1.4 Focus Group Activity Outline

Focus groups are conducted both in-person and online, based on participants' availability and preferences.

Tools and Resources

Online

- Compensation distributions
- Online conference meeting setup (Microsoft Teams, BlueJeans, etc.)

In-person

- Video/photo/scenario cards display screen/projection
- Paper pad +markers for brainstorming activities
- Audio recording / videotaping tools
- Compensation distributions
- Parking permits for participants

Research Focus

We will conduct 3-4 90 minutes sessions with 4-6 participants in each group. Discussions will be focused on people's current experience with smart homes and robots, and later transition to brainstorm sessions to collect insights on what participants think assistive robots could do at smart homes.

The sessions should be facilitated by two members of the research team. One as moderator and the other as observer/notetaker. The sessions should be videotaped/audio recorded for further analysis.

Activity Outline

Ice breaker (5 mins)

The moderator describes the research objectives and explains the purpose of the focus group discussion. Then start with an icebreaker.

1. Round of introduction: name
2. 1 question: What smart home devices or robots do you have at home?

Warm-up questions (~15 mins)

Show the photos of robots and smart home devices. And invite participants to discuss:

- What do you think about having a robot at home? Any concerns?
- Based on your experience with robots and smart home devices, if one robot were to be developed just for you, what special tasks would you most want this robot to do?

Notetaker takes notes on discussion.

Brainstorm #1: general home scenario (~30 mins)

5 Scenario cards will be offered to participants for group brainstorming sessions, including 1 practice scenario card. Each card will have one photo that visualizes the scenario and a brief description of the situation. Participants will be asked to brainstorm how they think or wish robots could perform by following the brainstorming techniques.

Springboard brainstorming:

- Explain how Springboard works (5 mins)
    - Use a scenario as an example, facilitators show how to participate by giving 2-3 statements
    - E.g.: Collapsed on the kitchen floor
        - Statement 1: IW I could call my caregiver
        - Statement 2: IW the robot can give me a hand
- Aim for >10 IW (I wish) statements each scenario

Scenario prompts (choose 4 for each session):

If I (or the family member) _____, I wish the robot ... (4 mins each)

- Couldn't find my phone
- Fell asleep on the couch
- Was getting ready in the morning
- Was cleaning the garage/basement
- Was preparing a dinner party
- Was cleaning the kitchen/ bathroom
- Was hosting a backyard party
- Was planning to go out for groceries
- Was doing the laundry
- Was planning to go for a two-week holiday
- Needed someone to watch my pet/take care of my garden

- Left home for a two-week holiday
- There was a thunderstorm/snowstorm coming up
- Was home alone on weekends
- Had insomnia and couldn't fall asleep

Brainstorm #2: assistive population home scenario (~15 mins)

After the first round of brainstorming, participants will keep brainstorming with scenarios similar to the last session. Users will be offered additional prompts to think of tasks for populations with specific physical difficulties for each scenario. Prompt is presented as: if I (or the family member) had + physical difficulties + and + home scenario, I wish the robot...

4-5 scenarios will be asked based on the session pace and time.

Physical difficulties in the prompt:

- Joint pains
- Memory issues

Notetaker take notes on discussion.

Summarize and end study (5 mins)

Researchers give a brief summary of what we have learned, and participants are dismissed for the session. Compensation will be sent after the session to the participants' email addresses.