

- formal comparison within and between data sets. *Anim Behav* 79:439–450
- Dingemanse NJ, Kazem AJN, Réale D, Wright J (2010b) Behavioural reaction norms: animal personality meets individual plasticity. *Trends Ecol Evol* 25:81–89
- Doran D (1997) Influence of seasonality on activity patterns, feeding behavior, ranging, and grouping patterns in Tai chimpanzees. *Int J Primatol* 18:183–206
- Duffy KG, Wrangham RW, Silk JB (2007) Male chimpanzees exchange political support for mating opportunities. *Curr Biol* 17:R586–R587
- Dunbar RIM (1993) Functional significance of social grooming in primates. *Folia Primatol* 57:121–131
- Field A (2005) *Discovering statistics using SPSS*, 2nd edn. Sage, London
- Fishman MA, Lotem A, Stone L (2001) Heterogeneity stabilizes reciprocal altruism interactions. *J Theor Biol* 209:87–95
- Flack JC, Girvan M, de Waal FBM, Krakauer DC (2006) Policing stabilizes construction of social niches in primates. *Nature* 439:426–429
- Foster MW, Gilby IC, Murray CM, Johnson A, Wroblewski EE, Pusey AE (2009) Alpha male chimpanzee grooming patterns: implications for dominance “style”. *Am J Primatol* 71:136–144
- Fraser ON, Schino G, Aureli F (2008) Components of relationship quality in chimpanzees. *Ethology* 114:834–843
- Freeman HD, Gosling SD (2010) Personality in nonhuman primates: a review and evaluation of past research. *Am J Primatol* 72:653–671
- Fucikova E, Drent PJ, Smits N, van Oers K (2009) Handling stress as a measurement of personality in great tit nestlings (*Parus major*). *Ethology* 115:366–374
- Garamszegi LZ, Eens M, Torok J, Tregenza T (2008) Birds reveal their personality when singing. *PLoS One* 3:e2647
- Gilby IC, Wrangham RW (2008) Association patterns among wild chimpanzees (*Pan troglodytes schweinfurthii*) reflect sex differences in cooperation. *Behav Ecol Sociobiol* 62:1831–1842
- Gosling SD (2001) From mice to men: what can we learn about personality from animal research? *Psychol Bull* 127:45–86
- Gunther B, Cimboric K, Lawrence CH, Stephen A (1999) The role of neuroticism in daily stress and coping. *J Pers Soc Psychol* 77:1087–1100
- Herrmann E, Hernandez-Lloreda MV, Call J, Hare B, Tomasello M (2010) The structure of individual differences in the cognitive abilities of children and chimpanzees. *Psychol Sci* 2:102–110
- Jokela M, Kivimäki M, Elovainio M, Keltinkangas-Järvinen L (2009) Personality and having children: a two-way relationship. *J Pers Soc Psychol* 96:218–230
- King J, Figueredo AJ (1997) The five-factor model plus dominance in chimpanzee personality. *J Res Pers* 31:257–271
- Konečná M, Lhota S, Weiss A, Urbanek T, Adamova T, Pluhacek J (2008) Personality in free-ranging Hanuman langur (*Semnopithecus entellus*) males: subjective ratings and recorded behavior. *J Comp Psychol* 122:379–389
- Koolhaas JM, Korte SM, De Boer SF, Van der Vegt BJ, Van Reenen CG, Hopster H, De Jong IC, Ruis MAW, Blokhuis HJ (1999) Coping styles in animals: current status in behavior and stress-physiology. *Neurosci Biobehav Rev* 23:925–935
- Kortet R, Hedrick A (2007) A behavioural syndrome in the field cricket *Gryllus integer*: intrasexual aggression is correlated with activity in a novel environment. *Biol J Linn Soc* 91:475–482
- Koski SE (2011) How to measure animal personality and why does it matter? Integrating the psychological and biological approaches to animal personality. In: Inoue-Murayama M, Kawamura S, Weiss A (eds) *From genes to animal behavior. Social structures, personalities, communication by color*. Springer, Tokyo, pp 115–136
