

Preface

This volume evolved from a symposium held at the American Society of Primatologists conference in Portland, Oregon, USA in August 2005. The symposium was organized by Lindsay Murray, Alex Weiss, and Sam Gosling with Jim King as the discussant. The symposium's purpose was to present an overview of the current status of research on personality in nonhuman primates. Sometime after the symposium Russ Tuttle approached two of the present editors (Alex Weiss and Jim King) about the idea of putting together this edited volume. We eagerly agreed and invited Lindsay Murray to participate in the project.

Primate personality research has progressed much since the 1930s and 1940s when primatologists began to notice large individual differences in the behavioral and emotional dispositions of monkeys and apes. Interest in the area waned and then briefly resurfaced when Jane Goodall, during her initial researches at Gombe National Park, described striking personality differences among the chimpanzees. These sometimes dramatic manifestations of distinct personalities should have been celebrated by the scientific community as much as the existence of tool making among chimpanzees. Instead the personality differences were largely ignored, no doubt because they were subjective and anthropomorphic at a time when primate behavior was synonymous with specific observable behaviors. Personality assessments were just as objectionable as Goodall's ascribing names to individual chimpanzees.

Fortunately, the attempts by behaviorists and ethologists to discourage Goodall from violating taboos against description of individual differences were spectacularly unsuccessful. Moreover, her interest in individual differences inspired other researchers to study nonhuman primate personality, though the more cautious sometimes have preferred identifying these phenomena as temperament or individuality. This behaviorally oriented approach to personality was exemplified by Chamove, Eysenck, and Harlow's early study of behavioral traits in rhesus monkeys that revealed dimensions similar to Eysenck's three human dimensions: Psychoticism, Extraversion, and Neuroticism. However, most notable were studies in 1978 on the personalities of chimpanzees in Gombe assessed with the Emotions Profile Index by Peter Buirski and the studies of Joan Stevenson-Hinde's group with the Madingley Questionnaire. These studies provided unambiguous evidence that subjective ratings

of personality traits from different raters converged and, in fact, were stable over time and related to behavior, thus meeting criteria set by early skeptics of personality trait theory.

These early studies have had long-lasting impacts. Notably, the Madingley scale developed by Joan Stevenson-Hinde has been adapted for use in several species. Moreover, this scale is still being used and adapted by several researchers, including some in this volume, who conduct research in a diverse range of areas. Thus, the present volume would not be complete without Joan Stevenson-Hinde's and Camilla Hinde's chapter describing the development of this questionnaire and the early history of the field.

A fundamental issue in primate personality is the relationship between behavioral observations and subjective rater judgments in personality measurement. The chapter by Freeman and Gosling presents a detailed comparison of these two approaches. A further question is whether personality measures should be initially approached through purely behavioral measures or through personality ratings based on subjective rater judgments. Jana Uher, in her chapter makes a case for the former strategy within a broader context of methodological issues in measurement of primate personality.

Lindsay Murray's chapter also emphasized the importance of overall context in making personality measurements. In this chapter she describes a series of studies which highlight the contextual variables that mediate the relationships between personality and behavior in captive great apes. These findings and those of other chapters stress the need to take such contextual factors into account even when validating personality ratings of small captive groups.

Similarly, the chapter by Bard, Gaspar, and Vick on individual differences among chimpanzees in facial expression might, at first, appear to be an unusual contribution to a book on primate personality. However, as documented in the chapter, chimpanzees' facial expressions are clearly related to their emotional state and most likely to stable personality traits. We suspect that individual consistency in patterns of facial expression may offer new insights into personality differences not currently measured by other behaviors or by rating scales, particularly for traits related to emotional and agonistic states. The subtle differences in facial expression may offer some far more sensitive personality measures than more conventional personality measures.

As this chapter further indicates, measurement of facial expressions and categorization of those expressions into a meaningful taxonomy is enormously complex. This complexity has probably impeded research into the relationship between facial expression and personality. However, the Facial Action Coding System (FACS) devised by the authors and described in their chapter may now be a basis for more studies on this new behavioral dimension and personality.

As research in primate personality develops, questions about the causal links between personality variables and the outcomes should come under increasing scrutiny. The chapter by Capitanio describes how the rated sociability of rhesus monkeys is positively correlated with the vigor of their immune response. He also describes evidence of the physiological variables that mediate the link between personality and the immune response.

As with other endeavors that seek to understand complex systems, progress can be made by understanding the simplest components of the system. In this respect, we believe that the study of personality in nonhuman primates is well-positioned to aid researchers in understanding the relationship of personality to other variables. For example, studies of nonhuman primates have been used to better understand the proximate genetic and environmental causes of personality or temperament. In this vein, the chapters by Dee Higley, Steve Suomi, and Andrew Chaffin as well as that by Lynn Fairbanks and Matthew Jorgensen demonstrate how studies of primates have been used to examine the effects of genes, the environment, and gene by environment interactions which give rise to individual differences underlying personality or temperamental traits related to psychopathology, aggression, and alcoholism in humans. In addition, Stephanie Anestis' chapter reveals that nonhuman primate research may help researchers untangle the relationship between traits such as personality and hormones.

Finally, evolutionary psychologists including David Buss and Daniel Nettle have hypothesized and conducted research on the evolutionary bases of human personality dimensions and variation. We believe a major contribution of all of the chapters in this volume is to inform this area of research. In particular, King and Weiss describe their work applying the comparative method to methods and measures adapted from human personality research improve our understanding of the evolutionary bases of personality dimensions such as Conscientiousness. The final chapter describes a new approach to studying personality, viz., the study of behavioral syndromes. This approach is rooted in behavioral ecology and we believe that it, while not yet being fully implemented in studies of nonhuman primates, has great promise in developing an understanding of how stable personality differences arose and are maintained by physiological characteristics of individuals (e.g., body size or metabolic rate), the nature of the social and physical environments, and the constitution of the population.

In conclusion, we believe that the present volume offers much to those interested in studying the personality of nonhuman primates and other species (including humans). We also hope that this volume dispels concerns about the field's rigor with respect to methods and subject matter. Finally, we think that this volume demonstrates the richness and diversity of findings and inspires new researchers to take the sorts of bold steps needed to further our understanding of diversity in primates, whether they are nonhuman or human.

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