



## Problem

Phubbing phenomenon & lack of family communication

### 1. An emerging social problem: "Phubbing"

- "Phoning" + "Snubbing"
- The act of snubbing someone in a social setting by concentrating on one's phone instead of talking to the person directly
- A relatively new psychological condition and problem

### 2. Lack of family interactions due to excessive smartphone usage

- Average meal time per day: 1 hour < Average smartphone usage time per day: 3h 39min
- **Average family conversation time** due to smartphone usage: 29.2 minutes

### 3. Several attempts were made to resolve a Phubbing, less focus on "Lack of family interaction" problem

Parents and children perceive family interaction problem differently



By conducting **family survey** for each family member, family members well acknowledge their relationship

Parents and children have different preferences for means and forms of family interaction



**Family events** and chatting services that encourage the whole family members to engage

Parents have difficulty when dealing with a phubbing phenomenon



Based on the analysis of **family chatting**, the application helps understand family relationship status and feedbacks

Few applications focus on increasing the intimacy between parents and children

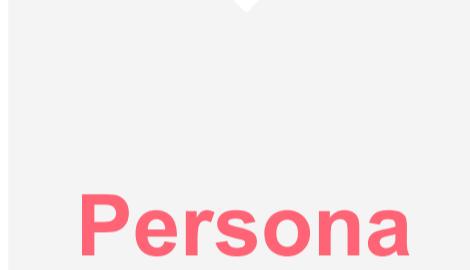


Increase the **real-time family interactions** by providing **family missions**

## Research



Contextual inquiry and interview with 12 families (12 parents, 6 children)  
**Communication Method:** Children age↑ Interaction with smartphone↑  
**Communication breakdown:** Children age↑ Communication breakdown↑  
**Family Intimacy:** Children age↑ Intimacy with parents↓  
**Phubbing:** Communication↓, Children Age↑ Smartphone usage during family interaction↑



**Form of online communication:** Different communication methods between parents and children

- S • Encourage all family members to participate
- W • Simplified function: easily accessible and usable
- O • Main focus is limited to event tracking & sharing
- T • Not providing diverse interesting **family dialogue contents**
- W • Do not have a **clear system identity** as a family application
- O • Provide interesting conversations contents
- T • Clearly focus on conversation function
- S • Too diverse SNS services, difficult to encourage users:
- T • Focus on specific problem improvement & clarify system identity

*"I cannot live without my smartphone, I often use Kakaotalk application when talking with my friends. I like talking about my boyfriend and general school life, but I do not have any common topics to share except for school grades with my parents."*

## Features

Freely share and record family events  
Group chats between parents and children

• Function: to post messages, open chatrooms with family members, and send voice messages and photos

• Purpose: to reduce the communication gap between parents and children

• Function: to regularly show family missions & events through application to family members

• Purpose: to accumulate love and trust between parents and children

Family survey diagnoses the present state of relationship between family members

• Function: Periodically presented to family members

• Purpose: to overview and remind changes in family relationships

• Reference: Survey questionnaires were based on family communication, attachment, and intimacy scales

Analysis of family discourses and activities  
Serve as an effective strategy to raise awareness of family relationship

• Function: Data analysis is presented with various visual graphs and explanations with behavioral suggestions

• Purpose: to raise awareness of family relationship

Provide contents of family missions regularly  
Parents and children receive feedbacks from mission

• Function: Different tasks are presented daily, weekly, and monthly basis, check each other's mission completion

• Purpose: to make an opportunity to have face-to-face interaction with family members

## Design Evaluation

Our team applied findings to design Implication, and produce prototypes three times and draw a final version of the application design.

### 1st Prototype

### Usability Test

### 2nd Prototype

### Heuristic Evaluation

### 3rd Prototype

### Final User Test

#### Tasks (Think Aloud Method)

- Sign up & connect with family members
- Check the relationship status with Dad
- Check Monday mission & upload Monday mission photo

#### Tasks

- Use application for 15 min.
- Apply 8 Heuristic evaluation standards and survey

