

Researchers show that bold baboons learn to solve tasks from other baboons

March 11 2014



The Tsaobis Baboon Project follows habituated baboons in the Pro-Namib desert of Namibia. Credit: Alecia Carter/Tsaobis Baboon Project

Baboons learn from other baboons about new food sources – but only if they are bold or anxious – according to a new study published in the journal *PeerJ*. The results suggest that personality plays a key role in social learning in animals, something previously ignored in animal cognition studies.

Studying animals at the Zoological Society of London's Institute of Zoology Tsaobis Baboon Project in Namibia, the researchers examined how [personality](#) influenced whether [baboons](#) solved foraging tasks and whether they then demonstrated to others how to solve the tasks. They found bolder baboons did both.

Over three years, the researchers performed two types of experiment in which the baboons could learn about a novel food source by watching another baboon with it.

According to lead author Dr Alecia Carter of the University of Cambridge: "Though bolder baboons learnt, the shy ones watched the baboon with the novel tasks just as long as the bold ones did, but did not learn the task. In effect, despite being made aware of what to do with the tasks they were still too shy to do anything with it afterwards."

This means there was a mismatch between collecting [social information](#) and using social information.

The authors found a similar mismatch for anxiety: calm baboons watched a demonstrator for longer than [anxious individuals](#), but it was the anxious [individuals](#) which learnt the task.



A juvenile male baboon gathers social information from another juvenile male baboon by smelling his mouth while he is processing food. Credit: Alecia Carter/Tsaobis Baboon Project

"These results are significant, because they suggest that in cognitive tasks animals may perform poorly not because they aren't clever enough to solve the task, they may just be too shy or nervous to interact with it. Individual differences in social learning that are related to personality may thus have to be taken into account systematically when studying [animal cognition](#)," she said.

The results also suggest that the baboons' social networks may prevent them from learning from others. "I couldn't test some individuals no matter how hard I tried," explained Dr Carter, "because although they were given the opportunity to watch a knowledgeable individual who knew how to solve the task some baboons simply never went near a knowledgeable individual and thus never had the opportunity to learn from others."

The findings may impact how we understand the formation of culture in societies through social learning. If some individuals are unable to get

information from others because they don't associate with the knowledgeable individuals, or they are too shy to use the information once they have it, information may not travel between all group members, stopping the formation of a culture based on [social learning](#).

More information: Carter et al. (2014), Personality predicts the propensity for social learning in a wild primate. PeerJ 2:e283; [DOI: 10.7717/peerj.283](#)

Provided by PeerJ

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