externalities. We focus on experimental literature because this methodology is uniquely equipped to observe unethical behavior and identify its causal factors, both intrinsic and extrinsic. Measuring these behaviors with natural data is usually difficult and imperfect since they are often hidden activities that cannot be recorded without biases.

The social determinants of unethical behavior encompass all aspects of the decision-making environment that involve others' behaviors, beliefs, and judgments. This includes the institutional environment (formal institutions and social norms dictating acceptable behavior), the organizational environment (group interactions, hierarchical structures, leadership styles, and networks), and incentives structures (cooperative vs. competitive payment schemes). It also includes peer effects and the impact of observability and others' judgment about individuals' morality.

Understanding the complex interplay between individual choices and social influences can help design more effective interventions to discourage unethical behaviors. A key finding from the experimental literature on cheating is that individuals generally cheat far less than they could to maximize their earnings, especially when they feel potentially observed and judged by others (e.g., Fischbacher and Föllmi-Heusi, 2013; Gneezy et al., 2018; Abeler et al., 2019). This literature highlights individuals' intrinsic aversion to lying and perceived cheating aversion, as well as the strong influence of social norms on behavior. Therefore, in addition to addressing institutional and organizational determinants, policies against unethical behavior could incorporate soft interventions that increase the social and moral costs of deceptive or antisocial actions. These interventions include moral appeals, norm nudges, or honesty oaths.

The chapter proceeds as follows. Section 2 highlights the cultural diversity of (un)ethical behaviors, exploring the cultural roots of unethical behavior and emphasizing societal differences, folklore, historical institutions, and the role of family in transmitting ethical norms. Section 3 delves into the impact of markets and organizations, questioning whether markets erode morals and examining the influence of organizational structures and the influence of leaders on individual ethical behavior. Section 4 discusses the effects of competitive environments, covering topics like competitive incentive schemes, competition

for status, and dynamic competitions. Section 5 focuses instead on cooperative environments, including cooperative payment schemes, collaborative dishonesty, and lying within groups. Section 6 summarizes the evidence regarding the importance of peer effects on honesty and invokes social norms, addressing issues like the asymmetric influence of peers, group identity, and the motivated selection of peers. Section 7 highlights the importance of reputational costs, lying aversion, and guilt when deciding whether to follow or not a moral conduct, and it examines the impact of observability on actions. Section 8 questions whether social determinants can be activated to promote ethical behavior, considering potential interventions and their effectiveness. The final section summarizes the previous sections and concludes.

## **2. The cultural roots of unethical behavior**

Several experimental studies have examined disparities in the inclination to deceive globally, employing the die paradigm or comparable methods.<sup>2</sup> Their most striking result is that behavior, in particular the strong aversion to lying, is robust across societies (see the meta-analysis of Abeler et al., 2019). For example, Pascual-Ezama et al. (2015a) investigated honesty levels across 16 developed and developing countries using a coin flip task. They discovered consistently high levels of honesty across most samples, averaging at 86%. Similarly, no discernible differences in cheating behavior across countries were found by Mann et al. (2016) who used a die task among students and the general public in China, Colombia, Germany, Portugal, and the U.S. In their lost-wallet field experiment conducted in 40 countries, Cohn et al. (2019) found that in almost all of them the return rate of the lost wallet was significantly higher when the wallet contained cash than when it did not (51% vs. 40%), suggesting that not returning cash could entail a universal moral cost of seeing oneself as a thief. These findings collectively suggest a consistency in behavior across different contextual settings, irrespective of variations in corruption indices or cultural values.

However, inferring from these results that cultural differences do not exist would be a hasty conclusion. Beyond a common intrinsic preference for honesty, other studies established that the magnitude of cheating or perceptions of dishonesty differ between countries. The annual measurement of the Corruption Perceptions Index by Transparency International reveals significant differences in this index among the 180 countries in which it is calculated, suggesting differences in the quality of formal and informal institutions within the space. On a 0-100 scale from the most corrupt to the least corrupt country, the mean index for 2023 was 43, with large variations between regions (65 in Western Europe, 45 in Asia and the Pacific region, 43 in the Americas, 38 in Middle-East and North Africa, and 33 in Sub-Saharan Africa).<sup>3</sup> Regarding behavior, in Cohn et al. (2019) the return rate of the lost wallet containing cash was three times lower in China than in Switzerland. Gächter and Schultz (2016) also observed large differences in the frequency of high claims in a standard die-rolling task and in the share of fully honest participants across 23 countries. The authors identified a correlation between cheating and an index of the prevalence of rules violations at the country level built on the size of the shadow economy, the World Bank's Control of Corruption index, and political rights.

A challenge in identifying the influence of cultural traditions is that we typically observe simultaneously cultural influences and the effects of deterrence institutions in place within a

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<sup>2</sup> In the die game (Fischbacher and Föllmi-Heusi, 2013), participants are instructed to privately roll a die and report the result. A higher reported number increases earnings. Participants can misreport the result to earn more without any risk of being individually detected. Evidence of lying is determined at the aggregate level by comparing the empirical distributions of the reported outcomes with the expected theoretical distribution. Any other random device can be used (tossing a coin, or drawing a ticket).

<sup>3</sup> <https://www.transparency.org/en>, consulted on June 02, 2024.

country. Tackling this obstacle through a natural field experiment, Fisman and Miguel (2007) analyzed the behavior of diplomats from 146 nations residing in New York City, where they benefited from immunity regarding illegal parking. Interpreting incidents of illegal parking as reflective of a deeper tendency towards disregard for rules, they found that diplomats originating from countries with higher levels of corruption were notably more inclined to violate parking regulations than those from less corrupt nations. This highlights the impact of cultural values from individuals' native countries on their behavior in unfamiliar environments. Laboratory experiments also explored the influence of the cultural origin of the participants living in the UK (Barr and Serra 2010) or the US (Salmon and Serra, 2017) on behavior in corruption games. They demonstrated a cultural origin of dishonesty among undergraduates that could be explained by the different social norms internalized during childhood across cultures.

This questions the historical origins of cultural values and their transmission. An anthropological approach helps understand the formation of cultures with differing degrees of permissiveness towards behaviors we deem unethical. Lowes *et al.* (2017) analyzed historical data from Central Africa, comparing the centralized governance of the Kuba Kingdom, established in the early 17th century, with less formalized village governance structures. Using resource allocation games, they found that descendants of the Kuba Kingdom exhibited weaker rule adherence and higher theft rates than those from non-centralized backgrounds. This aligns with theories of intergenerational transmission of cultural values, as Kuba parents prioritized rule adherence less in child-rearing. Additionally, Heldring (2021) studied violence in Rwanda, showing a causal link between historical centralized governance exposure and increased violence, suggesting this influences the intergenerational transmission of obedience norms.

The intergenerational transmission of values through families and communities, and its long-term cultural impact, has been investigated via oral traditions and myths. Michalopoulos and Xue (2021) used machine learning to analyze narratives from a thousand of societies, exploring the cultural roots of contemporaneous beliefs and customs. They specifically examined whether tricksters, who engage in stealing or cheating, were punished or positively portrayed in folktales, to gauge contemporaneous societal trust levels. They found that oral traditions condemning deceptive behavior by tricksters correlate with higher current levels of generalized trust, even among second-generation immigrants. This suggests that folklore reflects societal equilibrium and that the narratives and language describing actions play a significant role important in shaping moral preferences, alongside the consequences of decisions (Capraro *et al.*, 2024).

