

SURVEY

Welcome to the survey!

Thank you for taking the time to participate in the survey.

Today, you interacted with a *collaborative robot* that has been developed to perform in a chemical industry scenario, specifically, assisting the human operator in *pouring chemicals*.

Now, you are kindly asked to answer the following *questions* concerning the *experience* you had today collaborating with the *robot*.

It will take about *5-10 minutes* to answer the questions.

Kind regards,

Human-Robot Interfaces and Interaction Laboratory

Demographic data

Before starting, please provide *age* and *gender*:

- **Age:**
- **Gender:**

Questionnaire

With reference to the questions, there will be questions where you need to provide an answer based on a **5-point scale** (*1=low, 5=high*).

Question 1

How much did each of the following **parameters impact** your level of **trust** towards the **robot**?

- | | | | | | |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <i>Velocity of the robot</i> | 1 <input type="radio"/> | 2 <input type="radio"/> | 3 <input type="radio"/> | 4 <input type="radio"/> | 5 <input type="radio"/> |
| <i>Distance between you and the robot</i> | 1 <input type="radio"/> | 2 <input type="radio"/> | 3 <input type="radio"/> | 4 <input type="radio"/> | 5 <input type="radio"/> |
| <i>Height of pouring</i> | 1 <input type="radio"/> | 2 <input type="radio"/> | 3 <input type="radio"/> | 4 <input type="radio"/> | 5 <input type="radio"/> |

Please respond to the following questions by indicating either "A" or "B" depending on the experimental test.

Question 2

The way the robot moved during this experimental session promoted my trust in the robot.

Strongly disagree *Strongly agree*

Question 3

To what degree did the **robot** ...

- | | | | | | |
|--------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <i>Act consistently</i> | 1 <input type="radio"/> | 2 <input type="radio"/> | 3 <input type="radio"/> | 4 <input type="radio"/> | 5 <input type="radio"/> |
| <i>Function successfully</i> | 1 <input type="radio"/> | 2 <input type="radio"/> | 3 <input type="radio"/> | 4 <input type="radio"/> | 5 <input type="radio"/> |
| <i>Perform exactly as instructed</i> | 1 <input type="radio"/> | 2 <input type="radio"/> | 3 <input type="radio"/> | 4 <input type="radio"/> | 5 <input type="radio"/> |
| <i>Reliable</i> | 1 <input type="radio"/> | 2 <input type="radio"/> | 3 <input type="radio"/> | 4 <input type="radio"/> | 5 <input type="radio"/> |
| <i>Predictable</i> | 1 <input type="radio"/> | 2 <input type="radio"/> | 3 <input type="radio"/> | 4 <input type="radio"/> | 5 <input type="radio"/> |

Question 4

The way the robot moved made me uncomfortable.

Strongly disagree *Strongly agree*

I felt I could rely on the robot to do what it is supposed to do.

Strongly disagree *Strongly agree*

The speed at which the robot picked up and released the components made me easy.

Strongly disagree *Strongly agree*

I felt safe interacting with the robot.

Strongly disagree *Strongly agree*

The robot did not look reliable.

Strongly disagree *Strongly agree*

I was comfortable the robot would not hurt me.

Strongly disagree *Strongly agree*

I trusted that the robot was safe to cooperate with.

Strongly disagree *Strongly agree*