- Krause J, James R, Croft DP (2010) Personality in the context of social networks. *Philos Trans R Soc Lond B Biol Sci* 365:4009–4106
- Langergraber K, Mitani J, Vigilant L (2009) Kinship and social bonds in female chimpanzees (*Pan troglodytes*). *Am J Primatol* 71:840–851
- Leavens DA, Aureli F, Hopkins WD, Hyatt CW (2001) Effects of cognitive challenge on self-directed behaviors by chimpanzees (*Pan troglodytes*). *Am J Primatol* 55:1–14
- Lehmann J, Boesch C (2008) Sex differences in chimpanzee sociality. *Int J Primatol* 29:65–81
- Lessells CM, Boag PT (1987) Unrepeatable repeatabilities: a common mistake. *Auk* 104:116–121
- Maestripieri G, Schino G, Aureli F, Troisi A (1992) A modest proposal: displacement activities as indicators of emotions in primates. *Anim Behav* 44:967–979
- Martin P, Bateson P (1993) *Measuring behaviour: an introductory guide*, 2nd edn. Cambridge University Press, Cambridge
- Matsumoto-Oda A, Oda R (2001) Activity budgets of wild chimpanzees in different reproductive states. *J Ethol* 19:17–21
- McGraw KO, Wong SP (1996) Forming inferences about some intraclass correlation coefficients. *Psychol Meth* 1:30–46
- McNamara JM, Stephens PA, Dall SRX, Houston AI (2009) Evolution of trust and trustworthiness: social awareness favours personality differences. *Proc R Soc B* 276:605–613
- Mitani JC (2009) Male chimpanzees form enduring and equitable social bonds. *Anim Behav* 77:633–640
- Mitani JC, Merriwether DA, Zhang CB (2000) Male affiliation, cooperation and kinship in wild chimpanzees. *Anim Behav* 59:885–893
- Muller MN, Mitani JC (2005) Conflict and cooperation in wild chimpanzees. *Adv Stud Behav* 35:275–331
- Muris P, de Jong PJ, Engelen S (2004) Relationships between neuroticism, attentional control, and anxiety disorders symptoms in non-clinical children. *Pers Individ Differ* 37:789–797
- Murray LE (1998) The effects of group structure and rearing strategy on personality in chimpanzees *Pan troglodytes* at Chester, London and Twycross Zoos. *Int Zoo Yearbk* 36:97–108
- Nettle D (2005) An evolutionary approach to the extraversion continuum. *Evol Hum Behav* 26:363–373
- Nettle D, Liddle B (2008) Agreeableness is related to social-cognitive, but not social-perceptual, theory of mind. *Eur J Pers* 22:323–335
- Nettle D, Penke L (2010) Personality: bridging the literatures from human psychology and behavioural ecology. *Philos Trans R Soc Lond B Biol Sci* 365:4043–4050
- Nieuwenhuijsen K, de Waal FBM (1982) Effects of spatial crowding on social behavior in a chimpanzee colony. *Zoo Biol* 1:5–28
- Nishida T, Zamma K, Matsusaka T, Inaba A, McGrew WC (2010) *Chimpanzee behavior in the wild: an audio-visual encyclopedia*. Springer-Verlag, Tokyo
- Penke L, Denissen JA, Miller GF (2007) The evolutionary genetics of personality. *Eur J Pers* 21:549–587
- Pepper JW, Mitani JC, Watts DP (1999) General gregariousness and specific social preferences among wild chimpanzees. *Int J Primatol* 20:613–632
- Pike T, Samanta M, Lindström J, Royle NJ (2008) Behavioural phenotype affects social interactions in an animal network. *Proc Biol Sci* 275:2515–2520
- Pusey A, Williams J, Goodall J (1997) The influence of dominance rank on the reproductive success of female chimpanzees. *Science* 277:828–831
- Reader SM (2003) Innovation and social learning: individual variation and brain evolution. *Anim Biol* 53:147–158
- Réale D, Reader SM, Sol D, McDougall PT, Dingemanse NJ (2007) Integrating animal temperament within ecology and evolution. *Biol Rev* 82:291–318