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Editorial

Social norms and behavior change: The interdisciplinary research frontier

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ABSTRACT

Where there is behavior there are social norms. Social norms are a key feature of societies, and their adherence is crucial to sustaining social order. This special issue brings together research at the interdisciplinary research frontier investigating social norms with a focus on behavior change. We categorize research according to different methods (theory, non-experimental, laboratory, extra-laboratory) and discuss their policy implications.

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1. Introduction & motivation

In the last two decades, economists have expanded traditional rational choice models to incorporate psychological and social elements to model and explain a variety of collective behaviors and outcomes. Social norms are part of this renewed interest in offering a richer, interdisciplinary explanation of behavior. Social norms are the informal “rules we live by” and many of our behaviors can be understood as motivated by their existence. Norms can be approached in a variety of ways. We can stress the individual elements involved in norm-following, such as the emotional (guilt, shame) or the epistemic components (belief formation and change). We may also focus on the social elements, such as the role social expectations play in the survival or change of social norms, the social constraints within which norms exist (e.g., reference networks and legal systems), and how enforcement ensures norm survival.

An important aspect of modeling social norms is the operationalization of the concept. Norms can be defined using simple, measurable concepts such as social expectations and conditional preferences. Norms may be just supported by the expectations of what others in one’s reference network do (descriptive norms), or also by what others approve of (social norms). The preference for following a norm is conditional on having such expectations, and much work is being done showing how measurable expectations affect behavior. This way of modeling norms sits squarely within the rational choice tradition, an important difference being that preferences are not exogenously given but are instead conditional on the expectations that individuals entertain. Such expectations can be changed, imparting a dynamic element to the analysis of norms. It is indeed crucial to be able to model norm dynamics: how norms emerge, stabilize and change (see, e.g., [Bicchieri et al., 2022](#); [Dimant et al., 2022](#)).

The purpose of this special issue is to feature cutting edge theory and research on social norms in economics. Although social norms research has a longstanding interdisciplinary tradition, economists have only recently started to harness the power of social norms to facilitate behavioral change. This growing body of research has shown that social norms guide our behavior and interactions in a variety of economically interesting domains, such as corruption, environmental conservation,

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and charitable giving, among others, and is also as a way to augment the effectiveness of nudging in the form of so-called norm-nudges (see [Bicchieri & Dimant, 2019](#)).

Across 22 papers, we bring together research from economics (and adjacent fields) to illuminate the social dynamics surrounding the development, sustainability, violation, or demise of social norms, and how these mechanisms can be exploited to ultimately achieve positive behavioral change. The papers cover a broad spectrum of approaches to social norms, including theoretical, empirical, and experimental research at the intrapersonal, interpersonal, group, intergroup, and cultural levels of analysis. The findings featured in the special issue also hold important policy implications across a wide range of topics, including behaviors related to savings, electricity, public transportation, donations, elections, and COVID-19, among others.

2. Insights from accepted papers & how they related back to the roadmap

Using various scientific methods, the papers included in this special issue examine a multitude of topics related to norms and behavior change. Broadly construed, we can divide them into four categories:

- 1 Theory
- 2 Non-Experimental
- 3 Laboratory
- 4 Extra-Laboratory (online, field and variants thereof)

In what follows, we will discuss the main insights from each of the included papers within each of these four categories.¹

2.1. Theory

[te Velde \(2022\)](#) studies the role of image concerns when personal norms (the individually internalized belief about what is the right thing to do) differ among individuals, focusing on the role of "respect-seeking," namely the social image that accrues to those who place high priority on following their personal norms. When image concerns take the form of respect-seeking, greater social pressure will cause individuals to adhere more strictly to their personal norms. As a result, society may become more polarized, exhibiting radically different behaviors. This stands in contrast with the predictions obtained if instead image concerns take the form of seeking behavior that is considered right by the majority ("approval seeking").

[Michaeli and Wu \(2022\)](#) consider an important aspect of norms, namely intergenerational transmission. When people differ in their values (personal norms), parents who want their children's behavior to conform to their (the parents') values may instill extreme values in their children to counteract the effect of peer pressure. In turn, this may generate polarization.

