

Pre-Experiment Survey

Thank you for participating in this experiment titled "Assisted Teleoperation: SUB-EXPERIMENT NAME"! In order for us to better understand the results of your use of the experimental system, we'd like to ask you a few questions about your background and familiarity with teleoperation and robotic devices.

Please do not hesitate to ask the investigator any questions you may have about this form or the experiment in general.

Bookkeeping:

Subject ID:

19 Yuxuan

Today's Date:

24/10/2024 (dd/mm/yyyy)

About You:

Age: 26 yearsGender: F ☐ Prefer not to say.Handedness: ☐ Left ☒ Right ☐ AmbidextrousU.S. Citizen or Resident Alien: ☐ Yes ☒ No ☐ Prefer not to say.

How experienced are you with teleoperation and human-robot interactive devices?

- ☐ *None* This is my first time using such a device.
- ☒ *Limited* I've used such a device once or twice.
- ☐ *Familiar* I've used one or more devices many times.
- ☐ *Experienced* I've developed teleoperation systems, myself.

Are you currently experiencing any of the following?

- | | | | | |
|------------------------------|---|--------------------------------|--|---|
| Injuries to your hand or arm | <input type="checkbox"/> Left | <input type="checkbox"/> Right | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Prefer not to say. |
| Neurological disorders: | <input type="checkbox"/> Yes | | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Prefer not to say. |
| Uncorrected impaired vision: | <input checked="" type="checkbox"/> Yes | | <input type="checkbox"/> No | <input type="checkbox"/> Prefer not to say. |
| Poor depth perception: | <input type="checkbox"/> Yes | | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Prefer not to say. |
| Color blindness: | <input type="checkbox"/> Yes | | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Prefer not to say. |
| Headache: | <input type="checkbox"/> Yes | | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Prefer not to say. |
| Fatigue: | <input type="checkbox"/> Yes | | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Prefer not to say. |

If there are any other factors which you think might affect your performance in this experiment and wish to share them, please use the space below:

19.

System Usability Scale

Zhao Yuxuan.

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	Strongly disagree						Strongly agree
1. I think that I would like to use this system frequently	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. I found the system unnecessarily complex	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. I thought the system was easy to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. I think that I would need the support of a technical person to be able to use this system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. I found the various functions in this system were well integrated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. I thought there was too much inconsistency in this system	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. I would imagine that most people would learn to use this system very quickly	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. I found the system very cumbersome to use	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. I felt very confident using the system	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. I needed to learn a lot of things before I could get going with this system	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Post-Experiment Survey

Thank you for participating in this experiment titled "Assisted Teleoperation: SUB-EXPERIMENT NAME"! In order for us to characterize your experience with the system, please answer the following questions about the experiment you have just completed.

Please do not hesitate to ask the investigator any questions you may have about this form or the experiment in general.

Bookkeeping:

Subject ID: Zhao Yuxuan

Task ID: _____

Today's Date: 10/11/2024 (dd/mm/yyyy)

Your Experience:

How would you rate the difficulty you had when completing the task under different conditions?

Condition 1: Very Easy ☐ ☐ ☐ ☒ ☐ Very Hard

Condition 2: Very Easy ☐ ☐ ☐ ☒ ☐ Very Hard

Condition *n*: Very Easy ☐ ☐ ☐ ☒ ☐ Very Hard

Feedback:

How would you compare the strategies you used to complete the task in the different conditions?

Condition 3 is the easiest to complete the task.

The gripper tip helps to locate the positions.

The grey dot helps.

The blue line helps.

In the different conditions, did you feel like you were commanding the robot as if it were another person, or did you feel like the robot was a projection of your own body?

I felt like the robot was a projection of my own body.

Were there any instances where you expected the system to behave one way, but it did something else?

I was expecting some depth information to tell me whether my hands are on the same level.

Any other comments or suggestions on how you think the system should behave?

The positions to be measured can be marked more clearly.

If there is ~~some~~ some hint about whether the position has been ~~fully~~ accurately reached, that would be great.