Parents play a crucial role in the socialization of their children, who learn moral norms during childhood that influence their adult behavior. Sutter *et al.* (2019) highlight a correlation between parents' and children's social and moral preferences, noting that stronger parental involvement reinforces this link. Houser *et al.* (2016) found that parents behave more honestly in a lying game when observed by their child, who could benefit from the lie, compared to when they decide in isolation. Brouwer *et al.* (2023) provided direct evidence of parents transmitting social norms to children in response to social norm violations. Parents are more likely to punish violators of social norms in the presence of their child than when alone in the same environment.

Overall, these studies show the importance of cultural traits and their transmission in shaping moral behavior.

### 3. Markets and organizations

Market dynamics influences the social determinants of individuals' moral behavior. A long-standing controversy has persisted among economists regarding the erosion of moral values by markets. Critics of markets contend that market dynamics erode moral values by shifting individuals' focus from their innate moral principles to self-interested cost-benefit calculations (Sandel, 2012; Bowles, 2016). The erosion of individuals' moral values would be exacerbated by the diffusion of responsibility within market systems, where individuals feel less accountable for immoral actions. The transmission of social information and the dissemination of social cues regarding the acceptability of certain unethical behaviors contribute to this phenomenon, leading to a broader acceptance of actions that would typically be deemed as immoral. This perspective underscores the potential for markets to dilute individual moral responsibility and foster an environment where unethical behavior becomes normalized.

In a prominent study, Falk and Szech (2013) showed that less people were willing to give up money to save the life of a mouse when they were participating in a double auction market than when deciding in isolation. They concluded that engaging in market interactions leads individuals to act against their moral values. Examining the relationship between competition and unethical behavior, Feltovich (2019) found that competition and cheating reinforce each other, observing more lying under duopoly than monopoly. Another way markets shape individual immoral behavior is by undermining the sanctions imposed by firms. Egan et al. (2019) demonstrated how financial advisers who were dismissed by their firm for misconduct in the United States end up finding jobs at other companies that are less concerned about their employees' honesty. In a way, there would be a market for financial misconduct, as the labor market undoes the companies' disciplining policies.

However, the responsibility of markets in morality remains debated. Bartling et al. (2023) found that the decline of moral values observed in market settings by Falk and Szech (2013) was due to repeated decisions rather than market interactions themselves. More generally, markets can also promote mutual benefits, well-being, and societal resource coordination. Shleifer (2004) suggested that competition might even enhance ethics in the long run through economic growth and increased incomes. Markets and social information can foster moral behavior by allowing individuals to build moral reputations and marginalize those who fail to uphold moral standards. Bartling et al. (2015) showed that individuals may prefer to avoid negative externalities in markets by paying higher production costs or a price premium for socially responsible products, even amid sellers' competition and limited consumer information. However, consumers in market settings often express less moral concern against products with negative externalities than in individual choice contexts. Sutter et al. (2020) found that negative externalities reduce trading volume in markets, though the effect on prices varies with market structure. Thus, while markets can sometimes diminish moral concerns, they also offer mechanisms for promoting ethical behavior and social responsibility.

In response to the inconclusive existing literature based on idiosyncratic designs regarding the directional effect of competition on moral behavior, Huber et al. (2023) conducted a crowd-sourced project in which 45 teams tested different designs to study the effect of competition on moral behavior. Involving more than 18,000 subjects, the meta-analysis found an overall adverse effect of competition on moral behavior. However, the effect size was small (a Cohen's  $d$  of 0.1) and there was a large variance in effect sizes.

Beyond markets, organizations also shape the social determinants of (un)ethical behavior. Some corporate cultures, by prioritizing material success and financial goals over moral values, are more permissive of moral deviations than others. The banking sector is particularly

noted in this regard because of recurring frauds. Egan et al. (2019) estimated that seven percent of financial advisers in the U.S. have misconduct records, with huge and persistent differences across companies. In some advisory companies this percentage exceeds 15%. They show evidence that corporate cultures can foster weak ethical standards through higher tolerance of misconduct. Furthermore, there is a matching on misconduct: firms with a higher rate of misconduct are more likely to recruit employees with a higher rate of previous misconduct. Cohn et al. (2014) explored lying behavior among bank employees by priming the participants' professional identity. They found a higher prevalence of lying when the professional identity of banker was emphasized. They concluded that the business culture in the banking industry undermines the honesty norm through an increase in materialistic values. Rahwan et al. (2019), however, failed replicating these findings in different populations.

In addition to informal cultures in organizations, formal reporting structures, the nature of strategic interactions, and delegation opportunities are important determinants of ethical conduct through their influence on belief formation. When actions are complements, cheating increases in the belief that the counterpart will behave dishonestly, whereas when actions are substitutes, it decreases in these beliefs (Galeotti et al., 2024). Individuals also cheat more when they can delegate lying to other persons (e.g., Erat, 2013).

The ethical conduct of leaders and their discretionary powers in detecting and punishing misconduct profoundly influence the behavior of those under their authority within organizations and society at large. Beekman et al. (2014) showed in rural Liberia that corrupt community leaders dampen citizens' incentives to invest and cooperate. In a lab experiment conducted in Kenya, Boly and Gillanders (2018) found that public officials, whether corrupt or not, favored leniency in audit policy when faced with the prospect of scrutiny over their potential misconduct, compared to when the policy applied solely to another official.

Corruption among institutional representatives not only fosters ineffective anti-corruption measures but also sends negative signals to citizens, as demonstrated by Ajzenman (2021) in a natural experiment in Mexico. Exposure to corruption among local officials correlated with an increase by 10% of students' cheating tendency during school tests. This shapes individuals' beliefs that cheating is a necessary means to success and erodes the importance of rule adherence. The misconduct of leaders can profoundly influence the transmission of values to subsequent generations. In a lab-in-the-field experiment in Thailand, Hübler et al. (2021) found that perceptions of state corruption correlated with higher cheating inclinations.

In corporate settings, d'Adda et al. (2017) found that employees under dishonest leaders in a laboratory experiment were more prone to misconduct, aiming to boost firm profits at the expense of competitors. Dishonest leaders incentivized employees' cheating through public statements and the provision of discretionary bonuses to reward employees who reported higher numbers in a die lying task. These statements and incentives reduced the psychological cost of lying. The effect was amplified in an inter-firm competitive context, suggesting a role of rivalry in driving the effect of leadership on unethical behavior.

In summary, leaders' ethical standing shapes organizational and societal integrity. Their misconduct can foster cultures of corruption and normalize unethical behavior, with far-reaching consequences for future generations. Understanding these dynamics is critical for devising effective measures to promote ethical leadership.

#### **4. Competition and unethical behavior**

In organizational settings, incentives schemes such as tournaments and contests aim to boost competitiveness and performance but also carry inherent risks of fostering unethical behavior.

Sabotage stands out as a significant drawback, as competitors may undermine peers' performance to gain an advantage. Strategies include impairing opponent's performance by undermining their output, concealing information, spreading rumors, and biasing evaluations (e.g., Carpenter et al., 2010; Harbring and Irlenbusch, 2011). Moreover, competitors may resort to unethical means like doping, embellishing résumé, falsifying data, or wrongfully taking credit for successful outcomes to bolster their performance unfairly. Individuals are usually more willing to cheat by lying about themselves than to sabotage a competitor (Rigdon and d'Esterre, 2015).

