

Understanding the Origin of Psychopathic Tendencies Through Chimpanzees

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Psychopathy, a personality disorder characterized by antisocial behavior, lack of empathy, and disinhibition, is typically investigated among clinical and forensic samples, and sometimes among the general population. But a team led by Georgia State University researchers is now studying these tendencies in chimpanzees. Their findings are published in [*Clinical Psychological Science*](#).

The research provides a foundation for better understanding not only the nature and origin of psychopathic tendencies in humans but also, consistent with recent National Institutes of Health priorities, lays the groundwork for understanding the underlying biological basis of other clinical conditions.

It's important to note that we are not diagnosing nor are we interested in diagnosing psychopathy here," said lead researcher Robert Latzman in a [statement](#) from Georgia State University. "The work we're doing focuses on leveraging data collected from chimpanzees to understand basic dispositional processes associated with mental illness."

Latzman, William Hopkins of the Neuroscience Institute, and Christopher Patrick of Florida State University led the research, which included 238 captive chimpanzees.

Using an existing chimpanzee personality measure, the team identified items to assess each of the three dispositional tendencies included in the triarchic model of personality for humans: disinhibition, boldness, and meanness.

The researchers then administered both the chimpanzee-developed scales and a traditional human-developed measure of the same construct to a group of human participants. They found that the chimpanzee-developed scales were able to effectively index triarchic dimensions in humans, underscoring the translational value of their work with chimpanzees.

Finally, Latzman and the team investigated whether the chimpanzee-developed scales were able to predict previously collected behavioral data. Specifically, the researchers used behavioral tasks indexing approach-avoidance behavior (which was expected to correlate with boldness) and the ability to delay gratification (which was expected to correlate with disinhibition).

For example, the researchers measured approach-avoidance behavior by presenting chimpanzees with a novel stimulus, a human mannequin. Latzman and colleagues hypothesized that if the model scales were accurate, chimpanzees rated higher on boldness tendencies would more regularly approach the human mannequin.

As expected, the chimpanzee-developed scales accurately predicted the task-based behaviors. The chimpanzees with higher boldness tendencies approached the mannequin more often, further validating the model in chimpanzees.

Latzman said that the work is a nice demonstration of the type of innovative, noninvasive research that can be conducted with chimpanzees.

“The translational value of chimpanzee research to understand key neurobehavioral constructs important to understanding mental illness is clear,” he said.

Latzman, R., Drislane, L., Hecht, L., Brislin, S., Patrick, C., Lilienfeld, S., Freeman, H., Schapiro, S., & Hopkins, W. (2015). A chimpanzee (*Pan troglodytes*) model of triarchic psychopathy constructs: Development and initial validation. *Clinical Psychological Science*. DOI: [10.1177/2167702615568989](https://doi.org/10.1177/2167702615568989)