## EyeT4Empathy:

## Questionnaire for empathy assessement

Pedro Lencastre $^{1,2,3,*}$ , Samip Bhurtel $^{1,2}$ , Anis Yazidi $^{1,2,3}$ , Gustavo B.M. e Mello $^{1,2,3}$ , Sergiy Denysov $^{1,2,3}$ , and Pedro G. Lind $^{1,2,3}$ 

## **Empathy questionnaire**

The questionnaire to assess empathy was firstly introduced by Reniers and co-workers<sup>1</sup> and subsequently expanded by Bhurtel et al.<sup>2</sup>. To each question, there are four possible answers "Strongly disagree", "Slightly disagree", "Slightly disagree" and "Strongly disagree". These answers are ordered from "1" to "4", where "1" corresponds to "Strongly disagree" and "4" to "Strongly agree".

All the following questions were shown to participants:

- Q1 I sometimes find it difficult to see things from the 'other guy's' point of view.
- Q2 I am usually objective when I watch a film or play, and I don't often get completely caught up in it.
- Q3 I try to look at everybody's side of a disagreement before I make a decision.
- Q4 I sometimes try to understand my friends better by imagining how things look from their perspective.
- Q5 When I am upset at someone, I usually try to 'put myself in his shoes for a while.
- Q6 Before criticising somebody, I try to imagine how I would feel if I was in their place.
- Q7 I often get emotionally involved with my friends' problems.
- Q8 I am inclined to get nervous when others around me seem to be nervous.
- Q9 People I am with have a strong influence on my mood.
- Q10 It affects me very much when one of my friends seems upset.
- Q11 I often get deeply involved with the feelings of a character in a film, play or novel.
- Q12 I get very upset when I see someone cry.
- Q13 I am happy when I am with a cheerful group and sad when the others are glum.
- Q14 It worries me when others are worrying and panicky.
- Q15 I can easily tell if someone else wants to enter a conversation.
- Q16 I can pick up quickly if someone says one thing but means another.
- Q17 It is hard for me to see why some things upset people so much.
- Q18 I find it easy to put myself in somebody elses shoes.
- Q19 I am good at predicting how someone will feel.
- Q20 I am quick to spot when someone in a group is feeling awkward or uncomfortable.
- Q21 Other people tell me I am good at understanding how they are feeling and what they are thinking.

<sup>&</sup>lt;sup>1</sup>Dep. Computer Science, OsloMet - Oslo Metropolitan University, P.O. Box 4 St. Olavs plass, N-0130 Oslo, Norway <sup>2</sup>OsloMet Artificial Intelligence lab, OsloMet, Pilestredet 52, N-0166 Oslo, Norway

<sup>&</sup>lt;sup>3</sup>NordSTAR - Nordic Center for Sustainable and Trustworthy AI Research, Pilestredet 52, N-0166 Oslo, Norway \*corresponding author: Pedro Lencastre (pedro.lencastre@oslomet.no)

- Q22 I can easily tell if someone else is interested or bored with what I am saying.
- Q23 Friends talk to me about their problems as they say that I am very understanding.
- Q24 I can sense if I am intruding, even if the other person does not tell me.
- Q25 I can easily work out what another person might want to talk about.
- Q26 I can tell if someone is masking their true emotion.
- Q27 I am good at predicting what someone will do.
- Q28 I can usually appreciate the other persons viewpoint, even if I do not agree with it.
- Q29 I usually stay emotionally detached when watching a film.
- Q30 I always try to consider the other fellows feelings before I do something.
- Q31 Before I do something I try to consider how my friends will react to it.
- Q32 I feel frustrated when I cannot communicate my ideas.
- Q33 I complete the sentences of other people when they find it difficult to communicate their ideas to help them.
- Q34 If someone is suffering from stutter, I prefer speaking rather than texting.
- Q35 I try to be patient when people speak with me very slowly.
- Q36 In a situation, when there are handicapped students in a classroom, the pace of the class should be adapted to the handicapped student.
- Q37 In a situation, when there are only one handicapped student in a classroom, the pace of the class should be adapted to him/her independently of how many students are in the class.
- Q38 I feel impatient when people communicate slowly, so I complete other people's sentences to make the communication more efficient.
- Q39 I believe that the handicapped students should catch the pace of the group in a classroom to not delay the progress of other students
- Q40 I feel left out (or excluded) when I cannot participate in a conversation.

Questions Q1, Q2, Q27, Q30, Q36 and Q37 have reverse scoring<sup>2</sup>.

## References

- 1. Reniers, R. L., Corcoran, R., Drake, R., Shryane, N. M. & Völlm, B. A. The qcae: A questionnaire of cognitive and affective empathy. J. Pers. Assess. 93, 84–95 (2011).
- **2.** Bhurtel, S., Lind, P. G. & Moreno e Mello, G. B. For a new protocol to promote empathy towards users of communication technologies. In <u>International Conference on Human-Computer Interaction</u>, 3–10 (Springer, 2021).