Overview:

According to basic evolutionary theory, individuals should adapt their behaviour in response to their current physical and social environment, however recent research has found that individuals are sometimes constrained within individual personalities or behavioural syndromes. For example, an individual that acts in a bold manner towards conspecifics may win access to more resources, however, that individual would suffer from a greater predation risk if it were also bold in the presence of a predator. The aim of the current research was to investigate the role of personality in social games and social contexts.

The research was completed at Tsaobis Leopard Park in Namibia on two troops of chacma baboons. Data were collected over two years during the winter/autumn period. A total of 58 individuals (2009) and 53 individuals (2010) were the focus of the study and included all adult, subadult and juvenile baboons from both study troops. All individual’s personalities were tested using presentation with a novel food (2009, 2010) and a model threat (2009). Experienced observers also assessed all individual’s personalities using a basic questionnaire.

All individual baboons were focal followed for at least 22 hours over the two field seasons. Event data such as dominance interactions, leaving sleeping cliff decisions and waterhole approaches were collected ad lib. In addition to the personality experiments, large scale provisioning experiments were conducted in order to experimentally manipulate the patch entry decisions of individuals in order to gain access to a highly valued resource.

Preliminary results:

The data collected from the past two field seasons will be analysed in the coming months. However, preliminary results regarding the personality experiments completed showed that both when
presented with a novel food or presented with a model snake, individuals varied significantly in their reactions to the stimuli. This variation seems to depend on a) personality and b) age-sex class (for example, adult females’ reactions were, on average, shyer than those of juveniles of both sexes and adult males). This behaviour has been found to be broadly consistent between years for individuals, however this relationship was stronger for assessments by observers than for individual responses to novel foods.

The first analysis completed (in prep) showed that observer ratings of personality broadly predicted the reactions of the baboons in the objective experiments. We hope that this result opens lines of communication between the behavioural ecology and comparative personality approaches to animal personality research.

Above (from left to right): An 18 mo infant baboon is curious about the researcher at a break at the water hole (photo credit: Jenifer Isles); Alecia Carter performing a focal observation on a baboon as the baboon troop moves along the ephemeral river bed (photo credit: Steven Lade); Alecia Carter and a troop of baboons leave the water hole in line to return to foraging in the river bed (photo credit: Steven Lade)

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