Experimental studies revealed the propensity of individuals to cheat under competitive pay schemes compared to individual-based compensation (e.g., Schwieren and Weichselbaumer, 2010; Belot and Schröder, 2013). In laboratory experiments, between 20% and 60% of the time individuals are willing to sabotage others to improve their chance of winning (for a survey, see Gangadharan et al., 2020). Sabotage propensity escalates with the prize spread between winners and losers (Harbring and Irlenbusch, 2011) but not with the number of winners. Team-based tournaments exacerbate sabotage risks compared to individual competitions (Abbink et al., 2010). Sabotage can sometimes undermine affirmative action policies when perceived as unfair (Leibbrandt et al., 2017; Fallucchi and Quercia, 2018).

Tournaments also induce selection effects, as competitive payment schemes with opportunities for cheating are more appealing to dishonest individuals. Faravelli et al. (2015) found that individuals inclined to dishonesty are more prone to self-select into competitive payment schemes. Competitive payment schemes also have spillover effects on future destruction of assets, cheating (Schurr and Ritov, 2016), and reduced contributions to collective efforts (Buser and Dreber, 2016).

Motives behind sabotage and cheating in competition include envy, jealousy, inequality aversion, and spite toward winners. Such motivations explain that destructive behavior and cheating can emerge even without formal tournaments when individuals strive for status and rank. In a laboratory experiment in which employees performed a task for a flat wage, Charness et al. (2014) found that feedback on relative performance triggered a fraction of employees to resort to sabotaging others' work or inflating their own performance at a personal monetary cost. This may result from the prioritization of their rank within a hierarchy, driven by status concerns, image concerns, or a desire of dominance. Indeed, a number of individuals exhibit a desire to enhance their rank and dislike being ranked at the bottom of the hierarchy in terms of performance.

Most studies analyze the impact of competition on ethical conduct in one-shot games or with few repetitions. However, in natural settings, individuals face repeated competitive situations. Such dynamic environments influence behavior through direct material incentives, associated with a multiple-round competition, rivalry from repeated comparisons, and suspicion of unfair competition due to opponents' unethical actions detected over time. Information about an individual's relative performance during competition affects future moral conduct by potentially exacerbating rivalry if lagging behind or, on the contrary, reducing cheating if outperforming opponents.

Gürtler et al. (2013) showed that leading contestants in a three-player tournament face more sabotage, discouraging effort early on. Concealing intermediate performance information can help mitigate this issue. Benistant et al. (2022) investigated cheating in competitive (tournament) versus non-competitive (individual piece rate) incentive schemes, under various feedback policies (continuous feedback versus end-of-task feedback) on workplace morality in dynamic settings. They found more cheating in tournament than in piece-rate schemes, but this difference vanished when opponent could not cheat. This suggests curbing unethical



behavior in competitive settings by making employees aware that others cannot cheat. Continuous feedback increased dishonesty over time under piece-rate schemes, due to peer effects. This effect was absent in tournaments, highlighting the influence of conformity on ethical conduct in dynamic settings.

## **5. Cooperation and unethical behavior in groups**

If competitive payment schemes encourage unethical behavior, does this imply that cooperative incentives inherently promote ethical conduct? This is an important question because many decisions are made by groups in natural settings. In fact, research suggests otherwise. Team incentive schemes foster dishonest behavior compared to situations where individuals are rewarded based on their own performance metrics. Adapting the die task paradigm to a team environment without communication, Conrads et al. (2013) found that individuals were more prone to lying when profits were shared among team members as opposed to when they were compensated by individual piece-rates. One contributing factor to this phenomenon is the difficulty in unequivocally assigning responsibility for a lie to a specific team member. Individuals may exploit ambiguity to conceal their own dishonest actions behind others' decisions of.

Cooperative payment schemes, which rely on coordinated actions among partners, can enhance organizational performance but also create opportunities for unethical behavior such as corruption. Weisel and Shalvi (2015) explored collaborative dishonesty using a sequential dyadic die-rolling task (see Leib et al., 2022, for a meta-analytic review). In their experiment, one player rolled a die privately and reported the result to a second player, who then rolled and reported their result. Both players were paid based on the reported outcomes only if they matched. Findings showed that joint dishonesty, indicated by the proportion of cases in which both players reported the same number, was 48% higher compared to individual reporting and five times higher than chance. The study also found that brazen lying (i.e., reporting a double every time) was more common when both players equally shared the benefits of corruption. Additionally, when the first player was a brazen liar, the second player was more inclined to follow suit and be a brazen liar as well, indicating that the first player's behavior served as a social cue legitimizing cheating. Irlenbusch et al. (2020) further demonstrated that misreporting increased when a sense of similarity was induced with third parties negatively affected by cheating.

Studies of corruption highlight other social motives such as reciprocity between "partners in crime". Regular interaction with the same partners fosters trust and reciprocity, which can encourage bribery, a phenomenon mitigated by interventions such as rotating public officials (Abbink, 2004). Interestingly, direct communication or connection between players is not always necessary to increase dishonesty. Simply knowing that another person shares the same interests can prompt individuals to lie to achieve coordination, reducing the moral costs of dishonesty (Barr and Michailidou, 2017). Thus, the presence of a potential accomplice itself can significantly increase the likelihood of collaborative dishonesty, driven by aligned interests and social justifications.

If individuals are capable of coordinating to benefit from the mutual gains of cheating, do they demonstrate the same ability to avoid the collective risks caused by excessive fraud? Jiang and Villeval (2024) designed a lying game as a threshold social dilemma, where selfish behavior generated a risk of sanction to the whole group. The study found that individuals tend to free ride on others' honesty. Lack of coordination led to widespread dishonesty, causing most groups to hit the threshold that triggered the loss of all earnings. Groups became

trapped in dishonesty and individuals earned less than if everyone had reported honestly, regardless of whether a collectivist or an individualistic cultural mindset was induced.

If team incentive schemes tend to encourage unethical behavior more than individual incentive schemes, bonding within groups amplifies cheating even without shared payoffs. Communication within groups enhances this effect and substantially impacts ethical decision-making. Kocher et al. (2018) conducted an experiment where the first mover in a dyad observed a die roll via video and reported the outcome. The second mover saw this report before reporting the same outcome. Behavior in this setting was compared to individual decision-making scenarios, with varying payoff commonality across treatments. The study found that individuals lied more in group settings than in isolation. This could not be higher strategic sophistication of groups (Sutter, 2009) or decreased observability within groups. Different treatments ruled out explanations based on benefits to other group members. Instead, the findings suggested that group members communicate and learn what is normatively acceptable behavior. Communication allows group members to exchange justifications for lying, reducing the moral cost of dishonesty. Consequently, group incentives played a limited role, and individuals lied to the same extent regardless of payoff commonality. These findings highlight the influence of communication, peers and social norms on individual behavior.

## **6. Peer effects, social norms and group identity**

The importance of social norms in guiding individual behavior in society has been shown in various domains. Thus, unsurprisingly, research has also underscored the influence of peers on unethical behavior, using observational data (e.g., Damm and Dustmann, 2014; Ajzenman, 2021). Controlled experimental studies have provided causal evidence of peer effects on misconduct when individuals' payoffs are independent (e.g., Fortin et al., 2007; Keizer et al., 2008; Fosgaard et al., 2013; Kroher and Wolbring, 2015; Bott et al., 2020; Drago et al., 2020). Awareness of others' dishonesty escalates lying, and the number of peers observed cheating heightens the temptation to engage in dishonesty (see Carrell et al., 2008, for an example within academic environments).

Additional evidence comes from developing countries. In controlled experiments in India, Banerjee (2016) identified a pivotal role of perceived social norms on bribery. In Argentina, Abbink et al. (2018) found that participants in the role of firms who knew they were paired with officials from a group with a majority of corrupt individuals offered twice as many bribes as in a control group. Corbacho *et al.* (2016) manipulated the information provided about the level of corruption in Costa Rica to respondents in a household survey. Compared to a control group, the proportion of respondents willing to offer a bribe to avoid paying a traffic fine increased by 28% with social information.

