Normative foundations of human cooperation
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In 2016, Fehr was ranked as the most influential economist in Germany, Austria, and Switzerland.

- H-index: 120; 109,623 citations
- 1999: A theory of fairness, competition, and cooperation; 12K citations
- 2002: Altruistic punishment in humans; 5500 citations
- 2000: Cooperation and punishment in public goods experiments; 4,700 citations
- 2001: In search of homo economicus: behavioral experiments in 15 small-scale societies; 4,500 citations
- 2005: Oxytocin increases trust in humans; 4,000 citations

- z-Tree, a program developed for doing decision experiments
Two equally ubiquitous phenomena in humans

- Social norms
- Cooperation
Norms
Social norms

• “The expression of the wishes and judgment of the members of the same community ... serves ... as a most important secondary guide of conduct, in aid of the social instincts, but sometimes in opposition to them” (Darwin, 1871, p.99)

• “Humans live in a sea of social norms that govern pretty much all aspects of their lives” (Tomasello, 2011, p.20)
• Many individuals and groups are willing to pay extremely high costs to enact, defend, or promulgate norms that they consider important.

• At the same time, virtually all norms can be violated by individuals under some conditions (e.g. if the costs of compliance are too high)

• A society's values are transmitted through the internalization of norms, with some societies being more successful than others due to their norms and institutions.

• Society's norms are affected by historical and environmental factors. Some norms are very stable while others can change rapidly.

• Understanding the emergence, persistence, and effects of social norms is crucial for developing better policies affecting the life of the society as a whole and of its individual members.
Concepts of norms in social psychology

- **Descriptive norms** involve perceptions of which behaviors are typically performed and what people actually do.
  - Examples: “Most students drink a lot at parties”, “Most people go to church on Sunday”, “Most people have dinner around 6:00pm”
  - Information about the “best” behaviors (*When in Rome, do as the Romans do*)
  - Conformity

- **Injunctive norms** are behaviors that one is expected to follow and expects others to follow in a given social situation, that is, they refer to what people ought to do (right or wrong)
  - Examples: one should be polite, one should not lie, one should not take more than a fare share
  - Humans learn norms from parents, through educational and religious practices, from friends and acquaintances, books and media
  - The adherence to norms in reinforced by the approval and rewards to individuals who follow them and disapproval and (decentralized) punishment of norm violators
Internalized norms

- **Internalization**: the process of acceptance of a set of norms and values established by people or groups; once internalized, norms become ultimate end in themselves; a part of individual preferences.

- Internalizing a norm has two significant *effects upon human behavior*:
  - (1) people who have internalized a norm would follow it even when doing so does not serve their narrow self-interest, and
  - (2) they will tend to criticize or punish others who violate the norm.

- For individuals strongly internalizing a norm, violating it is psychologically painful even if the direct material benefits are positive.

- At the same time, practically all norms can be violated by individuals under certain conditions.
Norm internalization: some facts

- Norm internalization is an elaboration of imitation and imprinting found in various species of birds and mammals (Whiten 1992)
- There is a significant genetic component in the degree to which people respond to norm-violating behavior (Wallace et al. 2007)
- There are also neural correlates of people’s emotional reactions to violations of highly valued norms (Mu et al. 2015)
- Some people appear to lack a genetic predisposition for norm internalization (Mealey 1995) while others are more inclined to hold intolerant attitudes and may be more prone to react violently when their values are threatened (Hatemi et al. 2011)

**Conclusion**: There is a mainly genetic underpinning of the capacity for internalizing norms while the exact content of the norms is mainly determined culturally and socially
Fehr and Schurtenberger on Social norms

- Social norms are “commonly known standards of behaviour that are based on widely shared views of how individual group members ought to behave in a given situation”
  1. social norm establishes a normative standard of behaviour that applies to a particular group and to a particular situation
  2. the norm is not defined in terms of group members’ actual behaviour nor in terms of their motives, their compliance or the conditions under which compliance occurs; it is exclusively defined in terms of a normative behavioural standard, that is, how group members ought to behave.
  3. this normative standard and its widely shared approval is commonly known by group members.
- Because a norm requires that the normative standard is widely shared, non-compliance with the norm automatically triggers some disapproval.
Cooperation
What makes humans different from other animals?

- Cognitive abilities
- Language
- Culture and learning
- Social norms and values
- Social institutions
- **Cooperation**

- To solve various challenges posed by environment ("us vs. nature")
- To compete better against other groups ("us vs. them")
To what extent and how do social norms shape human cooperation?
Cooperation in public goods games
Peer punishment in PGG

• An option after each round of contributing to a game: deduct 3 reward units from any other individual at cost of 1 unit to the punisher

• “Antisocial punishment” in PGG: punishment of cooperators
Public goods experiments with or without peer punishment

[Graph showing contribution data with different treatments and cities involved.]
10 regularities in cooperation-related behaviours observed in experiments

• Figures 1 and 2
Several studies demonstrate that individuals’ behaviour in the lab is predictive of their behaviour in relevant field settings.
Can social norms explain cooperation-related behavior?

