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## Review

# Why do people follow social norms?

Jörg Gross<sup>1,a</sup> and Alexander Vostroknutov<sup>2</sup>**Abstract**

Norms prescribe how to make decisions in social situations and play a crucial role in sustaining cooperative relationships and coordinating collective action. However, following norms often requires restricting behavior, demanding to curtail selfishness, or suppressing personal goals. This raises the question why people adhere to norms. We review recent theories and empirical findings that aim at explaining why people follow norms even in private, when violations are difficult to detect and are not sanctioned. We discuss theories of norm internalization, social and self-image concerns, and social learning (i.e. preferences conditional on what others do/believe). Finally, we present two behavioral, incentivized tasks that can be used to elicit norms and measure the individual propensity to follow them.

**Addresses**

<sup>1</sup> Social, Economic and Organizational Psychology, Leiden University, the Netherlands

<sup>2</sup> Department of Economics, Maastricht University, the Netherlands

Corresponding author: Gross, Jörg ([mail@joerg-gross.net](mailto:mail@joerg-gross.net))

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**Introduction**

Social interactions are interspersed with rules and norms that guide many aspects of our behavior. From following the appropriate greeting ritual, tipping, or waiting at a red traffic light to donating to charity or voting for redistributive policies, social norms prescribe what actions to take or avoid. Rules and conventions—like driving on the right side of the street or queuing—help to coordinate social behavior. In most societies, following them is usually in the interest of the actor, as they suggest what

others will do and help to avoid punishment or miscoordination [1]. However, in many cases—such as paying taxes, returning undeserved pay, or telling the truth—norms demand to restrict selfish behavior and can be at odds with individuals' personal goals. For example, standing at a red light with no cars in sight unnecessarily interferes with reaching one's destination.

Why do people follow norms and rules? As per standard rational choice theory with selfish preferences, adhering to any rule should only happen when violating it leads to negative consequences (punishment, miscoordination) that outweigh the benefits of this violation. Indeed, many social rules of conduct, like paying taxes, are codified as laws, and violations are sanctioned. However, many others are not formalized or punished, and their violations cannot be easily observed (e.g. lying). Such informal rules and norms play a crucial role in upholding cooperation in groups and in establishing social relationships based on trust [2–4]. In this article, we review current theories that aim at explaining why social norms are followed and recent advances on how to measure norms and norm abundance and highlight some empirical findings on norm compliance.

**Why do people follow norms?****Internalization**

Different theories have been developed to explain why people follow norms, even when their violation is beneficial for the decision maker and sanctions are unlikely. One prominent explanation is that norm following is, to some degree, internalized through socialization [4–6]. Learning norms takes place when punishment of violations or rewards for adherence are observed or experienced. For example, children are capable of avoiding expected punishment, predicting cooperativeness of others [7], and learn the rules of moral conduct from their parents [8]. Internalization may also explain why norm violations can trigger emotional reactions such as guilt or shame that reduce the likelihood of violating norms [9]. Through the process of socialization, people can also develop heuristics for norm abundance that result in intrinsic preferences for fairness or honesty.

**Social image and self-image**

Related concepts that are often used to explain intrinsic norm abundance are social image and self-image [10,11]. We often like to be seen as fair-minded, honest, or decent by others. Such 'social image concerns' can be an

important driver behind norm abidance [12,13]. Having a positive social image can be beneficial for the actor, as it increases the chance to be seen as trustworthy, chosen as an interaction partner, and receive help from others [14,15]. Social image concerns, however, cannot explain why people would follow norms when they are not observed by others. Self-image theories propose that we also like to see ourselves as moral beings. For example, decisions to help a stranger in need or forgo the temptation to cheat on an exam reveal information about oneself [11]. To avoid having to revise one's own positive self-image, people may choose to follow a norm even if the decision is not observed by others. An interesting prediction of self-image theories is that people shy away from situations that tempt violation of norms to avoid damages to the self-image. In line with this prediction, Shalvi et al. [16] showed that participants actively avoid situations that allow them to deceive others. A study by Falk [17] also showed that increased self-awareness reduces antisocial, selfish behavior, possibly due to elevated self-image concerns. People also selectively misremember past actions [18] or avoid to learn about social consequences of their decisions that would negatively affect their self-image. For example, people may avoid to learn if consumed products were produced with child labor or damage the environment [19] (also [20]). Evidence for such 'strategic ignorance' comes from a seminal study by Dana, Weber, and Kuang [21], who showed that, in uncertain situations involving others, people choose to not resolve the uncertainty, but prefer to stay unaware of the social consequences of their decisions to justify their selfish behavior ('moral wiggle room'). Their results resonate with findings that people use or create uncertainty about norms or decision consequences to make norm violations feel more justified [22–24].

### Social learning

The abovementioned theories can explain why people follow norms even if their violation is not observed and sanctioned. They can also explain the large degree of interindividual differences in norm abidance observed in experiments by assuming that people differ in their internalized habits or concern for social image or self-image.