Peer effects on unethical behavior may arise from a desire to conform to social norms, driven by the inclination to align with peers. Information about others' behavior helps individuals update their beliefs about empirical social norms (Huber et al., 2023). Deviating from group norms can lead to discomfort or sanctions, such as ostracism or gossiping, fear of exclusion (Thau et al., 2015), while conformity offers social advantages. However, peer influence can manifest contagion rather than conformity pressure. Conformity pressure means individuals tend to mirror the ethical behavior of peers, while contagion reflects an asymmetric effect where negative behaviors influence more than positive ones.

Lefebvre et al. (2013) conducted an experiment on tax evasion in Belgium, France, and the Netherlands. They compared treatment where subjects received information about the highest

tax evasion rate from past sessions, versus the lowest evasion rates. Whereas high compliance rates did not reduce evasion, examples of low compliance increased it under certain audit probabilities. In a laboratory experiment in China, Italy, the Netherlands, and Russia, Schram et al. (2022) manipulated the level of information about bribe choices. Corruption escalated with knowledge of high peer dishonesty but did not decrease when the descriptive norm reflected greater honesty. Such asymmetry is also seen in deception games (Innes and Mitra, 2013) and studies of antisocial versus prosocial behavior (Dimant, 2019). These findings suggest that in contexts where punishment is not possible, contagion is a stronger driver of behavior than conformity pressure. However, the asymmetry tends to disappear with increased social proximity. In such cases both norm compliance and norm violations spread within groups (see for an example Bicchieri et al., 2022).

A natural question is whether certain peers wield greater influence than others in shaping individuals' ethical behavior. The influence of peers varies, with ingroup members (family, close colleagues, neighbors, friends) often wielding more impact than outgroup members (those socially or culturally distant). Group identity, encompassing both favoritism toward ingroups and discrimination against outgroups, can heighten the propensity for unethical behavior. Studies show that priming group identity can escalate norm violations, especially when identity aligns with weaker moral principles (Cohn et al., 2015) or stronger materialistic values (Cohn et al. 2014).

Emphasizing group identity can shift the focus of unethical conduct. Jiang (2015) and Cadsby et al. (2016) found individuals more inclined to deceive in noncompetitive settings if it benefited an ingroup member rather than an outgroup member. Gangadharan et al. (2019) explored antisocial behavior in response to inequality in an investment game, where players could diminish another participant's earnings at a personal cost. They found low-income players' antisocial behavior was less common towards ingroups when social identity was public. In contrast, social identity did not affect high-income players' antisocial behavior. In India, Banerjee et al. (2018) observed social identity's role in targeting antisocial behavior. After higher-caste participants lost to a lower-caste participant in a tournament, they were more likely to lie in a die task resulting in a decrease in payoff for a lower-caste counterpart.

However, the effect of group identity on moral conduct may depend on the incentive schemes. Benistant and Villeval (2019) conducted a controlled experiment with induced minimal group identity, finding limited influence of interpersonal connections on unethical conduct in competitive contests. Participants misreported outcomes similarly, whether inflating their own results or deflating their opponents', irrespective of group identity. This suggests that in competitive environments, the drive to succeed and urge to win may overshadow the significance of group identity.

Individuals' similar behavior within a group can arise from both contagion and homophily. People tend to connect with others who share similar socio-demographic traits, aspirations, or moral inclinations, a phenomenon evident in criminal behavior (e.g., Flashman and Gambetta, 2014; Gavrilova, 2019). By choosing peers, individuals align with social norms they are comfortable with. Dishonest individuals may also gravitate towards professions or sectors where unethical behavior is easier, such as in public sector in some countries (e.g., Hanna and Wang, 2017). Charroin et al. (2022) disentangled conformity effects from self-selection effects on lying. They identified conformity by giving subjects signals about the moral type of assigned peers before reporting task performance. Selection effects were identified in a treatment where individuals could choose peers based on signals on their moral values. Only those with weaker morals in isolation formed homophilous link with peers of similar moral, while honest individuals showed no such matching preferences. This asymmetry suggests

choices were driven by the desire to establish a reference group with more lenient social norms rather than a simple preference for similarity.

In many situations individuals can exploit opportunities from their encounters. Gross *et al.* (2018) observed corrupt collaboration when individuals could choose their partners.

Dishonest individuals actively sought partners in crime to enhance their earnings, while some honest individuals engaged in “ethical free-riding”. They maintained relationships with initially exogenously assigned dishonest partners, avoiding direct involvement in unethical behavior but still benefiting from it.

The choice of information individuals opt to receive about others is another avenue for manipulating moral compass. Allowing participants to choose whether to be informed about the average or maximum score reported by peers exacerbates dishonesty through sorting (Akin, 2019). Dimant *et al.* (2024) investigated how people seek norm-related information and its impact on norm-related expectations and lying behavior, considering group identity. They distinguished between descriptive norms (what others do) and injunctive norms (what people approve or disapprove of). They identified biases in information-seeking, with individuals preferring more lenient information sources, particularly from ingroups of the same political affiliation. This bias was more pronounced among those with weaker moral inclinations. Consuming lenient information was linked to increased cheating, especially when sourced from ingroups and related to normative expectations. Notably, seeking lenient information influenced empirical expectations more than normative ones.

Furthermore, individuals can opt to ignore inconvenient truths in ethical matters, giving them a wiggle room to make selfish decisions without bearing moral costs (Dana *et al.*, 2007; Golman *et al.*, 2017; Soraperra *et al.*, 2023). When lacking control over their information sources, people engage in strategic belief distortion to justify self-serving actions, such as overestimating the prevalence of lying to justify their behavior. However, there is no evidence of deliberate distortion of normative expectations concerning moral standards against lying, as prevailing injunctive norms do not deter dishonesty (Bicchieri *et al.*, 2023).

## **7. Reputation, social image, and guilt**

Individuals are influenced by others’ behavior and normative views, but they also care about how others perceive them when they have social image or reputational concerns, both when players’ payoffs are independent and in strategic interactions.

In their meta-analysis of cheating games without strategic interactions, Abeler *et al.* (2019) found that the utility function best fitting experimental data includes an intrinsic preference for truth-telling (lying aversion) and reputational costs of lying (a preference for being seen as honest), in addition to the monetary benefits from lying. People dislike being perceived as potential cheaters, and such moral costs may explain why a large fraction of people refrain from lying and why those who lie often do so only partially. This aversion to being seen as dishonest is central to several lying models (Dufwenberg and Dufwenberg, 2017; Gneezy *et al.*, 2018; Khalmetski and Sliwka, 2019). It also explains why individuals prefer to lie through a delegate rather than directly (Erat, 2013; Gawn and Innes, 2019). It is also consistent with findings that increasing the feeling of being observed tends to discourage dishonesty when the social norm of honesty is unambiguous. In a meta-analysis, Dear *et al.* (2019) found that the mere presence of eye cues reduced antisocial behaviors by 35%, as it made people feel watched.

Social image concerns may explain the complex interactions between the level of incentives and cheating. Individuals cheat less when the experimenter knows the true outcome compared

to “mind games” where only the players know the truth (Gneezy et al., 2018). While increasing monetary incentives does not lead to more lying in standard games, it increases lying when the true outcome of a random device is unobservable (Kajackaite and Gneezy, 2017). Individuals also lie less when their report is observable by another player unaware of the true outcome, such as through a real-time video (Basic and Quercia, 2022). To isolate the social signaling motive behind behavior, Fries et al. (2021) varied the observability of both the true outcomes of random draws and the reported outcomes. Individuals cheat less when the truth is observable, but anonymity of reports affects neither the external margin, nor the internal margin of lying. The interaction between observability and the structure of social interaction also plays a role. Kirchler et al. (2016) found that lifting the anonymity of traders promotes moral behavior when decisions are made in isolation, but not in double-auction markets due to the diffusion of responsibility.

