

Discover the Secrets Bonobos Share for a Price

Description

Traditionally regarded as a uniquely human trait, the ability to discern when a companion could benefit from a hint has emerged as a cognitive aptitude shared with our primate relatives.

Researchers at Johns Hopkins University in Maryland conducted an illuminating study focusing on <u>bonobos</u> (<u>Pan paniscus</u>), which provided insights into the ways these apes guided human researchers towards concealed treats—an endeavor they were eager to consume.

Such findings unveil cognitive parallels among <u>hominins</u> that were previously unrecognized, potentially extending back millions of years to our shared ancestral lineage.

According to psychologist Chris Krupenye, "The capacity to detect gaps in others' knowledge lies at the core of our most advanced social interactions, fundamentally shaping our collaborative, communicative, and strategic engagements."

In the experimental framework, three male bonobos engaged in a turn-taking game with a researcher, wherein treats were strategically concealed beneath cups—occasionally under the researcher's scrutiny and at other times without. Successful identification of the treat enabled the ape to partake in it.

Chimpotestind or type unknown

A cup game was employed to ascertain whether bonobos could differentiate between knowledge and ignorance in a human participant. (Townrow and Krupenye, *PNAS*, 2025)

The results illustrated that bonobos were notably more inclined to gesture and point towards the cup concealing the treat when the researcher exhibited ignorance regarding its location.

Though this might appear as a rudimentary behavior, it signifies a profound understanding of how our closest evolutionary relatives can cognitively evaluate the perspectives of others. <u>Prior studies</u> have documented instances of apes alerting their companions to possible dangers; however, these recent experiments disentangle such instincts from group dynamics, thereby exploring individual cognitive capacities.

As psychologist Luke Townrow aptly notes, "What we've demonstrated is that apes will communicate with a partner to modify their behavior, yet a pivotal question for future exploration is whether they seek to alter their partner's mental state or beliefs."

This <u>theory of mind</u>—the understanding that others possess distinct beliefs or perspectives—has historically been perceived as a distinguishing feature of human cognition.



Emerging evidence now suggests that this cognitive flexibility may also inhabit ape populations, as bonobos are observed to simultaneously grasp two conceptual frameworks: the location of the treat and their partner's knowledge of it. Such groundbreaking insights warrant further investigation in subsequentresearch endeavors.

A compelling inquiry for future study could pertain to the motivations underlying these bonobo behaviors: do they aspire to shift their partner's mental frameworks, or merely modify their conduct? Anticipation brews for more experiments centering around concealed treats.

"Ongoing debates within the field regarding primate capabilities find validation in our research, confirming that these remarkable cognitive capacities exist, contrary to scepticism from certain quarters," asserts Krupenye.

The findings of this research have been published in <u>PNAS</u>.

Vocabulary List:

- 1. Aptitude /'æp.tr.tju:d/ (noun): A natural ability to do something.
- Cognitive /'kpg.ni.tiv/ (adjective): Relating to the mental processes of perception memory judgment and reasoning.
- 3. **Parallel** /'pær.ə.lel/ (noun): A similarity or comparison between two things.
- 4. Devoid /dɪ'vɔɪd/ (adjective): Completely lacking in something.
- 5. Engagements /In'geId3.mants/ (noun): Arrangements to do something at a particular time.
- 6. **Communicative** /kə'mju:.nɪ.kə.tɪv/ (adjective): Ready to talk or impart information.

Comprehension Questions

Multiple Choice

1. What trait has emerged as a cognitive aptitude shared with our primate relatives?

Option: Hinting ability Option: Problem-solving skills Option: Memory retention Option: Creativity

2. Which university conducted the study focusing on bonobos?



Option: Harvard University Option: Johns Hopkins University Option: Stanford University Option: Yale University

3. What did the bonobos guide human researchers towards in the study?

Option: Hidden documents Option: Concealed treasures Option: Secret locations Option: Treats

4. What did the results of the experiment show about bonobos' behavior?

Option: They were less inclined to help Option: They were more inclined to gesture towards the treat with an ignorant researcher Option: They refused to participate Option: They showed no difference in behavior

5. Who noted that the capacity to detect gaps in others' knowledge is fundamental in shaping social ESL-NEW interactions?

Option: Chris Krupenye Option: Luke Townrow Option: Jane Goodall Option: John Hopkins

6. What concept do bonobos demonstrate an understanding of according to the text?

Option: Quantum physics Option: Theory of Relativity **Option: Theory of Mind Option:** Natural selection

True-False

- 7. Bonobos were observed guiding human researchers towards hidden locations in the study.
- 8. The study suggests that bonobos exhibit cognitive flexibility similar to humans.
- 9. The concept of Theory of Mind has only been observed in humans before this research.



