



ORAL COMMUNICATIONS

INDIVIDUAL STATE AND BEHAVIOURAL CONSISTENCY IN MALE EUROPEAN GREEN LIZARDS (*Lacerta viridis*)

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The biological validity of consistent between-individual behavioural differences (i.e. animal personality) and correlations between different behaviours (i.e. behavioural syndrome) became widely accepted during the last decade and ‘personality research’ is now one of the fastest growing fields of behavioural ecology. However, our understanding on how behavioural consistency emerges and evolves is still incomplete. One interesting question is how unstable state variables (e.g. energy reserves) could play a role in the emergence of stable behavioural differences? One solution is that feedback loops act between the behaviour and the underlying state variable stabilizing the system. The amount of available energy has a key role driving behavioural decisions and shaping behavioural strategies. Moreover, in ectotherms, body temperature is a vital factor in maintaining optimal metabolic rate and physiological performance. Here, we studied how food and body temperature affected male European green lizards’ (*Lacerta viridis*) behaviour. We used 40 adult males from a Hungarian population during the mating season (April-May) of 2014. We applied a full factorial experimental design with high vs. low food treatments and short vs. long available basking periods. We assessed activity and risk-taking three times for every lizard. We focused on two components of individual behavioural variation: individual mean behaviour and within-individual behavioural variation. We also tested for the presence of animal personality and behavioural syndrome in the treatment groups. Lizards with limited basking time took higher risk and expressed their activity with lower variation. Lizards in all treatment groups showed activity and risk-taking personalities. We found support for an activity – risk-taking behavioural syndrome only in the low food treatment. Our findings show that individual state indeed affects behavioural strategies in this species, from the expression of single behaviours to the emergence of a correlation between functionally different behaviours.