War less likely between nations that are 'friends of friends': study

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Credit: Tim Emerich/public domain

Even nations can have friends of friends, a new study has found.

Results suggest these indirect relationships have a surprisingly strong ability to prevent major conflicts, and that international military alliances may matter more than we typically expect.

Many studies have shown that nations with military alliances are less likely to go to war. But this new study is the first to show that neighboring countries without direct alliances are still unlikely to have serious conflicts, as long as they are indirectly connected through an ally in common.

In fact, this peace dividend extends up to three degrees of separation without getting weaker: Nations are much less likely to have wars with their allies, the allies of their allies, and the allies of their allies' allies.

"The peacemaking impact of an alliance between two countries goes beyond the two that signed the agreement," said Skyler Cranmer, lead author of the study and the Phillips & Henry associate professor of political science at The Ohio State University.

"It permeates the network of alliances, like ripples in a pond, to prevent conflicts beyond the two countries that have the alliance."

The researchers were surprised that the strength of these indirect relationships didn't decline until they went beyond three degrees, said co-author Aisha Bradshaw, a Ph.D. candidate in political science at Ohio State.

"We didn't expect that. We thought the effect would decline with each degree of separation," Bradshaw said

The study was published today in the journal *Science Advances*.

The researchers examined all serious military conflicts worldwide from

1965 to 2000. This included all conflicts in which one country made a deliberate choice to deploy military force against another.

They focused on conflicts between neighboring states, since very few nations have the ability to wage war beyond their borders.

Results showed that the probability of a new conflict between two neighboring countries in a given year was between 3 and 4 percent for nations within three degrees of separation. But the probability of conflict nearly doubled for countries at four degrees of separation from each other.

"The probability of conflict jumps dramatically once you get to four degrees," Cranmer said. "At that point, it appears that countries have much less in common that will keep the peace."

There are many examples of these indirect alliances helping keep the peace. One is the lack of conflict between Turkey and Iran from 1965 to 1979, a period during which they were indirectly connected at two degrees of separation. After losing this connection in 1980, disputes arose between the neighbors, reaching a peak in 1987 when they had a militarized dispute with fatalities.

What's the difference between three degrees and four degrees of separation between nations that dramatically changes the probability of conflict?

In order to figure that out, the researchers divided the world into different communities of nations. A community of nations was defined as a group of countries that were more closely connected to each other - through their alliances - than they were to those outside of the community.

"Not every member of a community is necessarily tied to every other member, but there is usually a short and clear path between them all," Cranmer said.

The researchers found that nearly all members of each of these communities of nations were within three degrees of each other, which helped explain why the probability of conflict was so much lower for these countries. But any two countries that had four or more degrees of separation were almost always in different communities of nations.

"At four degrees, the countries no longer share membership in common communities that represent shared interests," he said.

But these communities, by themselves, couldn't explain the probability of war between any two countries. Results suggested that these overall community structures helped explain how the indirect ties worked to prevent conflict. Still, both factors played independent roles in keeping the peace.

These results fit in with a growing body of evidence in science.

"There's emerging evidence that this three-degree horizon of influence seems to be relatively common in human networks and can be found in political attitudes, health behaviors and the likelihood of smoking," Cranmer said. "But this is the first evidence of anything like this in a political network."

The study shows the importance of ties between two countries, which can sometimes be forgotten in the conversation about the future of alliances like NATO, Bradshaw said.

"An alliance between two countries can make peace more likely among a larger group of countries than just those two countries," she said.

More information: "A three-degree horizon of peace in the military alliance network," *Science Advances*, advances.sciencemag.org/content/3/3/e1601895

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