

Chimp Cure For Stress: Hugs And Kisses

WASHINGTON, June 17, 2008

(AP) Researchers studying chimpanzees, the closest genetic relatives to people, found that stress was reduced in chimps that were victims of aggression if a third chimp stepped in to offer consolation.

"Consolation usually took the form of a kiss or embrace," said Dr. Orlaith N. Fraser of the Research Center in Evolutionary Anthropology and Paleoecology at Liverpool John Moores University in England.

"This is particularly interesting," she said, because this behavior is rarely seen other than after a conflict.

"If a kiss was used, the consoler would press his or her open mouth against the recipient's body, usually on the top of the head or their back. An embrace consisted of the consoler wrapping one or both arms around the recipient."

The result was a reduction of stress behavior such as scratching or self-grooming by the victim of aggression, Fraser and colleagues report in Tuesday's edition of Proceedings of the National Academy of Sciences.

Dr. Frans de Waal of the Yerkes Primate Center at Emory University in Atlanta said the study is important because it shows the relationship between consolation and stress reduction. Previous researchers have claimed that consolation had no effect on stress, said de Waal, who was not part of Fraser's research team.

"This study removes doubt that consolation really does what the term suggests: provide relief to distressed parties after conflict. The evidence is compelling and makes it likely that consolation behavior is an expression of empathy," de Waal said.

De Waal suggested that this evidence of empathy in apes is "perhaps equivalent to what in human children is called 'sympathetic concern.'"

That behavior in children includes touching and hugging of distressed family members and "is in fact identical to that of apes, and so the comparison is not far-fetched," he said.

While chimps show this empathy, monkeys do not, he added.

There is also suggestive evidence of such behavior in large-brained birds and dogs, said Fraser, but it has not yet been shown that it reduces stress levels in those animals.

Previous research on conflict among chimps concentrated on cases where there is reconciliation between victim and aggressor, with little attention to intervention by a third party.

Fraser and colleagues studied a group of chimps at the Chester Zoo in England from January 2005 to September 2006, recording instances of aggression such as a bite, hit, rush, trample, chase or threat.

The results show that "chimpanzees calm distressed recipients of aggression by consoling them with a friendly gesture," Fraser said.

Consolation was most likely to occur between chimpanzees who already had valuable relationships, she added.

The research was supported by the Leakey Trust.