

FamilyFlower

an Artificial Flower to Foster Distant Family Connections

Modern, globalized lifestyles make physical separation of family members an inevitable part of life. Due to changes in routines and social roles, remaining connected to distant loved ones is challenging and adversely affects psychological well-being. To support relatedness, we created FamilyFlower, an artificial flower aimed at fostering a connection between remote households by bringing awareness of everyday activities and offering basic expressivity. In its environment, each device detects human presence, movement, sound, and touch. In the remote household, the paired prototype responds by respectively opening the flower bud, actuating the stem, altering the seeds' color, and dispensing a fragrance. In a 2-week study of deployment between 2 family members, we collected initial impressions of our prototype, and identified key aspects our system could support in future research. From our results, we see that FamilyFlower supports an awareness of ongoing activities in a distant household and built a feeling of connectedness.



Aesthetic Design

integrating a living media interface

- Living media incites human affect
- Caring for a plant positively affects mood
- Mirrors caring for remote family members



Connected Device

building awareness between remote families

- FamilyFlower devices are used in pairs
- Actions in one household are reflected in the other
- Building a feeling of connectedness between remote families



Sensing & Actuation

incorporated in a flower-like prototype



When **human presence** is detected, the remote flower bud opens



When **active movement** is detected, the remote stem actuates



When **ambient sound** is detected, the flower bud changes color using 3 levels



When the **capacitive leaf** is touched, a fragrance is dispensed in the remote household



User Study

investigating initial impressions of FamilyFlower

- Two females with an intimate family bond, living separately
- They used their connected FamilyFlower device for two weeks
- ThingSpeak logging & post-hoc semi-structured interviews



Results

of FamilyFlower's daily usage and user indications

- Users replied to events by touching the leaf or tapping the microphone
- Users felt an increased sense of connectedness and excitement
- FamilyFlower incentivised virtual coffee meetings and an further communication



Insights

for future connected living media interfaces

- Living media interfaces integrate well in our daily lives
- Awareness of everyday activities and basic expressivity support connectedness
- Ubiquitous technology can foster relationships within disconnected families

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