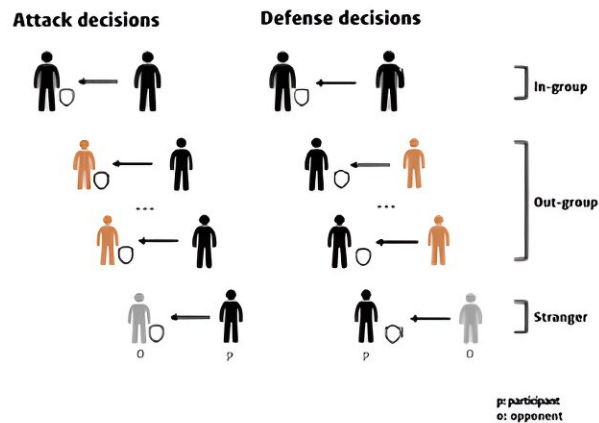


Study finds motivation to compete is stronger with in-group members than with outsiders

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Humans not only cooperate, but also compete more with in-group members than with out-group members and strangers, a new cross-country social-psychological study shows. This 'nasty neighbor effect' came as a complete surprise to the researchers, until they started delving into animal studies. [The study](#) is published in *Science Advances*.

In the bulk of behavioral science research, members of a group much prefer to cooperate with their own peer group, compatriots or political friends than with outsiders. This was also found in an earlier study by researcher Angelo Romano.

So it came as a surprise for his colleagues and Romano himself when a new experimental study in 51 countries—this time on competition and conflict—found that participants were actually much more eager to compete with their own compatriots than with others.

In fact, willingness to compete decreased the further away the country of the potential contender was. There was also no correlation with the extent to which people identified with their own country.

The game: Competing for money

To uncover socio-[psychological mechanisms](#) in a [controlled experiment](#), researchers often have their subjects play a game. So did Romano. In an online experiment, participants from the 51 countries were divided into 'attackers' and 'defenders.'

Both were given a sum of 10 units of money, the value of which corresponded with the average wage for one minute's work in their own country. They could decide how much of that they wanted to invest to win from their opponent or to defend themselves against the opponent's greed. They did not know how much the other would invest.

Then both attackers and defenders had to decide how much money they were willing to invest to compete with 1) a fellow countryman, 2) 25 players from a different country each and 3) one complete stranger. Without exception, they invested the most money if their opponent was a compatriot.

Kenya: Land of bloody civil strife

Triggered by this result, the researchers decided to conduct a similar experiment in Kenya. Instead of countries, different population groups

now participated.

"Kenya is very interesting because of its history of bloody civil strife between different ethnic groups, such as the Luo and the Kikuyu," explains Romano. "We wanted to know if this would influence participants' choices. But we saw exactly the same pattern as in the country study: willingness to compete within one's own ethnic group was higher. We repeated the experiment in the UK, with the same result."

The game: Trust

The group then decided to run yet another experiment, but this time it involved a trust game, which is often used to examine the inclination to cooperate. This experiment produced the old familiar result known from the literature: people trusted their own countrymen more than others.

"It was striking that there was no correlation whatsoever between the results of the two studies," says Romano. "They seem to be two completely unrelated phenomena. And definitely not two sides of the same coin."

The 'nasty neighbors effect'

"Over coffee we had the necessary discussion about it," Romano continues. "And then we delved into the literature, in search for studies that would back up our findings. But there appeared to be hardly any social-psychological research in which something similar had been found, perhaps because most research is about cooperation."

The animal kingdom, however, came to the rescue. In behavioral biology, the researchers stumbled upon the so-called 'nasty neighbor' effect: some socially living insects, birds and mammals, such as the

Eurasian beaver or the gibbon, behave more hostile to their closest neighbors under some circumstances than to conspecifics from outside, for instance when demarcating their territory.

Status and scarcity

Looking for explanations, the researchers focused on the factors of status and scarcity. "Status in the group also plays an important role in the animal studies," Romano knows. "And in our study, too, the effect was greater in people who attributed low status to themselves."

It was slightly less clear for scarcity, but that aspect also deserves further investigation.

"Of course, we all know our 'nasty neighbor' from the early days of the Pandemic, for instance, when rumors were going around that toilet paper or baby food would run out, and many people started hoarding. The difference with our experiments is that participants were explicitly presented with a choice: would I rather compete with my fellow countryman or with a foreigner?"

In Romano's experiment, participants from less wealthy countries were indeed found to invest more money in competing with their own compatriots than participants from wealthy countries did. "But there are still a lot of open questions about the underlying motives," Romano cautions.

Refugees

How can this pattern of intra-group competition in the presence of outsiders be reconciled with recent developments in the Netherlands, where refugees, for example, are often seen as the main competitors in

the tight housing market?

"In such a situation of scarcity, a scapegoat can be designated, diverting attention," Romano thinks. "But eventually we have to start taking all those kinds of factors into account."

The researchers are now developing a theoretical model in which they include all those elements: [evolutionary biology](#), the conditions under which people or animals cooperate or compete.

"By including all these aspects, we are trying to gain more insight. For example, we also want to start looking at political groupings."

More information: Angelo Romano et al, The nasty neighbor effect in humans, *Science Advances* (2024). [DOI: 10.1126/sciadv.adm7968](https://doi.org/10.1126/sciadv.adm7968)

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