Yet, research has also documented a large degree of intraindividual variation. People are often highly flexible in their norm adherence, adhering to or violating norms depending on what others do [25] or believe [26]. Such effects are difficult to reconcile with the above-outlined theories because habits or self-image concerns should not depend on others' behavior (without making further assumptions). Social learning (or, put differently, preferences conditional on what others do/believe) takes into account that norms and the degree of norm abidance depend on beliefs about and observations of others

[1,27]. For example, in social dilemma situations in which cooperation is beneficial for the group but costly for the individual, many participants can be classified as 'conditional cooperators', willing to cooperate only when others do [3,28]. This reveals an important requirement for individual and collective norm abidance. Social learning implies that the existence of a norm in itself does not mean that it is followed. Often a critical mass of people is needed to follow the norm (or people need to believe that others follow it) to sustain norm abidance. Observing norm violations can lead to slippery slopes and quickly crowd out norm abidance, as documented in many experiments [25,29–31], whereas common behavior followed by many can gain normative status [32].

### Other mechanisms influencing norm abidance

There are many other mechanisms mentioned in the literature that have an influence on the degree of norm abidance. One possible reason for interindividual differences in norm abidance is power. It has been argued that people in more powerful positions have a lower likelihood to follow norms, possibly because they also face a lower likelihood to get sanctioned for norm violations or develop feelings of entitlement [33–35]. Relatedly, individuals who belong to minority groups get punished more frequently for norm violations [36]. Research also has shown that norm enforcement is more likely when people interact with in-group rather than out-group members [37] and that people follow norms more stringently when they interact with other people whom they identify to belong to their in-group [38,39]. In addition, situational factors can make norms more salient (like avoiding to cross a red traffic light in the presence of children) [40,41]. Because norm following is often costly and not in the selfish interest of the decision maker, it has been argued that lower self-control leads to more norm violations [42,43] (however, see Refs. [2,44]). Resonating with the perspective that norm following involves a trade-off between abiding by rules and weighing the costs and benefits of such rules, a neuroscientific study found that the stimulation of the right lateral prefrontal cortex, a brain area associated with action control and prosocial choice, is associated with more flexible rule adherence and violating rules if the consequences would be to hurt another person, whereas the disruption of this area relates to more obedience to even antisocial rules [44].

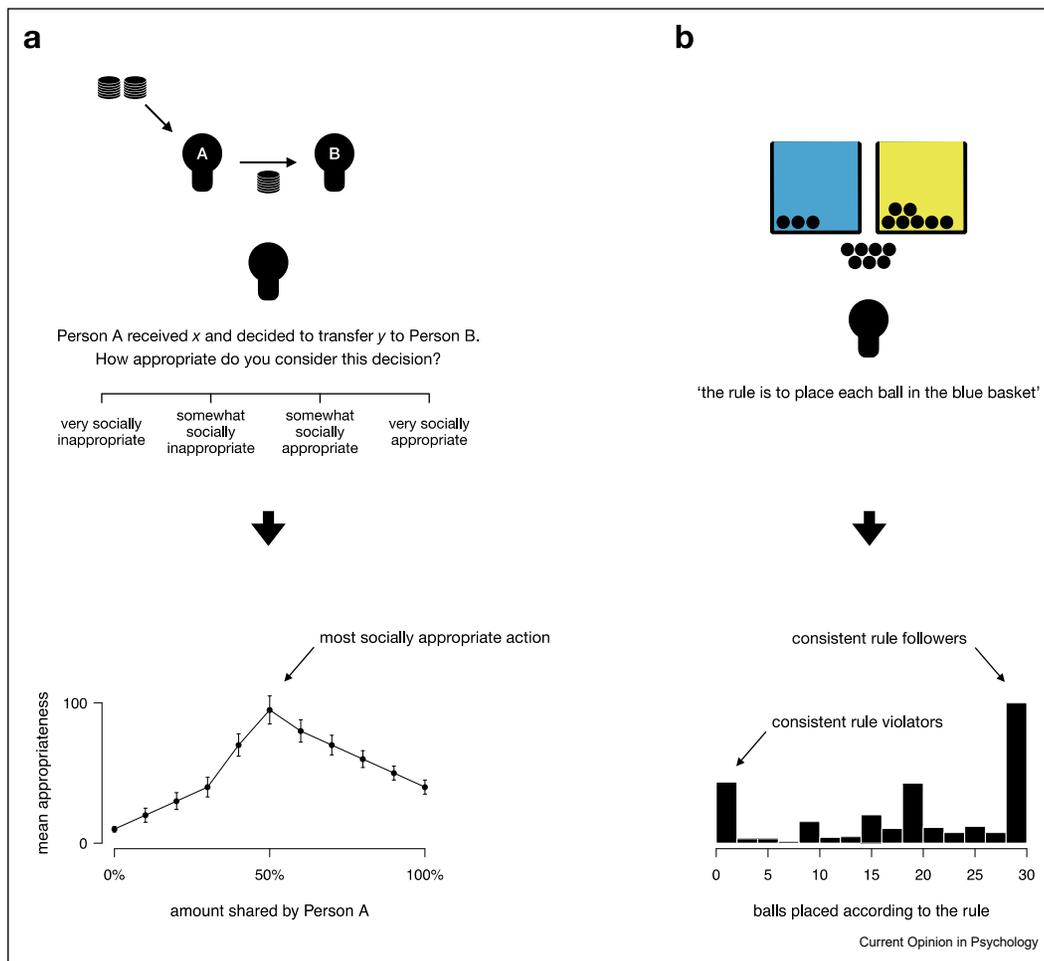
### Measuring norms and rule following

Given the wide variety of factors that determine norms and the degree of norm abidance discussed previously, it becomes crucial to use specifically designed tasks to measure norms and norm following to properly account for these factors. Indeed, cross-cultural comparisons have highlighted how idiosyncratic social norms are [45–47]. What is considered appropriate in one culture can be seen as highly deviant in another culture,