Observability also significantly influences the frequency of partial lying. Individuals are less likely to lie partially when the truth is observable by the experimenter (Gneezy et al., 2018; Abeler et al., 2019). Social signaling can explain why partial lying increases with non-observability. Observability also affects the decision to engage in corruption for individuals whose cultural background originates from countries with low levels of corruption (Salmon and Serra, 2017). In contrast, if individuals lie less when the social norm supports honesty and more when it supports dishonesty (like in corrupt organizations), Huber et al. (2023) found no interaction effect between observability, social norms, and lying in their online experiment.

Social proximity with the observer may affect social image concerns and behavior, but evidence is mixed. Bicchieri et al. (2022) showed that social proximity plays a role in the erosion of social norms. Pascual-Ezama et al. (2015b) found that individuals cheat less in the presence of familiar peers compared to working in isolation when reporting performance to an experimenter. However, Köbis et al. (2019) found that while observation curbs unethical behavior, increasing social proximity with the observer (friend versus stranger) has no additional effect on bribing; the mere presence of another person who cannot observe actual behavior has no effect.

When players’ payoffs are interdependent, interests are not aligned, and lies cannot be detected, such as in sender-receiver deception games, the evidence on reputational concerns is mixed. Hu and Ben-Ner (2020) found that the anticipation of receiving feedback, whether appreciative or accusatory, reduces the propensity to lie but feedback itself has little effect, except for honest individuals who start lying after receiving negative suspicious feedback. On the other hand, van de Ven and Villeval (2015) found no effect of third-party observability on senders’ lying behavior. The nature of lies also influences how reputational concerns affect cheating in strategic interactions. Tergiman and Villeval (2023) demonstrated that strengthening reputation concerns through fixed matching reduces detectable lies compared to rematching after each interaction, but it has no effect whatsoever on deniable lies. Liars adjust their strategy to maintain their reputation while benefiting from deceit.

Moral costs of dishonesty may increase with the guilt experienced when behaving unethically. Psychological game theory, which models the psychological utility of guilt-averse players based on their second-order beliefs (beliefs about other players’ beliefs about their actions), shows that guilt-averse individuals dislike disappointing others’ expectations. In a three-player embezzlement psychological game involving a donor, an intermediary, and a recipient, Attanasi et al. (2019) found that guilt-averse intermediaries were less likely to embezzle when they believed that the donor or recipient had higher expectations of honest transfers. This guilt aversion is observed even in games where other players are not vulnerable to the player’s selfish choices (Attanasi et al., 2023).

## 8. Policy implications

Understanding the social determinants of unethical behavior is crucial for evaluating the effectiveness of policies aiming at combating such conduct. Leveraging these determinants can inform the design of interventions that promote ethical behavior. Effective deterrence institutions and thoughtfully crafted incentive schemes for individuals and groups are essential for curbing dishonesty, considering their potential impact on moral conduct. But given the importance of moral values, reputational concerns, social image, and peer effects, other categories of interventions can complement traditional methods in the fight against unethical and antisocial behavior. This includes enhancing moral education and awareness, fostering environments that reinforce positive social norms, and implementing social nudges that leverage reputational concerns to encourage ethical actions.

Awareness can be enhanced through easier access to information and increased public disclosure. The advancement of information technologies has significantly broadened public access to information and transparency. While this has facilitated the emergence of new forms of fraud, it may also have helped mitigate certain types of dishonest behavior. For example, Bø et al. (2015) attributed a three percent rise in reported income in Norway to Internet public disclosure of tax return transcripts and the resulting shaming effect (see Coricelli et al., 2010, and Alm and Malézieux, 2021, for experimental evidence supporting the positive impact of public disclosure on tax compliance).

Changing a prevalent social norm of dishonesty is complex and can take decades. Social norm nudges (i.e., social information) might help change norms and behavior by clarifying bad norms and good norms. A positive effect of norm nudges on honest reporting has been observed in cheating games (Huber et al., 2023). However, while norm nudges can alter individuals' empirical expectations about what others would do and increase honesty, they have much less impact on normative expectations and may even backfire if reference networks are poorly understood. When individuals learn that most people do not lie, they infer that most others disapprove of cheating. Conversely, when told most people disapprove of lying, they do not necessarily infer honesty and may distort beliefs self-servingly (Bicchieri and Dimant, 2022). Dimant et al. (2020) introduced norm nudges emphasizing moral suasion based on either an empirical message about others' actions or a normative message about approval of actions. They varied the framing to highlight either majority honest behavior or minority dishonest behavior. The study found a null result and concluded that norm nudges must be strong enough to shift existing social norms to be effective.

Leaders' significant influence on moral conduct could expedite promoting a more honest culture. Acemoglu and Jackson (2015) theorized that in forward-looking societies, prominent agents can counter historical influences. By leveraging their visibility, leaders or trendsetters can shape others' expectations and gradually transform a corrupt culture into one that upholds honesty as a norm. Along a somewhat similar line, Dimant and Shalvi (2022) suggest meta-nudging, targeting norm nudges at social influencers in positions of authority to indirectly influence subordinates' honesty, rather than targeting individual behavior directly.

Interventions targeting social determinants like moral appeals can foster ethical behavior cost-effectively, although not uniformly in the population. Normative appeals deterred tax evasion in low- and medium-income taxpayers but not in high-income taxpayers in a field experiment in Minnesota (Blumenthal et al., 2001). Moral appeal increased honesty in street newspaper payments in Austria, primarily influencing individuals who internalized social honesty norms, but it did not increase the proportion of customers paying for the newspaper (Pruckner and Sausgruber, 2013). Similarly, moral suasion letters referring to fairness or societal benefits sent by Norwegian tax authorities to taxpayers increased the income reported the following

year but had no effect on the extensive margin (Bott et al., 2020). In a field experiment in an Islamic bank in Indonesia, a moral appeal to late-paying credit card customers decreased delinquency by 4.4 percentage points and reduced default among higher ex ante credit risk individuals (Burzryn et al., 2019).

Finally, experiments on honesty oaths, common in various professions (e.g., the banking industry in the Netherlands and Belgium), showed that they reduce lying in tax evasion games, cheating games, and sender-receiver games, despite lacking legal enforceability (e.g., Jacquemet et al., 2019; Beck et al., 2020; see Zickfeld et al., 2024, for a megastudy on oaths and tax compliance). Their effectiveness comes from the moral duty to uphold ethical conduct, psychologically costly to violate. Kingsuwankul et al. (2023) revealed mechanisms behind oaths effectiveness in strategic interactions. They found that one-third of oath-takers behave honestly due to the fear of moral judgments by other players who could be affected by the oath's breach, and another third due to the moral costs of oath breach in the presence of a passive audience, such as the experimenter. Individuals avoid being perceived as someone for whom it is easy to break an oath.

