

# Cooperation, punishment and revenge

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Research from The University of Nottingham has shed new light on the way in which people co-operate for the common good — and what happens when they don't.

In a new international study of 16 countries, published in the prestigious journal *Science*, economists studied the extent to which some people will sacrifice personal gain to benefit the wider public, while 'freeloaders' try to take advantage of their generosity.

Marked national differences arose when freeloaders were punished for putting their own interests ahead of the common good. And whether they accepted their punishment or retaliated in kind depended on what kind of society they lived in, the researchers found.

In countries like the USA, Switzerland and the UK, freeloaders accepted their punishment and became much more co-operative. But in countries based on more authoritarian and parochial social institutions such as Oman, Saudi Arabia, Greece and Russia, the freeloaders took revenge — retaliating against those who had punished them.

Co-operation for the common good plummeted as a result.

In societies where the modern ethic of co-operation with unrelated strangers is less familiar and the rule of law is perceived to be weak, revenge is more common and co-operation suffers, the study found.

Economists are keen to understand the decision-making processes

behind co-operation, as working together for the common good is crucial for progress in any society — not least for effectively addressing big issues such as recycling and tackling climate change.

Professor Simon Gaechter and Dr Benedikt Herrmann at The University of Nottingham and Dr Christian Thoni at the University of St Gallen, Switzerland, studied the behaviour of people in 16 cities around the world, from Boston and Bonn to Riyadh, Minsk, Nottingham, Seoul and others. Volunteers played a ‘public goods’ game in which they were given tokens and told they could either keep them all for themselves, or put it into a common ‘pot’ that would yield extra interest that would be shared out equally among all players.

If all volunteers pooled their money then all would come out with more at the end of the game. But if individuals chose to keep the money for themselves — and not contribute anything — they could keep all of it and also benefit from the generosity of others, by sharing in the pooled interest.

Levels of co-operation were remarkably similar across all 16 nations. However, behaviour changed dramatically when everyone’s contributions were revealed — and players were given the ability to ‘punish’ other players. Players could punish each other by taking tokens away from each other, although this option cost the punisher a token as well. As previous studies have shown, players were willing to part with a token of their own in order to punish low investors or freeloaders.

But the Science study also uncovered a new phenomenon. In subsequent rounds of the game, the freeloaders took revenge and hit back at their higher-paying counterparts in what is described as ‘anti-social punishment’. Or at least, they did in some cities — most notably in more traditional societies based on authoritarian and parochial social institutions such as Muscat in Oman, Athens, Riyadh in Saudi Arabia,

Samara in Russia, Minsk in Belarus, Istanbul, Seoul and Dnipropetrovsk in Ukraine. Players in these cities showed the highest levels of ‘anti-social punishment’.

The ultimate effect of this is to decrease co-operation between individuals, bringing down contributions and earnings to very low levels.

In other cities — most notably Boston in the US, Melbourne, Nottingham, St Gallen and Zurich in Switzerland, Chengdu in China, Bonn and Copenhagen — this occurred much less often and only freeloaders tended to get punished. These eight cities saw the least ‘antisocial punishment’ meted out, and earnings in the game increased over time.

Simon Gaechter, Professor of the Psychology of Economic Decision-Making at The University of Nottingham, said: “To our knowledge this is the largest cross-cultural difference in experimental games that has been carried out in the developed world.

“Our results correlate with other survey data in particular measures of social norms of civic co-operation and rule of law in these same societies. The findings suggest that in societies where public co-operation is ingrained and people trust their law enforcement institutions, revenge is generally shunned. But in societies where the modern ethic of co-operation with unrelated strangers is less familiar and the rule of law is weak, revenge is more common.

“There are numerous examples in everyday life of situations where co-operation is the best option but there are incentives to take a free ride, such as recycling, neighbourhood watch, voting maintaining the local environment, tackling climate change, and so on. We need to understand why people behave in this way because co-operation is very strongly inhibited in the presence of anti-social punishment.”

Norms of civic co-operation cover general attitudes to the law, for example whether or not citizens think it is acceptable to dodge taxes or flout laws. In societies where this behaviour is widespread and the rule of law is perceived to be ineffective — ie. if criminal acts frequently go unpunished — anti-social punishment is more common.

In a commentary in the same edition of Science, Professor Herbert Gintis of the Santa Fe Institute said: “Anti-social punishment was rare in the most democratic societies and very common otherwise.

“Using the World Democracy Audit evaluation of countries’ performance in political rights, civil liberties, press freedom and corruption, the top six performers among the countries studied were also in the lowest seven for anti-social punishment. These were the USA, UK, Germany, Denmark, Australia and Switzerland.”

He adds: “Their results suggest that the success of democratic market societies may depend critically upon moral virtues as well as material interests, so the depiction of civil society as the sphere of ‘naked self-interest’ is radically incorrect.”

Source: University of Nottingham

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