- Simple model of decision-making, e.g. about contributions c to pibic goods
- Material payoff: x
- Social norm: c*

Utility function (to be maximized):

\[ u = x - \gamma (c - c^*)^2 \] if c<c*

\[ u = x, \text{ if } c>c^* \]

The cost term \( \gamma (c - c^*)^2 \) denotes the \textit{psychic cost} of deviating from the social norm.

Conformity
Psychological reasons for norms compliance

• individuals may be **averse to disapproval** (actual, anticipated or merely imagined) when deviating from the norm

• individuals have an intrinsic **desire for equity or fairness** and social norms play a role in defining what is perceived as equitable or fair

• individuals have a **desire to reciprocate** the behaviour of relevant others

• individuals have a propensity towards **guilt aversion**

• non-compliance with socially beneficial norms is detrimental for their **self-image** and provides a psychological deterrent for non-compliance.

• All of these theories are consistent with the notion that **emotions** are a key driver of the social preference.
How can we identify social norms?

• Observe what people do:
  - One method builds on the premise that humans are willing to incur personal costs to sanction the violation of a norm even if they are not directly hurt by the violation.

• Ask people what they think:
  - ... asking subjects to rate the extent to which an action is ‘socially appropriate and consistent with moral or proper social behaviour
  - Each subject of the group is asked to indicate what other group members should contribute to the public goods.

• There is ample and diverse evidence for the existence of a conditional cooperation norm in social dilemma situations while there is little or no evidence that punishment of free-riders constitutes a social norm.
Do social norms causally affect cooperation behaviour?

• a causal effect of social norms can be identified by varying the salience of the norm with various priming techniques.

• Example: handbill on their windshield:
  - “April is Keep Arizona Beautiful Month. Please Do Not Litter”.
  - “April is Conserve Arizona’s Energy Month. Please Turn Off Unnecessary Lights
  - “April is Arizona’s Fine Arts Month. Please Visit Your Local Art Museum”.

  - Thrown on the ground in 10%, 18% and 25%, respectively.
• The evidence suggests that human cooperation is strongly affected by normative considerations.
Box 1 | Important unsolved research problems

(1) What are micro-sociological and psychological processes that facilitate and hinder the development of a social norm?

(2) What is — at the conceptual level — the precise relationship between social preferences and social norms and how can we distinguish them empirically? How do social norms influence the motivational content of social preferences and, for given social preferences, how do they affect compliance with normative standards?

(3) What determines individuals’ agreement with the ‘ought component’ of norms? How do they come to internalize or reject a normative standard?

(4) What explains the formation and the decay of social norms and how can we explain changes in the normative content, that is, the ‘ought component’ of social norms?

(5) What are the long-run environmental and economic determinants of social norms? And how do normative standards evolve in the context of conflicting economic interests?

(6) How do economic incentives, the human desire for social approval, and the cognitive abilities of people interact to influence the social norms?
(6) How do economic incentives, the human desire for social approval and normative standards interact? When are they complements and when do economic incentives undermine normative standards and approval incentives\textsuperscript{129}?

(7) How does actual compliance and non-compliance shape the development of normative standards\textsuperscript{88}?

(8) Through which interventions and public policies is it possible to shape social norms\textsuperscript{72} and which aspect of the norm and norm-related behaviours — the content of the normative standard, social agreement with the normative standard, behavioural compliance with the standard — is changed by the intervention?

(9) How do legal institutions — apart from their sanctioning capacity — affect social norms and how do social norms affect the effectiveness of legal institutions\textsuperscript{129,130}? To what extent do legal institutions shape normative standards by setting precedent, fall back rules or through expressing what is normatively approved and expected\textsuperscript{131}?

(10) To what extent and in which ways do social norms influence important economic and social patterns\textsuperscript{87,88,132–134}?
• An additional unsolved problem
  - How can we model and predict the dynamics of social norms?
Covid-19 and social norms

• How do we get people to avoid hoarding (Tragedy of the Commons problem)
  -- what is the best way to incentivize non-hoarding?

• How do we encourage social distancing?
  -- Western social norms for example, celebrate gatherings of friends and families to celebrate milestones (e.g., Mother's Day, Easter, Spring Break, Commencement) that can compromise health now -- what can we do to override norms.
• Injunctive norms like ‘people should maintain physical distance’ can backfire because they contain a contradictory descriptive norm (‘many people aren’t following the guidance’)

• Likewise, a descriptive norm on its own (e.g., ‘most people are only going out once a day for exercise’) can produce boomerang effects: it lowers behaviour amongst high performers, but can *raise* it among low performers

• So, align descriptive and injunctive norms

• BUT: norms also typically relate to *social identities*, and their influence on behaviour depends on people identifying with the group to which the norms relate.

• The problem is that attempts to *change* norms can meet with resistance by group members who identify strongly with the group, and see existing norms as important to ingroup identity

• Attempts to change norms should thus ideally come from a source that is seen as ‘one of us’ – a key message of the social identity approach to leadership

• Norm-based messages are also likely to be more effective if they involve *affirmation* of the group identity – make clear that this behaviour change isn’t altering who we are; it’s *affirming* who we are

• A norm-based message should also clearly establish *which* social identity is relevant: Nation? Community? Focus on one, inclusive identity consistently Why? We have many social identities, which can have conflicting norms.