## **9. Conclusion**

Cultural, institutional, and organizational environments profoundly shape individuals' moral preferences and ethical conduct. Societal norms, cultural traditions, institutions, and socialization processes shape perceptions of what is ethical or unethical. Markets dynamics and organizational structures can either diffuse responsibility and normalize unethical actions, eroding moral values, or promote ethical conduct and mutual benefits through societal coordination. Examples set by leaders are particularly influential in shaping ethical behavior. Incentives, whether competitive or cooperative, significantly impact behavior. Competitive schemes may drive unethical actions, like sabotage and deceit, while cooperative settings are not immune to collusive behavior and collaborative dishonesty. Therefore, incentive schemes aimed at boosting productivity must be carefully designed to avoid unintended ethical pitfalls.

Beyond formal institutions and organizations, peer effects and social norms also shape ethical behavior. The presence of peers, group identity, and the possibility to select information sources and one's reference group (and thus one's social norm), all contribute to how individuals navigate ethical decision-making. If individuals are influenced by peers, they also care about their reputation and social image, which explains why most individuals do not cheat despite existing opportunities. Social signaling can lead to partial lying when unobserved. If interests differ between partners, however, the impact of reputational concerns varies, depending on the deniability of misinformation. Guilt aversion also matters, with individuals less likely to misbehave if they believe that others expect ethical conduct from them.

Overall, this chapter underscores the multifaceted nature of unethical behavior and the importance of understanding social determinants to promote ethical conduct across different contexts. Interventions targeting social determinants, such as those encouraging social norms of honesty, moral appeals, norm nudges, and honesty oaths, show promise in fostering ethical behavior.

## Reference list

- Abbink, K. (2004). Staff rotation as an anti-corruption policy: An experimental study. *European Journal of Political Economy*, 20, 887-906.
- Abbink, K., Brandts, J., Herrmann, B., Orzen, H. (2010). Intergroup conflict and intra-group punishment in an experimental contest game. *American Economic Review*, 100, 420-447.
- Abbink, K., Freidin, E., Gangadharan, L., Moro, R. (2018). The effect of social norms on bribe offers. *Journal of Law, Economics, and Organization*, 34, 457-474.
- Abeler, J., Nosenzo, D., Raymond, C. (2019). Preferences for truth-telling. *Econometrica*, 87, 1115–1153.
- Acemoglu, D., Jackson, M. O. (2015). History, Expectations, and Leadership in the Evolution of Social Norms. *The Review of Economic Studies*, 82 (2), 423-456.
- d’Adda, G., Darai, D., Pavanini, N., Weber, R.A. (2017). Do Leaders Affect Ethical Conduct? *Journal of the European Economic Association*, 15 (6), 1177-1213.
- Akın, Z. (2019). Dishonesty, social information, and sorting. *Journal of Behavioral and Experimental Economics*, 80, 199-210.
- Ajzenman, N. (2021). The power of example: Corruption spurs corruption. *American Economic Journal: Applied Economics*, 13, 230-257.
- Alm, J., Malézieux, A. (2021). 40 years of tax evasion games: a meta-analysis. *Experimental Economics*, 24 (3), 699-750.
- Attanasi, G., Rimbaud, C., Villeval, M. C. (2019). Embezzlement and guilt aversion. *Journal of Economic Behavior & Organization*, 167, 409-429.
- Attanasi, G., Rimbaud, C., Villeval, M. C. (2023). Guilt Aversion in (New) Games: Does Partners’ Vulnerability Matter? *Games and Economic Behavior* 142, 690-717.
- Banerjee, R., Datta Gupta, N., Villeval, M. C. (2018). The spillover effects of affirmative action on competitiveness and unethical behavior. *European Economic Review*, 101, 567-604.
- Barr, A., Serra, D. (2010). Corruption and culture: An experimental analysis. *Journal of Public Economics*, 94, 862-869.
- Barr, A., Michailidou, G. (2017). Complicity without connection or communication. *Journal of Economic Behavior & Organization*, 142, 1-10.
- Bartling, B., Weber, R., Yao, L. (2015). Do markets erode social responsibility? *The Quarterly Journal of Economics*, 130, 219-266.
- Bartling, B., Fehr, E., Özdemir, Y. (2023). Does Market Interaction Erode Moral Values? *Review of Economics and Statistics* 105 (1), 226-235.
- Basic, Z., Quercia, S. (2022). The influence of self and social image concerns on lying. *Games and Economic Behavior*, 133, 162-169.
- Beck, T., Bühren, C., Frank, B., Khachatryan, E. (2020). Can honesty oaths, peer interaction, or monitoring mitigate lying? *Journal of Business Ethics*, 163 (3), 467-484.
- Beekman, G., Bulte, E., Nillesen, E. (2014). Corruption, investments and contributions to public goods: Experimental evidence from rural Liberia. *Journal of Public Economics*, 115, 37-47.



- Belot, M., Schröder, M. (2013). Sloppy work, lies and theft: A novel experimental design to study counterproductive behaviour. *Journal of Economic Behavior & Organization*, 93, 233-238.
- Benistant, J., Villeval, M. C. (2019). Unethical behavior and group identity in contests. *Journal of Economic Psychology*, 72, 128-155.
- Benistant, J., Galeotti, F., Villeval, M. C. (2022). Competition, information, and the erosion of morals. *Journal of Economic Behavior & Organization*, 204, 148-163.
- Bicchieri, C., Dimant, E. (2022). Nudging with care: the risks and benefits of social information. *Public Choice*, 191 (3-4), 443-464.
- Bicchieri, C., Dimant, E., Gächter, S., Nosenzo, D. (2022). Social proximity and the erosion of norm compliance. *Games and Economic Behavior*, 132, 59-72.
- Bicchieri, C., Dimant, E., Sonderegger, S. (2023). It's not a lie if you believe the norm does not apply: Conditional norm-following and belief distortion. *Games and Economic Behavior*, 138, 321-354.
- Blumenthal, M., Christian, C. W., Slemrod, J. (2001). Do Normative Appeals Affect Tax Compliance? Evidence From a Controlled Experiment in Minnesota. *National Tax Journal*, 54 (1), 125-138.
- Bø, E. E., Slemrod, J., Thoresen, T. O. (2015). Taxes on the Internet: Deterrence Effects of Public Disclosure. *American Economic Journal: Economic Policy*, 7 (1), 36-62.
- Boly, A., Gillanders, R. (2018). Anti-corruption policy making, discretionary power and institutional quality: An experimental analysis. *Journal of Economic Behavior & Organization*, 152, 314-327.
- Bott, K. M., Cappelen, A. W., Sorensen, E., Tungodden, B. (2020). You've got mail: A randomized field experiment on tax evasion. *Management Science*, 66, 2801-2819.
- Bowles, S. (2016). *The Moral Economy: Why Good Incentives Are No Substitute for Good Citizens*. New Haven: Yale University Press.
- Brouwer, T., Galeotti, F., Villeval, M. C. (2023). Teaching norms in the street. *The Economic Journal*, 650 (133), 872-887.
- Burzdyn, L., Fiorin, S., Gottlieb, D., Kanaz, M. (2019). Moral Incentives in Credit Card Debt Repayment: Evidence from a Field Experiment. *Journal of Political Economy*, 127 (4), 1641-1683.
- Buser, T., Dreber, A. (2016). The flipside of comparative payment schemes. *Management Science*, 62 (9), 2626-2638.
- Cadsby, C. B., Du, N., Song, F. (2016). In-group favoritism and moral decision-making. *Journal of Economic Behavior & Organization*, 128, 59-71.
- Capraro, V., Halpern, J. Y., Perc, M. (2024). From outcome-based to language-based preferences. *Journal of Economic Literature*, 62 (1), 115-154.
- Carpenter, J., Matthews, P. H., Schirm, J. (2010). Tournaments and Office Politics: Evidence from a Real Effort Experiment. *American Economic Review*, 100 (1), 504-517.
- Carrell, S. E., Malmstrom, F. V., West, J. E. (2008). Peer effects in academic cheating. *Journal of Human Resources*, 43, 173-207.