[Danilov et al. \(2021\)](#) consider the problem of distinguishing between two different motives: the desire to conform to norms (norm compliance), and the desire to match the expectations of others (guilt aversion). Since others generally expect us to behave in accordance to norms, these two distinct motives are often difficult to separate in practice. To achieve this purpose, the authors develop a design where dictators are presented with two pieces of information: what other dictators tend to do (descriptive norm) and what the recipient expects them to do. Their findings confirm that, while dictators' choices are affected by both, the effect of the descriptive norm on their choices is stronger.

[Merguei et al. \(2022\)](#) study moral opportunism in a setup characterized by pluralistic normative views. In a dictator game with second party punishment, they show that recipients who have been exposed to different norm functions choose to punish based on the norm function that prescribes less punishment and allows them to keep more money. This is in line with a theoretical model where individuals select ex-ante their normative views among those available, in order to maximize their ex-post material payoff.

2.2. Non-Experimental

Using a large-scale survey that collected data for over 100,000 respondents in 58 countries, [Hensel et al. \(2022\)](#) investigate the role of beliefs and attitudes towards citizens' and governments' responses early on in the COVID-19 pandemic. Among other things, one key result suggests that own adherence to preventative measures is strongly related to normative beliefs about such behavior and also found a positive relationship between lockdowns and optimism about others' and the government's response to the pandemic.

Within the context of Italy, [Bamieh and Cintolesi \(2021\)](#) study what they call "familism" in the legal profession, namely the practice by local evaluators of favoring family members of individuals who are already established in the legal profession when grading bar licensing examinations. Their analysis suggests that familism is more pervasive in areas characterized by weak civic norm. Areas with strong civic norms exhibit little familism, in spite of potential rents also being very high.

Using data from a large data base, [Li and Gelfand \(2022\)](#) examine the relationship between the strength of norms and economic outcomes. They investigate and confirm that the tightness and looseness of norms across countries explains cross-border acquisitions.

¹ It is worth noting that some of the papers use more than one method (for example, develop a theory that is then tested with an experiment). In such cases, we assign the paper to the main category that we believe the paper contributes to.

2.3. Laboratory

[Bicchieri et al. \(2021\)](#) use a series of laboratory experiments to examine the conditions under which the enforcement of norm conformity can backfire. They put forward the idea that such backfiring can occur when the punishment is perceived as illegitimate. To test this, they systematically vary the combination of existing punishment and norms and find support for their hypothesis that the effectiveness of norm enforcement is sensitive to its perceived legitimacy.

[Kölle and Quercia \(2021\)](#) examine the role of empirical and normative expectations in cooperative behavior. The authors find strong evidence for a norm of conditional cooperation in that both expectations are aligned. Interestingly, where strategic uncertainty exists, the expectations diverge in that individuals form gloomy expectations about other people's actual level of cooperation.

[Heinicke et al. \(2022\)](#) study how individuals coordinate on social norms. In the context of allocation games, the authors find that while norms are largely stable, most observed shifts in normative perceptions are consistent with self-serving allocations.

[Schram et al. \(2022\)](#) ran experiments in 4 countries (Netherlands, Russia, Italy, China) to study how descriptive norms affect corruption over time. By varying information about the behavior of other participants, the authors find evidence for behavioral contagion that is consistent with [Dimant \(2019\)](#) and [Bicchieri et al. \(2022\)](#).

[Apffelstaedt et al. \(2022\)](#) examine whether and how elections change perceptions of social norms in the context of income redistribution. In several lab experiments, they find support for this conjecture, even in situations where the election process is flawed (introducing a voting fee or "poll tax", bribing voters, or disenfranchising poorer voters).

2.4. Extra-Laboratory

[Isler and Gächter \(2022\)](#) study the impact of peers on moral decision-making. Using an online experiment, they find that individuals are indeed sensitive to peer effects with respect to both honesty and cooperation and that the negative peer effects usually outweigh the positive peer effects.

