

This Animal's Behavior Has Scientists in Awe

A closer look at how great apes are surprising researchers with their playful teasing and what it means for our understanding of intelligence.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Human babies as young as 8 months of age engage in playful teasing, which has scientists wondering if other (non-verbal) species do the same
- A collaborative team of university researchers has now observed and documented evidence of playful teasing in the four great ape species
- Playful teasing in apes differs from play in that it's one-sided on the part of the teaser — the "tease-ee" rarely reciprocates; also, during playful teasing, the animals rarely use play signals involving facial expressions or "hold" gestures

Since human babies as young as 8 months, who are still non-verbal, playfully tease others, it left scientists wondering if non-human (and also non-verbal) animals also engage in similar behavior.

A collaborative team of cognitive biologists and primatologists from UCLA, the University of California San Diego (UCSD), the Max Planck Institute of Animal Behavior in Germany, and Indiana University (IU) set out to answer the question.

Great Apes Were Observed Engaging in Playful Teasing

According to a Max Planck Institute news release on the resulting study, which was published in February 2024 in the Proceedings of Royal Society B:¹

"Joking is an important part of human interaction that draws on social intelligence, an ability to anticipate future actions, and an ability to recognize and appreciate the violation of others' expectations.

Teasing has much in common with joking, and playful teasing may be seen as a cognitive precursor to joking. The first forms of playful teasing in humans emerge even before babies say their first words, as early as eight months of age. The earliest forms of teasing are repetitive provocations often involving surprise.

Infants tease their parents by playfully offering and withdrawing objects, violating social rules (so-called provocative non-compliance), and disrupting others' activities."²

The research team observed and documented evidence of playful teasing in the four great ape species: orangutans, chimpanzees, bonobos, and gorillas.

“Great apes are excellent candidates for playful teasing, as they are closely related to us, engage in social play, show laughter and display relatively sophisticated understandings of others' expectations,” Isabelle Laumer of UCLA and Max Planck, a post-doctoral researcher and first author of the study, said in the news release.³

Playful Teasing vs. Play

To arrive at this conclusion, the scientists analyzed spontaneous social interactions among the apes that appeared to be playful, mildly harassing, or provocative. They observed the teasing animals' actions, bodily movements, and facial expressions, along with the reactions of the targets of the teasing. They also evaluated the teaser's intentionality by looking for evidence that the behavior was directed at a specific target, that it persisted or intensified, and that teasers waited for a response from the target.

The researchers discovered that all 4 types of apes displayed intentionally provocative behavior that frequently included characteristics of play. They identified 18 distinct teasing behaviors. Many of the behaviors appeared designed by the animals to provoke a response, or at least to get the target's attention.

“It was common for teasers to repeatedly wave or swing a body part or object in the middle of the target's field of vision, hit or poke them, stare closely at their face, disrupt their movements, pull on their hair or perform other behaviors that were extremely difficult for the target to ignore,” explains UCLA and IU professor Erica Cartmill, senior author of the study.⁴

The playful teasing of the apes came in many forms, but it differed from play in several ways. Per Cartmill:

“Playful teasing in great apes is one-sided, very much coming from the teaser often throughout the entire interaction and rarely reciprocated. The animals also rarely use play signals like the primate 'playface', which is similar to what we would call a smile, or 'hold' gestures that signal their intent to play.”

In addition, the playful teasing happened primarily when apes were relaxed, and shared similarities with behaviors in humans.

“Similar to teasing in children, ape playful teasing involves one-sided provocation, response waiting in which the teaser looks towards the target's face directly after a teasing action, repetition, and elements of surprise,” Laumer explains.

Chimpanzees Also Engage in Playful Teasing Behaviors

Jane Goodall and other field primatologists reported similar behaviors in chimpanzees many years ago, but this was the first effort to systematically study playful teasing in great apes.

“From an evolutionary perspective, the presence of playful teasing in all four great apes and its similarities to playful teasing and joking in human infants suggests that playful teasing and its cognitive prerequisites may have been present in our last common ancestor, at least 13 million years ago,” explains Laumer.

“We hope that our study will inspire other researchers to study playful teasing in more species in order to better understand the evolution of this multi-faceted behavior. We also hope that this study raises awareness of the similarities we share with our closest relatives and the importance of protecting these endangered animals.”

Sources and References

¹ [Laumer, J.B. et al. Proceedings of the Royal Society B, Volume 291, Issue 2016, 14 February 2024](#)

^{2,3,4} [Max-Planck-Gesellschaft News Release, February 14, 2024](#)
