Questionnaire on human perception of Barbary macaques’ facial expressions

Brief
This study aims to analyse how humans rate different facial expressions of Barbary macaques. A questionnaire will be displayed on your computer screen, showing pictures of Barbary macaques' faces. Please choose in both questions which emotional state better describes each monkey's face.

Please confirm: You agree to take part in this research. You are aware that you are free to withdraw at any point. You understand that any information you provide will be treated in confidence by the investigators. You will stay anonymous in the publication of any findings.

Questionnaire part 1

Q1 I consent to participate in this study
☒ Yes (1)
☒ No (2)

Q2 Age
☒ 18-25 (1)
☒ 26-40 (2)
☒ 41-60 (3)
☒ 61+ (4)

Q3 Gender
☒ Male (1)
☒ Female (2)
☒ Other (3)

Q4 Have you ever seen live non-human primates in real life before?
☒ Yes (1)
☒ No (2)

Display This Question:
If Have you had any previous experience with primates? Yes Is Selected

Q4 Which species? (Please give the names of 1 or 2 species you have seen the most / or you have worked with)

Display This Question:
If Have you ever encountered live primates before? Yes Is Selected

Q5 In which context?
☒ Work (1)
☒ Holiday (2)
☒ All of the above (4)
☒ Other, please specify (3) ____________________
Q6 How long have you worked with non-human primates?

Q7 Which type of work have you conducted?
- Behavior (1)
- Other, please specify (2) ____________________

Q8 Have you ever seen live Barbary macaques in real life before?
- Yes (1)
- No (2)

Q9 In which context have you seen live Barbary macaques?
- Work (1)
- Holiday (2)
- All of the above (4)
- Other, please specify (3) ____________________

Q10 How long have you worked with Barbary macaques?

Q11 Which type of work have you conducted?
- Behavioural (1)
- Other, please specify (2) ____________________

Q12 Have you ever seen a Barbary macaque before, in a picture?
- Yes (1)
- No (2)

Q13 Have you ever seen a Barbary macaque before, in a video/film?
- Yes (1)
- No (2)
**Display This Question:**

If Have you ever seen a Barbary macaque before, in a picture? Yes Is Selected
Or Have you ever seen a Barbary macaque before, in a video/film? Yes Is Selected

**Q14 In which context?**
- Work (1)
- Holiday (2)
- Other, please specify (3) ____________________

**Display This Question:**

If In which context Work Is Selected

**Q15 Which type of work have you conducted?**
- Behavioural (1)
- Other, please specify (2) ____________________

**Please note:** if you have any concerns about any aspect of your participation or any other queries please raise this with the investigators. Contact details: Dr Laetitia Marechal or Xandria Levy School of Psychology, College of Social Science, University of Lincoln, Brayford Pool, Lincoln, Lincolnshire LN6 7TS Tel: +44 (0)1522 837409 Email: facialexpressionsofbarbarymacaques@outlook.com
Training phase

This is the training phase. Please find below examples of Barbary macaques' faces, with a label naming the type of facial expression displayed over each picture. Some definitions are extracted from Teufel et al. (2010).

**Neutral Facial Expression:** the mouth is closed and the overall face is relaxed.

![Neutral Facial Expression](image1)

**Friendly or ‘Affiliative’ Facial Expression:** the mouth is half open and the lips slightly protruded. This expression involves a chewing movement and clicking or smacking of the tongue and lips.

![Friendly or ‘Affiliative’ Facial Expression](image2)

**Distressed Facial Expression:** the mouth is widely open, and the animal is yawning. Yawning might be expressed when an animal is in a discomforting situation.

![Distressed Facial Expression](image3)
**Very Distressed or 'Submissive' Facial Expression:** the corners of the lips are fully retracted and the upper and lower teeth are shown.

![Very Distressed or 'Submissive' Facial Expression](image1)

**Aggressive or 'Threat' Face:** the eyebrows are raised, the animal stares intently and the lips are protruded to form a round mouth.

![Aggressive or 'Threat' Face](image2)

**Very Aggressive Facial Expression:** the eyebrows are raised, the animal stares intently and the mouth is open showing the teeth.

![Very Aggressive Facial Expression](image3)
Questionnaire part 2

Q16 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________

Q17 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________
Q18 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________

Q19 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________
Q20 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________

Q21 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________
Q22 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8)_________________________

Q23 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8)_________________________
Q24 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________

Q25 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________
Q26 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________

Q27 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________
Q28 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________

Q29 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________
Q30 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________

Q31 Could you specify the emotional state of this monkey?
- Very friendly (1)
- Friendly (2)
- Neutral (3)
- Distressed (4)
- Very Distressed (5)
- Aggressive (6)
- Very Aggressive (7)
- Other, please specify (8) ____________________
Debrief
Thank you very much for taking part in this study, if you have any questions or comments please contact:  facialexpressionsofbarbarymacaques@outlook.com

We would like to sincerely thank Prof. Julia Fischer, Roger Eritja, and Andrew Forsyth for the permission to use their photographs.