

How female chimps call off the competition

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Female chimps are more concerned with having sex with many different males than finding the strongest mate, according to researchers.

The new study, published in *PLoS ONE* on June 18, by University of St Andrews scientists suggests that female chimps keep quiet during sex so that other females don't find out about it, thus preventing any unwanted competition.

The research, by psychologists Simon Townsend and Klaus Zuberbühler, sheds new light on the sophisticated mental capacities and social intelligence of our closest living relatives.

The St Andrews researchers observed the behaviour of chimps in the Budongo Forest, Uganda, in collaboration with Tobias Deschner of the Max Planck Institute for Evolutionary Anthropology in Leipzig.

They found that chimpanzee females use copulation calls strategically to enlist the future protective support of males against aggressive group members, especially other females. The females produced more copulation calls when high-ranking males were around but concealed their sexual activity when high-ranking females were nearby.

Simon Townsend said, "Competition between females can be dangerously high in wild chimpanzees. Our findings highlight the fact that these females use their copulation calls in highly tactical ways to minimise the risks associated with such competition."

The function of copulation calls in female primates has been debated for years. One common hypothesis suggests that such calls enable females to advertise their sexually receptive state to mates, which in turn incites competition amongst males. According to this idea, the successful female ends up with the strongest partner and achieves the highest quality offspring. However, the new study found no evidence for such male-to-male competition, nor any link between hormonal state and calling activity.

"The female chimps we observed in the wild seemed to be much more concerned with having sex with many different males, without other females finding out about it, than causing male chimps to fight over them," explained Simon Townsend.

"We also found that the calling behaviour of copulating females was unrelated to their fertile period and therefore not linked to the likelihood of conception.

"Copulation calling therefore may be one potential strategy employed by female chimpanzees to advertise receptivity to high-ranked males, confuse paternity and secure future support from these socially important individuals."

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