

# Scratching is contagious when solitary orangutans are in groups

May 27 2020, by Merijn Van Nuland

---



Credit: CC0 Public Domain

If someone around you yawns, the chances are that you too will soon yawn. In orangutans it has now been found that scratching is very contagious. This is what cognitive psychologists from Leiden discovered at Apenheul Primate Park. Publication in *American Journal of Primatology*.

All in the name of science, Ph.D. candidate Daan Laméris must have thought when he was assigned the honourable noble task of keeping tally of how often the nine orangutans at Apenheul yawned or scratched themselves. With the patience of a saint, he recorded a series of ticks in his notebook and, as if that wasn't enough, he also kept track of how long it took before another [orangutan](#) repeated the behaviour. It was a very thankless task at times: an orangutan would hide under a hessian sack for a long period of time and refuse to participate in the experiment.

But there is now a result: scratching is contagious in orangutans. If one begins to scratch, there is a significant chance that another will repeat this behaviour. The researchers couldn't draw the same conclusions about yawning: too few orangutans yawned during the observation period.

"It's still a bit unclear why this kind of behaviour is contagious in primates," says Evy van Berlo, co-author of the article.

"We think that yawning and scratching are both proxies for empathy. You use them to show that you recognise the other's emotion and mirror that behaviour. Apes scratch themselves when they feel stressed, so if another ape repeats this, it can mean: 'Look, I've noticed that something's wrong.' In this study, we found that scratching behaviour primarily occurred in negative situations and that the behaviour was more contagious between apes that were somewhat further apart."

Van Berlo finds it remarkable that orangutans exhibit this behaviour. In contrast to gorillas, chimpanzees and bonobos, they are animals that live a mainly solitary life in the wild and so have less interaction with their peers. The researchers think that as orangutans repeat behaviour in groups this could mean it is 'ingrained' in their system. "Who knows? Perhaps this behaviour comes from a time before they became solitary animals," says Van Berlo.

**More information:** Daan W. Laméris et al. Low relationship quality predicts scratch contagion during tense situations in orangutans ( *Pongo pygmaeus* ), *American Journal of Primatology* (2020). [DOI: 10.1002/ajp.23138](https://doi.org/10.1002/ajp.23138)

Provided by Leiden University

Citation: Scratching is contagious when solitary orangutans are in groups (2020, May 27)  
retrieved 26 April 2024 from  
<https://phys.org/news/2020-05-contagious-solitary-orangutans-groups.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.