# news & views

## SOCIAL PSYCHOLOGY

# Social norms and how they impact behaviour

There is wide interest in the social norms construct across psychology, economics, law and social marketing. Now a study investigates an important missing piece in the social norms' puzzle: what is the underlying process that explains how norms impact behaviour? The answer: self-other similarity (self-categorization) and internalization.

# Katherine J. Reynolds

here are good reasons why social norms are capturing attention. Take the example of Hallsworth and colleagues1: at a time when there are increasing health concerns about antibiotic resistance, this randomized controlled trial demonstrated a significant reduction in antibiotic prescriptions via a social norms intervention. Hallsworth and colleagues identified the top 20% prescribing GP practices in local areas in the United Kingdom and then randomly assigned the practice to either a social norms feedback condition (letter from chief medical officer) or control (no communication). The letter stated that the GP practice was prescribing antibiotics at a higher rate than more than 80% of practices in the local area. The key finding was that those practices that were provided with social normative information reduced their prescribing rates by 3.3% (close to the government's goal) compared with the controls; 73,406 fewer antibiotic items were dispensed.

In another example of a successful social norms intervention, Nolan and colleagues2 found that household energy use was reduced the most when people were presented with a descriptive normative message ('most people in your community are finding ways to conserve energy') compared with messages that highlighted self-interest ('the time is right to save money on your home energy bills'), environmental protection ('the time is right for reducing greenhouse gases') or social responsibility ('we need to work together to save energy'). There are numerous other examples across a wide range of behaviours (for example, tax compliance and binge drinking), showing that knowledge of what others do affects people's own behaviour in significant and important ways.

Such evidence promises effective interventions that are low-cost, rapid and upscalable to a national level. An obstacle to progress, though, is that the underlying mechanisms that explain when social norms will have an impact or not have not been systematically investigated. There also are

instances where norm interventions have had no effect or increases in the undesirable behaviour have been observed. There is a need to systematically investigate when and how social norms are effective in behaviour change<sup>3</sup>.

There are three main theories<sup>3</sup> explaining how norms impact on behaviour. The information account argues that people turn to others because they assume that they have already evaluated options and selected the most beneficial action. What others 'do' is a heuristic that provides quick and useful information ('social proof'4). The social sanction account emphasizes rewards and punishments, where it is assumed that people 'go along, to get along' and to avoid being excluded. The self-categorization and internalization account emerges from a body of work that studies humans as social animals who have special adaptations connected to living and working in groups, including a cognitive ability to expand the self to include others as 'similar-to-self'. Known as a social identity, the self can come to include others as part of an ingroup and when this social identity is psychologically operative, ingroup members have increased influence over each other<sup>5</sup>. The norms, values and beliefs of the ingroup are more potent in shaping behaviour. Drawing on the examples above and using this self-categorization analysis to explain the findings, 'other GPs in the local area' and 'neighbours in the same community' must have become a relevant ingroup ('we', 'us') such that information about the action of these others had an impact on what 'I' do as a fellow group member<sup>6</sup>.

Writing in *Nature Human Behaviour*, Pryor et al. Feport a series of experiments where information was provided about similar 'others' actions, but it was also made clear that this information did not hold informational or social sanction value. Participants were provided with information about previous respondents ('others') in relation to a moral dilemma (for example, witnessing a robbery where the robber then donated the money to an orphanage)



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before they indicated their own response. These previous respondents were described as having gender, age and personality similarities to the current participant so these dimensions could be used to form an 'ingroup' in the experimental situation. The researchers also explained that the previous respondents, rather than choosing the action (for example, report the robber to police or do nothing), had been incorrectly directly allocated to a particular action condition (report or not report). Therefore, there was no informational value in 'what others do' because unlike the current participant they did not choose to report or not report; they were assigned to one action or the other. The research question was whether participants would be influenced by such arbitrary norm information. If so, such findings would indicate support for the self-categorization and internalization explanation. Over a number of studies that added further controls, participants where influenced by 'what similar others do'.

Importantly, in the final study, participants were given two descriptions of the previous respondents, one that was similar to the participant (potential self-other similarity or ingroup) and one that was different to the participant (potential self-other dissimilarity or outgroup). Participants were asked to indicate how much they identified with one group over the other with the difference score indicating ingroup identification. There was evidence

that information about others, even that with limited heuristic value, did influence participants own responses and particularly so if there was social identification with these others. As Pryor et al. state "the degree to which participants identify with a group determines the extent to which they follow random, arbitrary norms associated with that group, as predicted by self-categorization theory".

In their study, Pryor et al. have clarified the theoretical fault lines concerning 'how' norms impact behaviour. However, the social sanctions account only is investigated indirectly and there is more work to be done to systematically investigate all three main explanations. The innovative methodology can be extended and perhaps used to examine further the impact of self-categorization and the ingroup and outgroup dynamics of social influence<sup>8</sup>. This paper represents an importance starting point

for a trajectory of research examining the underlying mechanisms that account for the impact of norms on behaviour.

The problems humans face as a species — from social cohesion to health and energy consumption — all require behaviour change as part of the solution. Thus, there is a need for comprehensive models that not only explain behaviour but also how to modify it. The use of social norms as solutions to social issues and problems offers much promise, but it is necessary to systematically investigate precisely when and how they impact behaviour. There is a need to further unpack the 'social' that gives social norms their force.

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#### References

- 1. Hallsworth, M. et al. Lancet 387, 1743-1752 (2016).
- Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J. & Griskevicius, V. Pers. Soc. Psychol. Bull. 34, 913–923 (2008).
- Reynolds, K. J., Subasic, E. & Tindall, K. Soc. Pers. Psychol. Compass 9, 45–56 (2015).
- Cialdini, R. B. Pre-suasion: A Revolutionary Way to Influence and Persuade 1st edn (Simon & Schuster, New York, 2016).
- Turner, J. C. & Reynolds, K. J. in *Handbook of Theories in Social Psychology* (eds Van Lange, P., Kruglanski, A. & Higgins, T.) 399–417 (Sage, Thousand Oaks, 2012).
- Reynolds, K. J. & Branscombe, N. R. in *The Psychology of Change:* Life Contexts, Experiences, and Identities (eds Reynolds, K. J. & Branscombe, N. R.) 265–281 (Psychology Press, London, 2015).
- Pryor, C., Perfors, A. & Howe, P. D. L. Nat. Hum. Behav. https://doi.org/s41562-018-0489-y (2018).
- 8. Turner, J. C. Eur. J. Soc. Psychol. 35, 1-22 (2005).
- 9. Nyborg, K. et al. Science 354, 42-43 (2016).

#### Competing interests

The author declares no competing interests.

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