- Charroin, L., Fortin, B., Villeval, M. C. (2022). Homophily, peer effects and dishonesty. *Journal of Economic Behavior & Organization* 200, 618-637.
- Charness, G., Masclet, D., Villeval, M. C. (2014). The Dark Side of Competition for Status. *Management Science*, 60 (1), 38-55.
- Cohn, A., Fehr, E., Maréchal, M. A. (2014). Business culture and dishonesty in the banking industry. *Nature*, 516 (7529), 86-89.
- Cohn, A., Maréchal, M. A., Noll, T. (2015). Bad boys: How criminal identity salience affects rule violation. *Review of Economic Studies* 82 (4), 1289-1308.
- Cohn, A., Maréchal, M. A., Tannenbaum, D., Zünd, C. L. (2019). Civic honesty around the globe. *Science*, 365 (6448), 70-73.
- Conrads, J., Irlenbusch, B., Rilke, R. M., Walkowitz, G. (2013). Lying and team incentives. *Journal of Economic Psychology*, 34, 1-7.
- Corbacho, A., Gingerich, D. W., Oliveros, V., Ruiz-Vega, M. (2016). Corruption as a self-fulfilling prophecy: evidence from a survey experiment in Costa Rica. *American Journal of Political Science*, 60, 1077-1092.
- Coricelli, G., Joffily, M., Montmarquette, C., Villeval, M. C. (2010). Cheating, Emotions, and Rationality: An Experiment on Tax Evasion. *Experimental Economics*, 13 (2), 226-247.
- Damm, A., Dustmann, C. (2014). Does growing up in a high crime neighborhood affect youth criminal behavior? *American Economic Review*, 104, 1806–1832.
- Dana, J., Weber, R. A., Kuang, J. X. (2007). Exploiting moral wiggle room: experiments demonstrating an illusory preference for fairness. *Economic Theory*, 33, 67-80.
- Dear, K., Dutton, K., Fox, E. (2019). Do ‘watching eyes’ influence antisocial behavior? A systematic review & meta-analysis. *Evolution and Human Behavior*, 40, 269-280.
- Dimant, E. (2019). Contagion of pro-and anti-social behavior among peers and the role of social proximity. *Journal of Economic Psychology*, 73, 66–88.
- Dimant, E., van Kleef, G. A., Shalvi, S. (2020). Requiem for a nudge: Framing effects in nudging honesty. *Journal of Economic Behavior & Organization*, 172, 247-266.
- Dimant, E., Shalvi, S. (2022). Meta-nudging honesty: Past, present, and future of the research frontier. *Current Opinion in Psychology*, 47 (101426).
- Dimand, E., Galeotti, F., Villeval, M. C. (2024). Motivated information acquisition and social norm formation. *European Economic Review*. Forthcoming.
- Drago, F., Mengel, F., Traxler, C. (2020). Compliance Behavior in Networks: Evidence from a Field Experiment. *American Economic Journal: Applied Economics*, 12, 96–133.
- Dufwenberg, M., Dufwenberg, M. A. (2018). Lies in Disguise—A Theoretical Analysis of Cheating. *Journal of Economic Theory*, 175, 248-264.
- Egan, M., Matvos, G., Seru, A. (2019). The Market for Financial Adviser Misconduct. *Journal of Political Economy*, 127, 233–295.
- Erat, S. (2013). Avoiding lying: The case of delegated deception. *Journal of Economic Behavior & Organization*, 93, 273-278.
- Falk, A., Szech, N. (2013). Morals and Markets. *Science*, 340 (6133), 707-712.
- Fallucchi, F., Quercia, S. (2018). Affirmative action and retaliation in experimental contests. *Journal of Economic Behavior and Organization*, 156, 23-40.

- Faravelli, M., Friesen, L., Gangadharan, L. (2015). Selection, tournaments, and dishonesty. *Journal of Economic Behavior and Organization* 110, 160–175.
- Feltovich, N. (2019). The interaction between competition and unethical behaviour: experimental evidence. *Experimental Economics* 22, 101–130.
- Fischbacher, U., Föllmi-Heusi, F. (2013). Lies in disguise— An experimental study on cheating. *Journal of the European Economic Association*, 11, 525–547.
- Fisman, R., Miguel, E. (2007). Corruption, norms, and legal enforcement: Evidence from diplomatic parking tickets. *Journal of Political Economy*, 115, 1020-1048.
- Flashman, J., Gambetta, D. (2014). Thick as thieves: Homophily and trust among deviants. *Rationality and Society*, 26, 3–45.
- Fortin, B., Lacroix, G., Villeval, M. C. (2007). Tax evasion and social interactions. *Journal of Public Economics*, 91, 2089–2112.
- Fosgaard, T. R., Hansen, L. G., Piovesan, M. (2013). Separating will from grace: an experiment on conformity and awareness in cheating. *Journal of Economic Behavior & Organization*, 93, 279–284.
- Fries, T., Gneezy, U., Kajackaite, A., Parra, D. (2021). Observability and lying. *Journal of Economic Behavior & Organization*, 189, 132-149.
- Gächter, S., Schulz, J. F. (2016). Intrinsic honesty and the prevalence of rule violations across societies. *Nature*, 539, 496-499.
- Galeotti, F., Rilke, R. M., Verrina, E. (2024). Beliefs and Group Dishonesty: The Role of the Strategic Interaction and Complicity. *Mimeo, GATE*.
- Gangadharan, L., Grossman, P. J., Molle, M. K., Vecci, J. (2019). Impact of Social Identity and Inequality on Antisocial Behaviour. *European Economic Review*, 119, 199-215.
- Gangadharan, L., Grossman, P. J., Vecci, J. (2020). Antisocial Behaviour in the Workplace in K. F. Zimmermann (Ed), *Handbook of Labor, Human Resources and Population Economics*, Springer.
- Gavrilova, E. (2019). A partner in crime: Assortative matching and bias in the crime market. *Journal of Economic Behavior & Organization*, 159(C), 598-612.
- Gawn, G., Innes, R. (2019). Lying through others: Does delegation promote deception? *Journal of Economic Psychology*, 71, 59-73.
- Gneezy, U., Kajackaite, A., Sobel, J. (2018). Lying aversion and the size of the lie. *American Economic Review*, 108, 419-453.
- Golman, R., Hagmann, D., Loewenstein, G. (2017). Information avoidance. *Journal of Economic Literature*, 55, 96-135.
- Gross, J., Leib, M., Offerman, T., Shalvi, S. (2018). Ethical Free Riding: When Honest People Find Dishonest Partners. *Psychological Science* 29 (12), 1956-1968.
- Gürtler, O., Münster, J., Nieken, P. (2013) Information policy in tournaments with sabotage. *The Scandinavian Journal of Economics*, 115, 932-966.
- Hanna, R., Wang, S. Y. (2017). Dishonesty and selection into public service. *American Economic Journal: Economic Policy*, 9 (3), 262-290.
- Harbring, C., Irlenbusch, B. (2011). Sabotage in tournaments: evidence from a laboratory experiment. *Management Science*, 57 (4), 611-627.

