

Table S1

Description of variables included in PCA analysis

Behaviour	Description	Coding
Back of cage	Monkey was positioned in back 1/3 of cage	Point (1)
Front of cage	Monkey was positioned in front 1/3 of cage	Point (1)
Middle of cage	Monkey was positioned in middle 1/3 of cage	Point (1)
Attention to others	Attention of monkey, as evaluated by eyes, was focused on conspecifics	Point (2)
Attention to tester	Attention of monkey, as evaluated by eyes, was focused on observer	Point (2)
Back to tester	Monkey was turned with back to tester	Point (2)
Ignore	Attention of monkey, as evaluated by eyes, was ignoring the observer and conspecifics	Point (2)
Lean or approach tester	Monkey leaned or moved towards the observer, but did not lunge	Point (2)
Lunge	Monkey lunged at observer	Point (2)
Move away	Monkey leaned or moved away from observer	Point (2)
Crouch	Monkey was crouched	Point (3)
Lie	Monkey was lying on floor of cage	Point (3)
Locomote	Monkey was moving around cage	Point (3)
Sit	Monkey was sitting on floor of the cage	Point (3)
Stand on two legs	Monkey was standing on hindlegs (without locomoting)	Point (3)
Stand on three or four legs	Monkey was standing on three or four legs (without locomoting)	Point (3)
Grunt	Monkey grunted	Point (4)

LEN to other monkey	Monkey produced 'LEN' facial expression (Lips forward, Ears back, Neck extended), directed towards a conspecific	Point (4)
LEN to tester	Monkey produced LEN towards observer	Point (4)
Lipsmack to other monkey	Monkey showed lipsmack towards conspecific	Point (4)
Lipsmack to tester	Monkey showed lipsmack towards observer	Point (4)
Open mouth	Monkey showed open mouth	Point (4)
Quiet face	Monkey showed quiet face (mouth closed, no lip or jaw movement)	Point (4)
Grimace	Whether or not monkey showed fear grimace to observer	One-zero
Shriek	Whether or not monkey shrieked	One-zero
Grind teeth	Whether or not monkey ground teeth, without eating	One-zero
Threat	Whether or not monkey made a threat display (open-mouth threat, lunge and/or stamping foot with eye contact) to observer or conspecifics	One-zero
Reach	Whether or not monkey reached out of the cage	One-zero
Avert gaze	Whether or not monkey averted gaze from observer (direction of gaze moved away from observer as observer directed eyes towards monkey)	One-zero
Food	Whether or not monkey consumed food	One-zero
Groom	Whether or not monkey self-groomed	One-zero
Object	Whether or not monkey manipulated an object on or in the cage	One-zero
Scratch	Whether or not monkey scratched itself	One-zero
Shake body	Whether or not monkey shook its body	One-zero
Shake cage	Whether or not monkey shook cage	One-zero
Urinate	Whether or not monkey urinated	One-zero
Yawn	Whether or not monkey yawned	One-zero

Coding is described as either ‘point’ (behaviour recorded once per minute at a specified time; instantaneous sampling) or ‘one-zero’ (tester recorded whether or not behaviour occurred any time in the past minute). Point score variables involved (1) cage position, (2) degree and type of responsiveness to the observer or other monkeys, (3) posture/locomotion and (4) facial/vocal expression. These categories were scored on the 15, 30, 45 or 60 s interval, respectively. Related point score variables are grouped together by number in the Coding column. All scores range from 0 to 4. The behaviours listed in bold significantly contributed to personality components used in this study (see Sussman, Ha, Bentson, & Crockett, 2013, for details on inclusion criteria).

References

Sussman, A.F., Ha, J.C., Bentson, K.L., & Crockett, C.M. (2013). Temperament in rhesus, long-tailed, and pigtailed macaques varies by sex and species. *American Journal of Primatology*, 75(4), 303–313.