

Trolley dilemma: When it's acceptable to sacrifice one person to save others is informed by culture

January 21 2020



Credit: CC0 Public Domain

Cultural differences play a pivotal role in how people in different parts of the world perceive when it is acceptable to sacrifice one person to

save a larger group, new research has shown.

An innovative new study, led by Edmond Awad from the University of Exeter's Business School, looked at how people on different continents reacted to a new version of the famous ethical thought experiment, known as the "[trolley dilemma](#)."

It found that those in more [traditional communities](#), such as those in Asia, were less inclined to support sacrificing someone to save more lives.

The results could have serious implications for the development of Artificial Intelligence, such as driverless cars, and the future of ethical programming.

The study is published in *Proceedings of the National Academy of Sciences*.

Dr. Edmond Awad, from Exeter's Business School said: "Sacrificial dilemmas provide a useful tool to study and understand how the public want driverless cars to distribute unavoidable risk on the road."

The 'Trolley Dilemma' is an ethical thought experiment where there is a runaway trolley moving down railway tracks. In its path, there are five people tied up and unable to move and the trolley is heading straight for them.

People are told that they are standing some distance off in the train yard, next to a lever. If they pull this lever, the trolley will switch to a different set of tracks—but will kill one person who is standing on the side track.

The people have the option to either do nothing, and allow the trolley to kill the five people on the main track, or pull the lever, diverting the

trolley onto the side track where it will kill one person.

The results showed that, overridingly, people in Europe, Australia and the Americas were more willing than those in eastern countries to switch the track, or to sacrifice the man, to save more lives

In Eastern countries such as China, Japan and Korea, there were far lower rates of people likely to support this 'morally questionable' view.

In traditional communities, where people may stay in close, small communities where it is hard to form new relationships, they don't want to alienate their current connections by suggesting they would sacrifice someone, expert suggest.

In [western countries](#), where it is easier to move on and find new social groups if someone disagrees with you, people may find it easier to voice, or think, such thoughts.

The study asked 70,000 people across 42 countries the ethical dilemma—one of the largest studies of its type.

Overall, 81 percent were willing to switch the carriage to a separate train track to kill one person instead of five, and half would throw a man off a footbridge on to the tracks to spare five.

Dr. Awad said these results could offer a pivotal new impetus in the development of ethical programming, for AI including driverless cars.

He said that policymakers would have to take into consideration how local ethics differed across the world, when regulating future programming.

Dr. Awad added: "It's hard to see from now whether these cross-country

differences are big enough to require different rules for machines in different countries, but the results suggest that it's worth further investigation."

"Universals and variations in moral decisions made in 42 countries by 70,000 participants" is published in *Proceedings of the National Academy of Sciences*.

More information: Edmond Awad et al., "Universals and variations in moral decisions made in 42 countries by 70,000 participants," *PNAS* (2020). www.pnas.org/cgi/doi/10.1073/pnas.1911517117

Provided by University of Exeter

Citation: Trolley dilemma: When it's acceptable to sacrifice one person to save others is informed by culture (2020, January 21) retrieved 2 May 2024 from <https://phys.org/news/2020-01-trolley-dilemma-sacrifice-person-culture.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--