challenging the idea of norm universals. This also means that interpreting behavior that is governed by norms, such as cooperation or honesty, is difficult without knowing the underlying norms at play [48]. Krupka and Weber [49] developed an incentive-compatible elicitation method to identify social norms. Participants receive a description of a situation in which a person has to choose between different actions. For each possible action that the person could take, the participant is asked to judge how socially appropriate they perceive it on a scale from ‘very socially inappropriate’ to ‘very socially appropriate’. For example, participants are asked to imagine a person A who received a sum of money and has to decide how much of this money to transfer to another person B who did not receive any money (the dictator game; Figure 1a). Person A can decide to keep all the money for herself up to transferring all the money to person B. The participant rates how appropriate they perceive each possible action. To reduce cheap-talk and

demand effects, people are financially incentivized for their answers. Specifically, the participant receives a monetary bonus if their evaluation for one randomly selected action is the same as that of most of the other participants that took part in the experiment. Importantly, although participants know about this bonus payment, they do not receive any information about how others evaluated the different actions. Participants therefore have to think about how others perceive the different actions and tacitly coordinate their answers, similar to a norm that is implicitly shared within a group. Eliciting appropriateness ratings this way for all possible choice alternatives reveals a mean appropriateness rating for every action (Figure 1a). The action with the highest mean appropriateness can be interpreted as the most socially appropriate (the norm). The appropriateness values of other actions become important if we assume that subjects maximize norm-dependent utility [35,49,50], representing a trade-off between having

Figure 1



The Krupka–Weber method to elicit norms (a; data were created for illustration and mimics empirical observations from Ref. [49]) and the rule-following task to predict norm abidance (b; data shown from Ref. [53]).

more consumption and the desire to adhere to norms. A steeper peak on Figure 1a would make decision makers choose the norm more often, whereas a flatter distribution would generate more selfish behavior.

Identifying a norm, however, does not mean that people will follow it. Kimbrough and Vostroknutov [51] developed a simple ‘rule-following task’ aimed at measuring an individual’s propensity to follow norms (Figure 1b). Participants have to distribute a fixed number of balls between two baskets (e.g. a blue and yellow basket). Participants earn more money by putting the balls in the yellow basket. Yet, in the instructions, they are told that ‘the rule is to place all balls in the blue basket’. The task confronts participants with a conflict between selfish payoff maximization and abiding by the rule similar to a norm but removing any moral connotations, risk of punishment, or social image concerns. Experiments have shown that rule following in this task (measured by the number of balls in the blue basket) predicts norm abidance in economic games such as the dictator game, trust game, or public goods dilemma [50] and is correlated with dishonesty in the die-under-the-cup task in which participants can misreport a random die-roll to earn more money [52]. Rule abidance is also positively correlated with personal need for structure [53], a preference for clear, unambiguous, and predictable situations, revealing how personality dimensions can influence norm abidance. Using the rule-following task, Gross and De Dreu [52] also showed that rule followers can help to sustain norm abidance in groups of rule violators (see also [29,50]), and a recent study showed that people preferably select rule followers as partners for a subsequent decision task that requires more trust [15]. Taken together, the norm elicitation method and the rule following task provide simple tools to measure norms and the individual propensity to follow them.

## Conclusions

There is little disagreement among scientists that norms play a pivotal role in guiding social behavior. Many recent studies across multiple disciplines have made important progress in understanding when and why people follow norms. However, an important challenge still remains: How do norms develop and change? Some answers have recently started to emerge [27,35]. Nonetheless, the picture is incomplete. The considerable cross-cultural variations in norms are not very well understood. Furthermore, framing effects [54] and the role of emotions and risk in normative decisions [55] present certain challenges for a comprehensive theory of normative behavior that aims not only to explain why people follow or violate a norm but also to explain when and why certain norms emerge. Many theoretical and empirical attempts have been made to take intentions, frames, or moral emotions into account. Nevertheless, we do not yet have a widely accepted theory that can

explain norm abidance and predict what norms emerge in each given situation. Such a theory also has to be able to explain why groups sometimes develop seemingly maladaptive practices that reduce collective social welfare, such as the practice of female genital mutilation [56], antisocial punishment [57], or binge drinking [58]. An exciting avenue for future research, hence, is to understand norm emergence and to unravel the determinants of the dynamics of normative change.

## Conflict of interest statement

Nothing declared.

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Papers of particular interest, published within the period of review, have been highlighted as:

- \* of special interest
- \*\* of outstanding interest

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