- 10. Bonobos in the study showed no difference in behavior based on the researcher's knowledge.
- 11. Luke Townrow is one of the researchers highlighted in the text.
- 12. Bonobos are unable to understand the perspectives of others according to the text.

Answer

Multiple Choice: 1. Hinting ability 2. Johns Hopkins University 3. Treats 4. They were more inclined to gesture towards the treat with an ignorant researcher 5. Chris Krupenye 6. Theory of Mind True-False: 7. False 8. True 9. False 10. False 11. True 12. False

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.) NEWS.CO

1. What is the meaning of "elucidated"?

Option: a. Explained or clarified

Option: b. Accelerated or enlarged

Option: c. Discarded or removed

Option: d. Composed or created

2. Which term refers to the likelihood of something happening?

Option: a. Probabilities Option: b. Speculative Option: c. Correlations Option: d. Aptitude

3. What does the term "impractical" mean?

Option: a. Very practical Option: b. Not feasible or sensible Option: c. Extremely useful Option: d. Unintended outcome

4. Which term is related to the mental processes of perception and understanding?

Option: a. Cognitive Option: b. Aptitude **Option: c. Engagements** Option: d. Genesis



5. What does "colossal" mean?

Option: a. Tiny Option: b. Magnificent Option: c. Gigantic Option: d. Delicate

6. Which word means remarkably or impressively great in extent size or degree?

Option: a. Impractical Option: b. Prodigious Option: c. Parallel Option: d. Nuanced

7. What does "efficacy" mean?

Option: a. Strength Option: b. Joy **Option: c. Effectiveness** Option: d. Depletion

8. Which term is related to the measurement of the amount of sugar in blood? ESL-NEWS

Option: a. Glycemic Option: b. Aptitude Option: c. Erosion Option: d. Instigated

9. What does "burgeoning" mean?

Option: a. Shrinking Option: b. Expanding or growing rapidly Option: c. Limited Option: d. Outgoing or friendly

- 10. What are "obstructions"?
 - Option: a. Unpredictable Option: b. Barriers or obstacles **Option:** c. Innovations Option: d. Adaptations

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. Good leaders are not only assertive but also ______ ensuring effective information

flow within the team.



12. Over time the continuous water flow caused	of the ancient stone carvings.
13. The scientist discussed the	_ of the universe in his groundbreaking research.
14. Volcanic eruptions can release ash lava and other v	olcanic into the
atmosphere.	
15. The new regulations have significant	for small businesses in the region.
16. The controversial decision	$_$ a heated debate among the board members.
17. A sedentary lifestyle and excessive calorie intake can lead to increased	
or fat accumulation.	
18. The laboratory studies focus on the	
pollutants.	
19. The doctor specializes in treating disorders of the brain and nerves known as	
conditions.	
20. The aroma of fresh coffee began to	the entire house.
Matching Sentences (Match each definition to the correct word from the vocabulary list.)	
21. In the artwork the artist used of light and dark colors to create a sense of balance.	
22. Investing in cryptocurrencies is considered a venture due to the high volatility in the market.	
23. The professor drew a between the human brain and a computer to explain complex cognitive processes.	
24. The old mansion was eerie and of any signs of life or habitation.	
25. The company announced new business with international partners to expand its market presence.	
26. The exhibition explored the of modern art movements in the context of historical events.	



27. Studies have shown that marine life ingests leading to ecological concerns about ocean pollution.

28. The researchers studied the development of infants to understand early learning processes.

29. The tech industry in the region is experiencing a growth attracting new talent and investments.

30. The political unrest was by economic disparities and social inequality.

Answer

Multiple Choice: 1. a. Explained or clarified 2. a. Probabilities 3. b. Not feasible or sensible 4. a. Cognitive 5. c. Gigantic 6. b. Prodigious 7. c. Effectiveness 8. a. Glycemic 9. b. Expanding or growing rapidly 10. b. Barriers or obstacles

Gap-Fill: 11. communicative 12. erosion 13. genesis 14. ejecta 15. implications 16. instigated 17. adiposity 18. toxicological 19. neurological 20. permeate

. s. el ESL-NEWS.COM Matching sentence: 1. juxtaposition 2. speculative 3. parallel 4. devoid 5. engagements 6. genesis 7. microplastics 8. cognitive 9. burgeoning 10. instigated

CATEGORY

1. Health - LEVEL6

Date Created 2025/02/07 Author aimeeyoung99