

Feathered friends: Study shows "selfless" parrots helping peers

By Nicola Davis, The Guardian, adapted by Newsela staff on 01.30.20 Word Count **675**



An African grey parrot sits on a branch in September 2010. African grey parrots have been discovered to exhibit selfless behavior. Photo: PanWoyteczek/Wikimedia Commons. Licensed under CC-BY-4.0

Scientists found that African grey parrots help others complete tasks. It was the first study to show that birds display such "selfless" behavior. They do this without seeing an immediate benefit to themselves, the scientists said.

Other friendly behaviors have been seen in birds. However, the study team said helping peers to reach a goal has only previously been shown, apart from people, in orangutans and bonobos. Orangutans and bonobos are types of apes.

Professor Désirée Brucks helped to write the study paper from Max Planck Institute for Ornithology in Germany. She said it was an obvious choice to do an experiment with parrots.

Parrots, crows and ravens are known as the smartest birds, she said. "They have been tested in many studies on problem-solving or word learning."

Unselfish Behavior Does Not Extend To All Birds

However, the unselfish behavior does not extend to all birds. It is not even seen among all parrots. A previous study showed that ravens do not help their peers with tasks. The new research shows blue-headed macaws are also rather selfish.

The team said their findings suggest the helpful behavior cropped up several times over the course of evolution. Evolution is an idea, or theory, about the way that types of life have developed over the years.

Similar pressures on birds could lead to similar behaviors, said Brucks.

Brucks and other scientists wrote about their study for the journal Current Biology. They tested two parrot types. A task involved the birds passing a metal ring through a hole to a neighboring bird of the same type. This ring could then be passed by the second bird to a human through another hole. The human would give a piece of nut for it.

Eight African grey parrots and six blue-headed macaws were in the experiments. They had been trained to give the rings for food when a person held out their hand.

The team found African grey parrots passed rings to their neighbors when a human held out their hand. This allowed the second bird to drop a ring through the hole. The second bird got a treat.

When the roles of the birds were switched, the same behavior was seen. The more rings a bird had given, the more they received in return.

However, the team said the birds did not know at the start that their favor would be returned. That suggests it is a selfless act.

Parrots Did Not Pass Rings For Fun

Far fewer rings were passed between birds when there was no human signal and no hole to pass the ring. This suggests the parrots did not pass rings for fun. The parrots also passed fewer rings when there was no neighbor.

The experiments were repeated with blue-headed macaws. They rarely passed rings to a neighbor.

The message, the team said, is that the African grey parrots were helping peers with a task. They added that the behavior is more complex than sharing food. It involves understanding the needs of another bird to reach a goal.

The team said African grey parrots form huge flocks at night. Then they split into smaller groups during the day to look for food. Brucks said that being helpful might help the birds gain a good standing with others. That could make it more likely they would team up on tasks.

By contrast, blue-headed macaws might value other things. They live in smaller, more stable flocks. They might have more defined leaders and less emphasis on sharing. In another task, the team found these birds were less eager than African grey parrots to share food.

Sharing Behavior And Feeding Might Be Related

Manon Schweinfurth is an expert in animal behavior from the University of St. Andrews in Scotland. She was not involved in the study. However, she has an idea about some birds helping others. It might come from the fact that they feed their young, she said.

Handing things over to members of the same species is one of the things they do, she said.

Quiz

1 Read the section "Parrots Did Not Pass Rings For Fun."

Select the paragraph from the section that shows why scientists think African grey parrots might help each other complete tasks.

- (A) Far fewer rings were passed between birds when there was no human signal and no hole to pass the ring. This suggests the parrots did not pass rings for fun. The parrots also passed fewer rings when there was no neighbor.
- (B) The message, the team said, is that the African grey parrots were helping peers with a task. They added that the behavior is more complex than sharing food. It involves understanding the needs of another bird to reach a goal.
- (C) The team said African grey parrots form huge flocks at night. Then they split into smaller groups during the day to look for food. Brucks said that being helpful might help the birds gain a good standing with others. That could make it more likely they would team up on tasks.
- (D) By contrast, blue-headed macaws might value other things. They live in smaller, more stable flocks.

 They might have more defined leaders and less emphasis on sharing. In another task, the team found these birds were less eager than African grey parrots to share food.
- 2 Read the section "Unselfish Behavior Does Not Extend To All Birds."

Which selection from this section supports the conclusion that African grey parrots behave selflessly?

- (A) However, the unselfish behavior does not extend to all birds. It is not even seen among all parrots. A previous study showed that ravens do not help their peers with tasks.
- (B) The team said their findings suggest the helpful behavior cropped up several times over the course of evolution. Evolution is an idea, or theory, about the way that types of life have developed over the years.
- (C) Eight African grey parrots and six blue-headed macaws were in the experiments. They had been trained to give the rings for food when a person held out their hand.
- (D) The team found African grey parrots passed rings to their neighbors when a human held out their hand.

 This allowed the second bird to drop a ring through the hole. The second bird got a treat.
- Which sentence from the article supports the main idea of the article?
 - (A) Parrots, crows and ravens are known as the smartest birds, she said.
 - (B) Similar pressures on birds could lead to similar behaviors, said Brucks.
 - (C) However, the team said the birds did not know at the start that their favor would be returned.
 - (D) However, she has an idea about some birds helping others.
- 4 Read the summary of the main ideas of the article below.

Scientists have discovered that African grey parrots help others of their same species to complete tasks that have no direct benefit to themselves. They believe the behavior might originate in the way that African grey parrots team up to find food.

Which answer choice would complete the summary?

- (A) African grey parrots are the first non-mammals discovered to exhibit such behavior.
- (B) African grey parrots are much more helpful to each other than other kinds of birds, such as ravens.
- (C) The experiment showed that blue-headed macaws are much less likely to help other blue-headed macaws.
- (D) The experiment involved one bird passing a ring to a second bird, who could then trade it for a treat.