

# Warriors don't always get the girl

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Courtesy Penn State University and [World Science](#) staff

Some anthropologists have considered aggressive, vengeful behavior among certain South American tribesmen as a way for them to obtain more wives and children. But anthropologists working in Ecuador among the Waorani people have found that sometimes the macho guy doesn't do better.

In 1988, the U.S. anthropologist Napoleon Chagnon "published evidence that among the famously warlike Yanomamo of Venezuela, men who had participated in a homicide had significantly more wives and children than their less warlike brethren," said anthropologist Stephen Beckerman of Penn State University.

Yet "our research among the Waorani indicates that more aggressive warriors have lower indices of reproductive success than less warlike men."

Chagnon took considerable criticism for what opponents considered his suggestion that violence was a natural, ancestral human way of life. But Beckerman didn't contest Chagnon's findings; he instead argued that the Yanomamo and Waorani have two very different situations.

The Waorani are rainforest manioc horticulturalists and foragers. When the first peaceful contact occurred in 1958, they numbered about 500 people living in an area the size of New Jersey between the Napo and Curaray rivers in the Amazon basin east of the Andes. Their abundant resources often attracted outsiders, who were promptly killed if found.

Warfare and murder were common among the Waorani, who are known to be more warlike than the Yanomamo, according to Beckerman and colleagues. The Waorani practiced their violence on each other as well as on outsiders. Eventually, over a period of 14 years, missionaries pacified the Waorani. Aggressive warfare and raiding are now almost gone.

"In light of the documented abundance of wild resources, resource limitation cannot be considered the cause of warfare among the Waorani," said Beckerman.

Beckerman and colleagues looked at how a man's participation in raiding correlates with his survivorship and that of his wives, the number of his wives and the number of children he produced and their survivorship.

The researchers interviewed men in 23 settlements. They interviewed any man old enough to have experienced warfare before the pacification that could be found and who agreed to the interview. The researchers collected Waorani men's genealogies, reproductive history, narrative personal life history and warfare history. The raiding database contained 95 men. Beckerman and his colleagues



report their research in this week's edition of the Proceedings of the National Academy of Science online.

“Our sample of warriors includes both living and dead men,” said Beckerman. “We ranked aggression by the number of raids they participated in. Our analysis is free of the problem caused by the inherent correlation of the warrior's age with both participation in raids and reproductive success.”

The researchers found that more aggressive men do not acquire more wives than milder men. They do not have more children and their wives and children do not survive longer. In fact, warlike men have fewer children who survive to reproductive age.

Why do these results differ from Chagnon's and why are Waorani men so bellicose when there appears to be no benefit? The researchers suggest that while both the Yanomamo and Waorani's aggressiveness is for revenge, the Yanomamo's warfare cycles have peaceful interludes where warriors can reap the benefits and accrue wives and children. The Waorani men do not incorporate peaceful interludes between their aggressive endeavors and will even initiate an action based on something that occurred in their grandparent's generation. In general, the Waorani goal was to eliminate the other side.

Another difference between the Yanomamo and the Waorani is that even with chronic warfare, the Yanomamo population had grown over the two centuries before Chagnon's investigation. The Waorani literally seemed to be on the way to “killing themselves off” at the time of their discovery by outsiders, according to the researchers.

*Image: Waorani man with a blow gun. Image courtesy of James Yost, La ti go Ranch, Kremmling, Colo.*