

## GAToRS (General Attitudes Towards Robots Scale)

Koverola, M., Kunnari, A., Sundvall, J., & Laakasuo, M. (2022). General attitudes towards robots scale (GAToRS): A new instrument for social surveys. *International Journal of Social Robotics*, 14(7), 1559-1581.

Please read the following statements and answer based on how much you agree with each statement. All items are anchored from 1 to 7 ("Completely disagree"–"Completely agree").

- 1 I can trust persons and organizations related to development of robots
- 2 Persons and organizations related to development of robots will consider the needs, thoughts and feelings of their users
- 3 I can trust a robot
- 4 I would feel relaxed talking with a robot
- 5 If robots had emotions, I would be able to befriend them
- 6 I would feel uneasy if I was given a job where I had to use robots
- 7 I fear that a robot would not understand my commands
- 8 Robots scare me
- 9 I would feel very nervous just being around a robot
- 10 I don't want a robot to touch me
- 11 Robots are necessary because they can do jobs that are too hard or too dangerous for people
- 12 Robots can make life easier
- 13 Assigning routine tasks to robots lets people do more meaningful tasks
- 14 Dangerous tasks should primarily be given to robots
- 15 Robots are a good thing for society, because they help people
- 16 Robots may make us even lazier
- 17 Widespread use of robots is going to take away jobs from people
- 18 I am afraid that robots will encourage less interaction between humans
- 19 Robotics is one of the areas of technology that needs to be closely monitored
- 20 Unregulated use of robotics can lead to societal upheavals

- 1 S1 – personal positive
- 2 S1 – personal positive
- 3 S1 – personal positive
- 4 S1 – personal positive
- 5 S1 – personal positive
- 6 S2 – personal negative
- 7 S2 – personal negative
- 8 S2 – personal negative
- 9 S2 – personal negative
- 10 S2 – personal negative
- 11 S3 – societal positive
- 12 S3 – societal positive
- 13 S3 – societal positive
- 14 S3 – societal positive
- 15 S3 – societal positive
- 16 S4 – societal negative
- 17 S4 – societal negative
- 18 S4 – societal negative
- 19 S4 – societal negative
- 20 S4 – societal negative

## IDAQ (Individual Differences in Anthropomorphism Questionnaire)

Waytz, A., Cacioppo, J., & Epley, N. (2010). Who sees human? The stability and

importance of individual differences in anthropomorphism. Perspectives on psychological science, 5(3), 219-232.

All items are rated on a 0 (not at all) to 10 (very much) scale.

idaq_number	idaq_type	idaq_item
1	idaq_na	To what extent is the desert lethargic?
2	idaq_na	To what extent is the average computer active?
3	idaq	To what extent does technology-devices and machines for manufacturing, entertainment, and productive processes (e.g., cars, computers, television sets)-have intentions?
4	idaq	To what extent does the average fish have free will?
5	idaq_na	To what extent is the average cloud good-looking?
6	idaq_na	To what extent are pets useful?
7	idaq	To what extent does the average mountain have free will?
8	idaq_na	To what extent is the average amphibian lethargic?
9	idaq	To what extent does a television set experience that we then reduced to 30 items, as shown in Box A1. The emotions?
10	idaq_na	To what extent is the average robot good-looking?
11	idaq	To what extent does the average robot have consciousness?
12	idaq	To what extent do cows have intentions?
13	idaq	To what extent does a car have free will?
14	idaq	To what extent does the ocean have consciousness?
15	idaq_na	To what extent is the average camera lethargic?
16	idaq_na	To what extent is a river useful?
17	idaq	To what extent does the average computer have a mind of its own?
18	idaq_na	To what extent is a tree active?
19	idaq_na	To what extent is the average kitchen appliance useful?
20	idaq	To what extent does a cheetah experience emotions?
21	idaq	To what extent does the environment experience emotions?
22	idaq	To what extent does the average insect have a mind of its own?
23	idaq	To what extent does a tree have a mind of its own?
24	idaq_na	To what extent is technology-devices and machines for manufacturing, entertainment, and productive processes (e.g., cars, computers, television sets)-durable?
25	idaq_na	To what extent is the average cat active?
26	idaq	To what extent does the wind have intentions?
27	idaq_na	To what extent is the forest durable?
28	idaq_na	To what extent is a tortoise durable?
29	idaq	To what extent does the average reptile have consciousness?
30	idaq_na	To what extent is the average dog good-looking?

Note: To compute the IDAQ response score, sum items 3,4,7,9,11, 12, 13, 14, 17,20, 21, 22, 23, 26, 29. To compute IDAQ-NA, sum items 1, 2, 5, 6, 8, 10, 15, 16, 18, 19, 24, 25, 27, 28, 30. Unused items with spiritual agents are: "To what extent does a spirit (or spirits) have a mind of its own?", "To what extent does a ghost have free will?", "To what extent do supernatural beings have intentions?", "To what extent does the average spiritual agent have consciousness?", "To what extent does a god experience emotions?", "To what extent are deities durable?", "To what extent is a god useful?", "To what extent is the average supernatural being good-looking?", "To what extent is a spirit (or spirits) active?", and "To what extent is the average spiritual agent lethargic?"