- Heldring, L. (2021). The origins of violence in Rwanda. *Review of Economic Studies*, 88, 730-763.
- Houser, D., List, J.A., Piovesan, M., Samek, A., Winter, J. (2016). Dishonesty: from parents to children. *European Economic Review*, 82, 242-254.
- Hu, F., Ben-Ner, A. (2020). The effects of feedback on lying behavior: Experimental evidence. *Journal of Economic Behavior & Organization*, 171, 24-34.
- Huber, C., Dreber, A., . . . , Holzmeister, F. (2023). Competition and moral behavior: A meta-analysis of forty-five crowd-sourced experimental designs. *PNAS*, 120 (3), e2215572120.
- Huber, C., Litsios, C., Nieper, A., Promann, T. (2023). On social norms and observability in (dis) honest behavior. *Journal of Economic Behavior & Organization*, 212, 1086-1099.
- Hübler, O., Koch, M., Menkhoff, L., Schmidt, U. (2021). Corruption and cheating: Evidence from rural Thailand. *World Development*, 145, 105526.
- Innes, R., Mitra, A. (2013). Is dishonesty contagious? *Economic Inquiry*, 51 (1), 722-734.
- Irlenbusch, B., Mussweiler, T., Saxler, D. J., Shalvi, S., Weiss, A. (2020). Similarity increases collaborative cheating. *Journal of Economic Behavior & Organization*, 178, 148–173.
- Jacquemet, N., Luchini, S., Rosaz, J., Shogren, J. F. (2019). Truth Telling Under Oath. *Management Science*, 65 (1), 426-438.
- Jiang, T. (2015). Other-regarding Preferences and Other-regarding Cheating - Experimental Evidence from China, Italy and the Netherlands. *SSRN Electronic Journal*.
- Jiang, S., Villeval, M. C. (2024). Dishonesty as a collective-risk social dilemma. *Economic Inquiry*, 62, 223–241.
- Kajackaite, A., Gneezy, U. (2017). Incentives and Cheating. *Games and Economic Behavior*, 102, 433-444.
- Keizer, K., Lindenberg, S., Steg, L. (2008). The spreading of disorder. *Science*, 322, 1681-1685.
- Khalmetski, K., Sliwka, D. (2019). Disguising lies – image concerns and partial lying in cheating games. *American Economic Journal: Microeconomics*, 11 (4), 79-110.
- Kingsuwankul, S., Tergiman, C., Villeval, M. C. (2023). Why Do Oaths Work? Image Concerns and Credibility in Promise Keeping. Working Paper, <https://ssrn.com/abstract=4574459>.
- Kirchler, M., Huber, J., Stefan, M., Sutter, M. (2016). Market design and moral behavior. *Management Science*, 62, 2615-2625.
- Köbis, N. C., van der Lingen, S., Dores Cruz, T. D., et al. (2019). The Look Over Your Shoulder: Unethical Behaviour Decreases in the Physical Presence of Observers. Working Paper.
- Kocher, M. G., Schudy, S., Spantig, L. (2018). I lie? We lie! Why? Experimental evidence on a dishonesty shift in groups. *Management Science*, 64, 3995–4008.
- Kroher, M., Wolbring, T. (2015). Social control, social learning, and cheating: Evidence from lab and online experiments on dishonesty. *Social Science Research*, 53, 311–324.
- Lefebvre, M., Pestieau, P., Riedl, A., Villeval, M. C. (2015). Tax evasion and social information: an experiment in Belgium, France, and the Netherlands. *International Tax and Public Finance*, 22, 401-425.

- Leib, M., Köbis, N., Soraperra, I., Weisel, O., Shalvi, S. (2022). Collaborative dishonesty: a meta-analytic review. *Psychological Bulletin*, 147 (1241).
- Leibbrandt, A., Wang, L.C., Foo, C. (2017). Gender quotas, competitions, and peer review: Experimental evidence on the backlash against women. *Management Science*, 64, 3501-3516.
- Lowes, S., Nunn, N., Robinson, J. A., Weigel, J. L. (2017). The evolution of culture and institutions: Evidence from the Kuba Kingdom. *Econometrica*, 85, 1065-1091.
- Michalopoulos, S., Xue, M. M. (2021). Folklore. *The Quarterly Journal of Economics*, 136 (4), 1993-2046.
- Pascual-Ezama, D., Fosgaard, T.R., Cardenas, J.C., ....., Branas-Garzia, P. (2015a). Context-dependent cheating: Experimental evidence from 16 countries. *Journal of Economic Behavior & Organization*, 116, 379-386.
- Pascual-Ezama, D., Dunfield, D., Gil-Gomez de Liano, B., Prelec, D. (2015b). Peer Effects in Unethical Behavior: Standing or Reputation? *PLOS One*, 10, e0122305.
- Pruckner, G. J., Sausgruber, R. (2013). Honesty on the streets: A field study on newspaper purchasing. *Journal of the European Economic Association*, 11 (3), 661-679.
- Rahwan, Z., Yoeli, E., Fasolo, B. (2019). Heterogeneity in banker culture and its influence on dishonesty. *Nature*, 575 (7782), 345-349.
- Rigdon, M.L., D’Esterre, A. (2015). The effects of competition on the nature of cheating behavior. *Southern Economic Journal*, 81 (4), 1012-1024.
- Salmon, T. C., Serra, D. (2017). Corruption, social judgment and culture: An experiment. *Journal of Economic Behavior & Organization*, 142, 64-78.
- Sandel, M. (2012). *What Money Can’t Buy. The Moral Limits of Markets*. London: Alan Lane.
- Schram, A., Zheng, J. D., Zhuravlev, T. (2022). Corruption: A cross-country comparison of contagion and conformism. *Journal of Economic Behavior & Organization*, 193, 497-518.
- Schurr, A., Ritov, I. (2016). Winning a competition predicts dishonest behavior. *Proceedings of the National Academy of Sciences* 113 (7), 201515102.
- Schwieren, C., Weichselbaumer, D. (2010). Does competition enhance performance or cheating? A laboratory experiment. *Journal of Economic Psychology*, 31 (3), 241–253.
- Shleifer, A. (2004). Does competition destroy Ethical Behavior? *American Economic Review* 94 (2), 414–418.
- Soraperra, I., van der Weele, J., Villeval, M. C., Shalvi, S. (2023). The social construction of ignorance: Experimental Evidence. *Games and Economic Behavior*, 138, 197-213.
- Sutter, M. (2009). Deception through telling the truth?! Experimental evidence from individuals and teams. *The Economic Journal*, 119, 47-60.
- Sutter, M., Zoller, C., Glätzle-Rützler, D. (2019). Economic behavior of children and adolescents-a first survey of experimental economics results. *European Economic Review*, 111, 98-121.
- Sutter, M., Huber, J., Kirchler, M., Stefan, M., Walzl, M. (2020). Where to look for the morals in markets? *Experimental Economics*, 23 (1), 30-52.
- Tergiman, C., Villeval, M. C. (2023). The Way People Lie in Markets. *Management Science*, 69 (6), 3157-3758.

Thau, S., Derfler-Rozin, R., Pitesa, M., Mitchell, M. S., Pillutla, M. M. (2015). Unethical for the sake of the group: Risk of social exclusion and pro-group unethical behavior. *Journal of Applied Psychology*, 100, 98-113.

Van de Ven, J., Villeval, M. C. (2015). Dishonesty under scrutiny. *Journal of the Economic Science Association* 1, 86-99.

Weisel, O., Shalvi, S. (2015). The collaborative roots of corruption. *Proceedings of the National Academy of Sciences of the USA*, 112, 10651–10656.

Zickfeld, J., Scigala, K., Elbaek, C. T., ..., Mitkidis, P. (2024). I Solemnly Swear I'm Up To Good: A Megastudy Investigating the Effectiveness of Honesty Oaths on Curbing Dishonesty. *PsyArXiv*.