Extreme rituals enhance social cohesion

Physically and mentally exhausting rituals promote the spirit of community in society, according to a new study. This is the first time that this hypothesis has been confirmed experimentally.

We humans are weird creatures. In the Philippines, people crucify themselves in extremely painful ways in an annual ritual. In Spain and in Greece, people walk on burning charcoal and risk getting burned while the audience is spurring them on.

A popular explanation of this phenomenon is that we humans form bonds and find a shared identity through collective rituals. This explanation has now been confirmed experimentally for the first time by a group of researchers headed by Dmitri Xygalatas of the Interacting Minds Centre (IMC) at Aarhus University, Denmark.

The study, published in the journal *Psychological Science*, was conducted on the island of Mauritius in the Indian Ocean. It concludes that the locals who watch or participate in the annual Kavadi ritual subsequently experience a stronger sense of attachment to society.

Kavadi is a painful ritual in which the participants are pierced with spears and large needles, after which they have to carry heavy bamboo structures called Kavadi for several hours before climbing a mountain to offer these structures to the temple of Murugan as a sign of their devotion.

The Mauritian population is highly varied, but the ritual is Hindu.

The study found that the ritual participants and the audience are more willing to donate money to the temple than those who only participate in low-ordeal communal prayer.

“It appears that the more people sacrifice themselves physically and mentally, the greater the effect it has on the willingness of the participants and the audience to donate money to the community,” says co-author Professor Andreas Roepstorff, who also works at the IMC in Aarhus.

Pain and empathy make people donate money

After the ritual, the research team gave a group of ritual participants and a group of audience a bag of money equivalent to two days’ wages for a Mauritian worker. They also gave money to a third group, which had not taken part in the painful ritual; instead, they took part in a Hindu communal prayer.

The three groups, totalling 86 persons, were then given the option of donating a self-chosen amount anonymously to the Murugan temple.

“We observed that the participants from the painful Kavadi ritual were more willing to donate money than those who took part in the communal prayer. But it was actually the Kavadi audience that donated the most out of the three groups,” says Roepstorff.
“This indicates that the audience was affected by the ritual and felt empathy with the participants, which made them want to support the temple.”

**Rituals act as social glue**

The three groups were also handed a questionnaire designed to reveal how the people regarded themselves in relation to being part of the Mauritian community.

“We noted an interesting shift in identity and self-image. The painful rituals drew the participants and the audience towards a stronger sense of common identity and belonging, and away from their original stance,” says Roepstorff.

**Religion is not the driving force**

He believes it is in our nature to perform this kind of physical and social rituals, and that the religious aspect is not the driving force.

"Religion also consists, to a great extent, of participating in some coordinated social activities. We look at it as a social practice, not as something where ‘God said we should do things this way and that way’,” he says.

"It’s important for us humans to share experiences with one another, and preferably with people we can relate to. This is a characteristic of the human mind and part of our evolution, but it does not appear to be something we have in common with monkeys.”

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Read the Danish version of this article at videnskab.dk [9]

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Fact box

The study was carried out in Mauritius, where Aarhus University has an ongoing research programme through the establishment of the Mauritian Laboratory for Experimental Anthropology - www.malexa.net [12]

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Andreas Roepstorff

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