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# **PRESS RELEASE**

# If it Pays to be a Jerk, Why Isn't Everyone That Way?

Long-term research on chimpanzees offers new clues to the puzzle of personality



Known as a bully, Frodo the chimpanzee was Gombe's alpha male for five years. Credit: Ian C. Gilby, Arizona State University.

DURHAM, N.C. -- Throw a tantrum. Threaten, shove aside or steal from your colleagues. Science confirms, yet again, that brutish behavior can be an effective path to power. And not just in humans, but in chimpanzees, too.

A new study appearing April 24 in the journal <u>PeerJ Life and Environment</u> found that male chimps with more bullying, greedy and irritable personalities reached higher rungs of the social ladder and were more successful at siring offspring than their more deferential and conscientious counterparts.

But if that's the case, researchers ask, why isn't every chimp a bully?

A team led by researchers at the University of Edinburgh and Duke University followed 28 male chimps living in Gombe National Park in Tanzania.

A <u>previous study</u> of Gombe chimpanzees led by Edinburgh's Alexander Weiss along with Duke professor Anne Pusey and colleagues <u>showed</u> how some chimpanzees are more sociable, while others are loners. Some lean towards easy-going, while others are more overbearing or quick to pick fights.

Tanzanian field researchers who knew the chimpanzees well performed the personality assessments, based on years of near-daily observations of how each chimpanzee behaved and interacted with other chimps.

In the current study, researchers found that male chimps with certain personality traits -in this case, a combination of high dominance and low conscientiousness -- tend to fare better in life than others.

"Personality matters," said Joseph Feldblum, assistant research professor of evolutionary anthropology at Duke and the other lead author of the study.

It may not be shocking to learn that bullying has its perks. But for some researchers, findings like these pose a conundrum: If males with certain personality tendencies are more likely to rise to the top and reproduce, and pass the genes for those traits on to their offspring, then shouldn't every male be that way?

In other words, why do personality differences exist at all?

"It's an evolutionary puzzle," Feldblum said.

One long-held <u>theory</u> is that different personality traits pay off at different points in animals' lives. Even if being aggressive gives young male chimps an edge, it might backfire when they're older. Or perhaps certain traits are a liability in youth but an asset in old age.

"Think of the personality traits that lead some people to peak in high school versus later in life," Weiss said. "It's a trade-off."

But when the team tested this idea, using 37 years of data going back to some of Jane Goodall's early work at Gombe in the 1970s, they found the same personality traits were linked to high rank and reproductive success across the lifespan.

The findings suggest that something else must explain the diversity of personalities in chimpanzees. It might be that the "best" personality to have varies depending on environmental or social conditions, or that a trait that is beneficial to males is costly to females, Feldblum said.

If that were true, then "genes associated with those traits would be kept in the population," Weiss said.

Not too many years ago, the mere suggestion that animals have personalities at all was considered taboo. Jane Goodall herself was accused of <u>anthropomorphism</u> when she described some of the Gombe chimpanzees as "bolder" or "more fearful" than others, some as "affectionate" and others "cold."

Since that time, scientists studying creatures ranging from birds to squid have found evidence of distinctive personalities in animals: quirks and idiosyncrasies and ways of relating to the world that remain reasonably stable over time and across situations.

Weiss says personality ratings for animals have proven to be as <u>consistent</u> from one observer to the next as are similar measures of human personality.

"The data just don't support the skepticism," Weiss said.

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Image Credit: Known as a bully, Frodo the chimpanzee was Gombe's alpha male for five years. Credit: Ian C. Gilby, Arizona State University.

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#### **Media Contacts**

Robin Ann Smith, Ph.D.

Senior Science Writer

Duke University Robin Smith ras10@duke.edu

#### For the authors:

Dr. Alexander Weiss <u>alex.weiss@ed.ac.uk</u>

Dr. Joseph T Feldblum jfeldblum@gmail.com

#### For PeerJ:

Euan Lockie: press@peerj.com

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