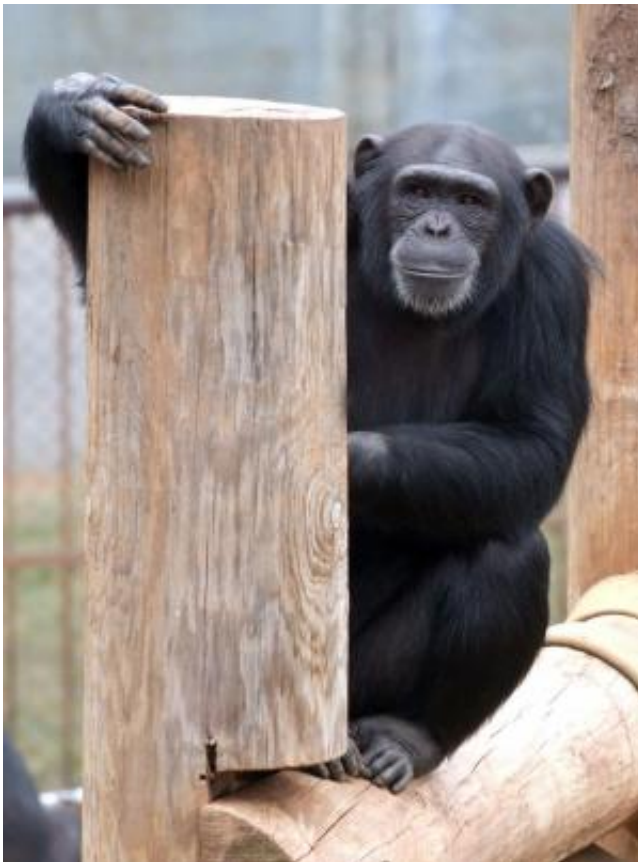


Chimps prefer African, Indian tunes over strong beats typical of Western music, research finds

June 26 2014



Psychological research with chimpanzees like Tara, above, has found chimps prefer silence to Western music. New research published by the American Psychological Association reveals chimpanzees like listening to other types of world music, such as African and Indian. Credit: Photo courtesy of the Yerkes National Primate Research Center, Emory University

While preferring silence to music from the West, chimpanzees apparently like to listen to the different rhythms of music from Africa and India, according to new research published by the American Psychological Association.

"Our objective was not to find a preference for different cultures' music. We used cultural music from Africa, India and Japan to pinpoint specific acoustic properties," said study coauthor Frans de Waal, PhD, of Emory University. "Past research has focused only on Western music and has not addressed the very different acoustic features of non-Western music. While nonhuman primates have previously indicated a preference among music choices, they have consistently chosen silence over the types of music previously tested."

Previous research has found that some [nonhuman primates](#) prefer slower tempos, but the current findings may be the first to show that they display a preference for particular rhythmic patterns, according to the study. "Although Western music, such as pop, blues and classical, sound different to the casual listener, they all follow the same musical and acoustic patterns. Therefore, by testing only different Western music, previous research has essentially replicated itself," the authors wrote. The study was published in APA's *Journal of Experimental Psychology: Animal Learning and Cognition*.

When African and Indian music was played near their large outdoor enclosures, the chimps spent significantly more time in areas where they could best hear the music. When Japanese music was played, they were more likely to be found in spots where it was more difficult or impossible to hear the music. The African and Indian music in the experiment had extreme ratios of strong to weak beats, whereas the Japanese music had regular strong beats, which is also typical of Western music.

"Chimpanzees may perceive the strong, predictable [rhythmic patterns](#) as threatening, as chimpanzee dominance displays commonly incorporate repeated rhythmic sounds such as stomping, clapping and banging objects," said de Waal.

Sixteen adult chimps in two groups participated in the experiment at the Yerkes National Primate Research Center at Emory University. Over 12 consecutive days for 40 minutes each morning, the groups were given the opportunity to listen to African, Indian or Japanese music playing on a portable stereo near their outdoor enclosure. Another portable stereo not playing any music was located at a different spot near the enclosure to rule out behavior that might be associated with an object rather than the music. The different types of music were at the same volume but played in random order. Each day, researchers observed the chimps and recorded their location every two minutes with handwritten notes. They also videotaped the activity in the enclosure. The chimps' behavior when the music was played was compared to their behavior with no music.

"Chimpanzees displaying a preference for music over silence is compelling evidence that our shared evolutionary histories may include favoring sounds outside of both humans' and chimpanzees' immediate survival cues," said lead author Morgan Mingle, BA, of Emory and Southwestern University in Austin. "Our study highlights the importance of sampling across the gamut of human [music](#) to potentially identify features that could have a shared evolutionary root."

More information: "Chimpanzees Prefer African and Indian Music Over Silence," Morgan E. Mingle, BA, Emory University and Southwestern University; Timothy M. Eppley, PhD, and Matthew W. Campbell, PhD, Emory University; Katie Hall, PhD, Emory University and University of St Andrews; Victoria Horner, PhD, and Frans B. M. de Waal, PhD, Emory University; *Journal of Experimental Psychology: Animal Learning and Cognition*, online June 23, 2014.

www.apa.org/pubs/journals/releases/xan-0000032.pdf

Provided by American Psychological Association

Citation: Chimps prefer African, Indian tunes over strong beats typical of Western music, research finds (2014, June 26) retrieved 14 May 2024 from

<https://phys.org/news/2014-06-chimps-african-indian-tunes-strong.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.