Interview Guide

- [1] Knowledge and Awareness Toward Social Robots
- 1.1 Have you ever heard of the term social robot?
- 1.1.1 (*If yes*) In your own words, how would you define a social robot?
- 1.2.2 (*If no*) If you had to guess, how would you define a social robot?
- 1.2 What capabilities do you think a device should have to be counted as a social robot?

[Providing a definition for a social robot] While there is no single definition of what a social robot is, for the purposes of this interview, we'll define a social robot as an artificial intelligence (AI) system that is designed to interact with humans and other robots by following social behaviors and rules attached to its role. Like other robots, a social robot is physically embodied.

- 1.3 Is this definition clear to you, or is there any part of this definition that you would like us to further elaborate on?
- 1.4 Do you know of any technologies currently available for purchase that fit the provided definition of a social robot?

[Robot Specification] An established company is aiming to develop a novel social robot. They are currently working on designing the prototype device, and they would like to do some research with users to specify some important aspects of the social robot before they launch the main product to the market. As an independent research institute, we are helping this company to capture people's honest opinions and feedback regarding the prototype device to inform the future design of the company's social robot. Therefore, it is valuable for us to capture any positive and negative feedback that comes to your mind.

[We provide the specification of the social robot.] For the remainder of this interview, we may ask you a few questions to capture your attitudes and preferences toward purchasing this specific social robot, or social robots more generally. For these questions, please assume that the final price of the device is within your budget.

- 1.5 Which of these features are you most comfortable with and why?
- 1.6 Which of these features are you most concerned about and why?
- 1.7 Would you consider purchasing this specific social robot in the near future, and why?
- 1.8 What information would you like to have to make an informed decision as to whether or not to have this specific social robot in your home?

[2] Vignettes

In this section, we are going to walk through some potential use-case scenarios for the prototype social robot we described earlier. We will ask some follow-up questions after each scenario.

[Purchasing for yourself] Imagine that you are living alone, and you are purchasing this specific social robot for yourself to be the robot's primary user.

[Purchasing for children] Imagine that you are living in a family setting with a child, and you are purchasing this specific social robot for the child to be the robot's primary user.

[Purchasing for the elderly] Imagine that you are living with an elderly family member, and you are purchasing this specific social robot for the elderly family member to be the robot's primary user.

[Purchasing for a communal household] Imagine that you are living in a communal setting, and you are purchasing this specific social robot to be shared amongst your household without having a specific primary user.

So far we have talked about purchasing the device for yourself, a child, or an elderly family member. Now we're going to talk about the various contexts that this device could be used in.

[Educational Context] Keeping in mind the four user scenarios we just described, how comfortable or concerned would you be purchasing this device to fulfill an educational need for the users?

[Medical Context] Keeping in mind the four user scenarios we just described, how comfortable or concerned would you be purchasing this device to fulfill a medical need for the users?

[Psychological Therapy Context] Keeping in mind the four user scenarios we just described, how comfortable or concerned would you be purchasing this device to fulfill a psychological therapy need for the users?

At the end of each scenario:

- 2.1 How comfortable or concerned are you with this described scenario, and why?
- 2.1.1 (*If concerned*) What do you think should happen to make you less concerned about this described scenario?

At the end of all scenarios:

- 2.2 Imagine you are deciding to purchase a social robot. What factors would you consider to be important when deciding what social robot to buy?
- [3] Privacy and Security Concerns and Expectations Toward Social Robots
- 3.1 On a scale of 1 to 5, 1 being not at all important and 5 being very important, how important do you consider privacy and security to be in your decision to purchase a social robot and why?
- 3.2 What type of privacy and security information, if any, would you want to know about to determine if you would purchase a social robot?
- 3.3 As a reminder, social robots collect information, and use artificial intelligence to enable social interactions. What type of information, if any, would you want to know about the conversational artificial intelligence features of a social robot to determine if you would purchase it?
- 3.4 How would you like this information to be communicated to you to inform your purchasing decisions?

3.5 Who do you think is responsible for protecting users from the potential privacy and security risks of social robots, and how?

[4] Conclusion

4.1 Do you have any key takeaways or opinions that you didn't get a chance to express during our conversation?