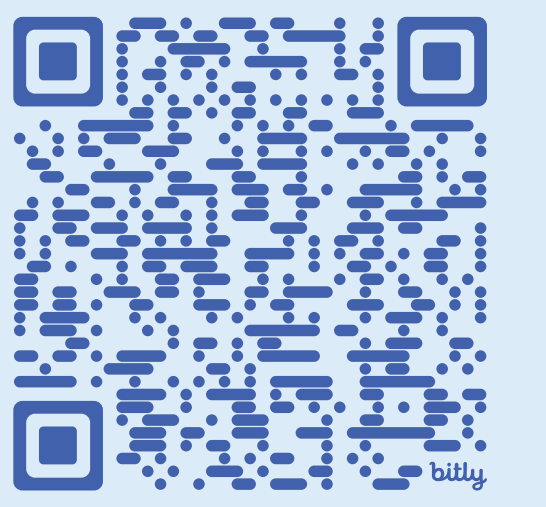# Supporting Long-Term HRI Through Shared Family Routines

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I take a family-centered approach to explore, design, and evaluate how social robots can be useful in **facilitating family routines to support long-term human-robot interaction.**

## What are **families' preferences** for having a social robot in their home?

Prior Work

Families co-created scenarios, acted them, and discussed their preferences for having a social robot in their home.

1. Children prefer the **robot's role** as a companion, while parents see it as an assistant.
2. Children prefer the robot to set **priorities** between family members, while parents seek **authority** over the robot.
3. Parents and children have varying **privacy** concerns, which might create tensions between family members.

Co-Design and Pretend Play

Scenarios
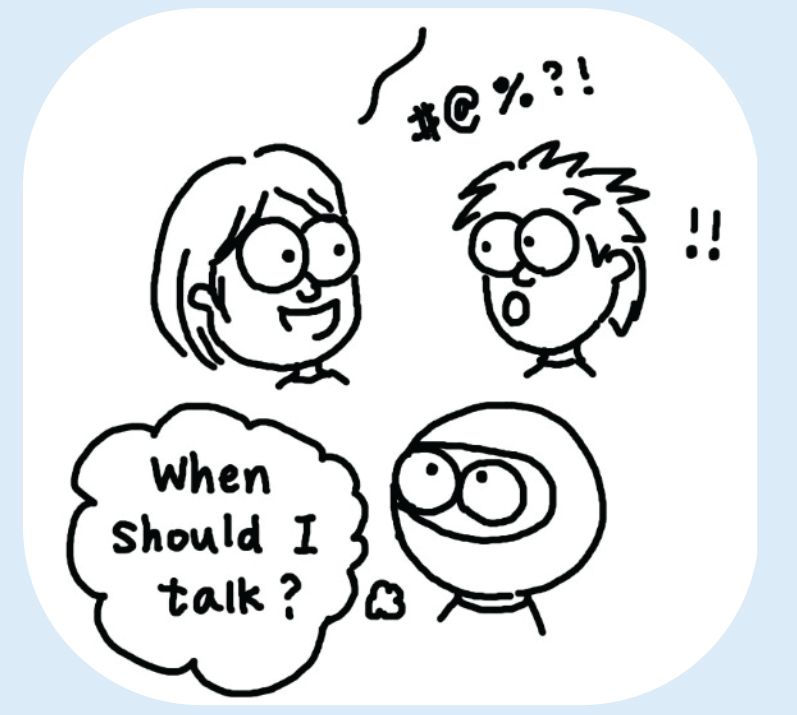
What are the **design considerations** for robot-facilitated family routines?

Prior Work

We identified several design considerations for robot-facilitated care, play, and reading routines.

1. Children showed how they would **take care** of a robot in their morning, nighttime, and recreation routines.
2. When **playing**, children engaged in robot-facilitated activities such as dancing, yoga, and playing music.
3. Children's experiences **reading** to a robot was effected by critical factors that influenced long-term interaction. Several family members were excited to **join the routine**.

Method	Participatory Design Study	Technology Probe Study	One-Month Field Study
Routines	Caretaking	Play	Reading

How can **robot-facilitated routines** support long-term family-robot interactions?

Current & Future Work

A pesonalized family-robot integration plan (FRIP) can be supportive in setting and maintaining long-term family-robot interaction and routines.

1. Co-create FRIP to **fit families' needs** for setting and maintaining routines.
2. Select **feasible family routines** and specify robot design requirements.
3. Prototype and test selected interactions for **family-robot** routines.
4. Evaluate the long-term effectiveness of **family-robot integration plan**.