
Personality Research: Theoretical and Methodological Foundations for Studying the Behaviour and Mind of the Individual

Jana Uher

Department of Psychology, Free University Berlin, Germany

E-Mail: uher@primate-personality.net

Key Words: Personality · Temperament · Individual differences · Measurement · Species comparisons

Many primate species exhibit pronounced variations in individual-specific patterns of behaviour and mind that are commonly construed as personality or temperament differences. Their relevance to primatology, in particular to ecological and evolutionary research questions, is increasingly recognised yet theoretical and methodological foundations are still not well established. Using empirical examples, I present three meta-theoretical core issues of personality research, and explore commonalities and differences to behavioural biology. First, I explain the theoretical and methodological foundations needed to quantify the individuals' behavioural characteristics. I emphasise that sufficient aggregation across occasions and empirical evidence of temporal reliability is essential in order to extract individual-specific patterns from behavioural data that always contain random and error variation within and between individuals as well. I show how variable- and individual-centred analyses allow the quantification of individual uniqueness based on empirical comparability with other individuals. I also explain why cross-situational consistency is often only moderate in primates. Second, I present various methodological approaches to select personality constructs for empirical studies, and contrast advantages and limitations of top-down approaches, such as from the human Five Factor Model, with those of systematic bottom-up approaches, such as the Behavioural Repertoire Approach [Uher, 2008a, b]. Third, I show that personality constructs can be measured reliably with various methods ranging from ethological behaviour observations to intuitive ratings of human observers using behaviour-descriptive verb inventories and trait adjective inventories. Finally, I explain theoretical concepts and methodologies to compare personality variation among species, and highlight the potential of cross-species personality research for evolutionary research questions.

Female Orang-Utan Social, Genetic and Spatial Relationships

Maria A. van Noordwijk, Natasha Arora, Erik P. Willems

Anthropological Institute and Museum, University of Zurich, Switzerland

E-Mail: vnoord@aim.uzh.ch

Key Words: Social organization · Relatedness · Association pattern · Range overlap

Female Bornean orang-utans (*Pongo pygmaeus wurmbii*) tend to range in the company of only their youngest offspring, and spend only short periods of time in association with conspecifics. In Tuanan, central Kalimantan, more than 15,000 h of focal observation on adult females were collected which were analyzed in combination with their ranging data and genetic relatedness. Kernel density estimation was employed to assess detailed patterns of range use by 5 adult females; for an additional 4 females the home range borders inside the study area could be determined in a biologically meaningful way. Non-invasively collected faecal samples were used to determine genetic relatedness among all females encountered in the study area, using genotypes from 26 microsatellite loci and mtDNA control region haplotypes. Females from the same matriline were found to have a higher degree of overlap of their home ranges and of their core areas. In addition, they had more frequent encounters, longer associations and more positive social interactions with each other than with females of different matriline. In particular, there