[Casirua et al. \(2021\)](#) study the relationship between social norms and social distancing during the COVID-19 pandemic. Through the means of a weekly online experiment run in France for three months in 2020, the authors find that both norm perception and behavior was sensitive to the introduction and removal of social distancing measures by the French government. They also found evidence for this effect to be persistent, thus highlighting the stickiness of social norms.

In a field experiment run on Wikipedia in Germany, [Linek and Traxler \(2021\)](#) examine how negative or positive framing of information about how many other users are donating affects donation decisions. Based on a series of trials, the authors find that donations are strategic substitutes in that the negative framing yields increased donation rates.

[Adriani et al. \(2022\)](#) study gender effects in two countries (India and Norway) that exhibit very different gender norms. In an environment where inequality is ingrained and largely unavoidable (the battle of the sexes), the authors examine whether participants adapt their choices to the gender of their opponent. Their findings document the existence of gender effects which take opposite forms in the two countries. In India, the gender effect is present among less educated participants (especially women), who exhibit a lower tendency to choose the "hawkish" action when facing a male opponent. In Norway, the gender effect takes the form of highly educated men behaving less "hawkishly" when facing a woman. This suggests that gender norms in one's own social circle may guide behavior in the battle of the sexes, and points to a possible role for gender inequality metrics based on in-the-lab behavior.

[Fromell et al. \(2021\)](#) examine and find a plurality of norms in the context of savings behavior in Kenya. In particular, they find that network characteristics are related to both the perceived norms and actual savings behavior.

[Restrepo-Plaza and Fatas \(2022\)](#) collect data on ex-combatants, victims, and non-victims of conflict in Colombia to study discriminatory behavior. In a series of economic games, they find that ex-combatants are consistently discriminated against and that this is aligned with the elicited social norms.

[Bartoš \(2021\)](#) runs a field experiment in Afghanistan to examine how scarcity affects one's willingness to enforce norms and sharing behavior. He finds that while norm enforcement is substantially lower in times of scarcity, sharing itself remains stable over time.

[Gravett and Collentine \(2021\)](#) study whether public transport usage is sensitive to either norm-nudges or economic incentives in the context of a large-scale natural experiment in Sweden. While the authors find that behavior is largely invariant to the former, the positive effects of economic incentives are both sizeable and long-lasting. This work also provides evidence for heterogeneity with respect to take-up rates in that the positive effect is mainly driven by initial low users.

[Kim and Kaemingk \(2021\)](#) run a large-scale experiment in Moldova to examine the impact of letters containing norm-nudges with respect to the electricity-usage of others on own electricity consumption. They find positive effects that are both sizeable in magnitude and persistent, which lends support to the idea that modest interventions can produce substantial behavior change.

In an experiment run in Central Africa, [Lowes \(2021\)](#) sheds light on the role of kinship structure and stress on women's and men's willingness to compete. Examining the willingness to compete among 27 ethnic groups, the author finds no evidence that - relative to patrilineal kinship - matrilineal kinship does not close the gender gap in competition. Results from the physiological data suggest that women who experience greater stress during competition are less likely to select into competition.

3. Conclusion & outlook

The papers in this special issue illustrate the sheer variety of approaches that may be fruitfully employed to understand the effect of norms on behavior. We see these approaches (theory, field experiments, lab experiments, extra-lab experiments and non-experimental data) as complementary, documenting different facets of a multi-faceted phenomenon. The common theme, of course, is the acknowledgement of man as a social animal, influenced by the behavior and expectations of other individuals.

It is important to stress that acknowledging the social dimension of human beings does not imply that individuals do not respond to “standard” material incentives. What it emphasizes is the need to incorporate social incentives and to consider how social and material incentives may interact, in order to form a more complete picture of the underlying determinants of human behavior.

In our increasingly small and interconnected world, developing a full-fledged understanding of how norms arise and evolve is as urgent as ever. What is the power of norms? How do norms operate and how do they generate behavioral change? How can norms be harnessed to achieve desirable (or undesirable) behavioral outcomes? These questions present us with a rich research agenda that will keep us busy for years to come. Producing satisfactory answers will require a 360° perspective, which encompasses multiple methodological viewpoints. We hope that this special issue represents a useful step in that direction.

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