

Computational Support for Facilitating Parental Reflective Functioning in Everyday Parent-child Interaction

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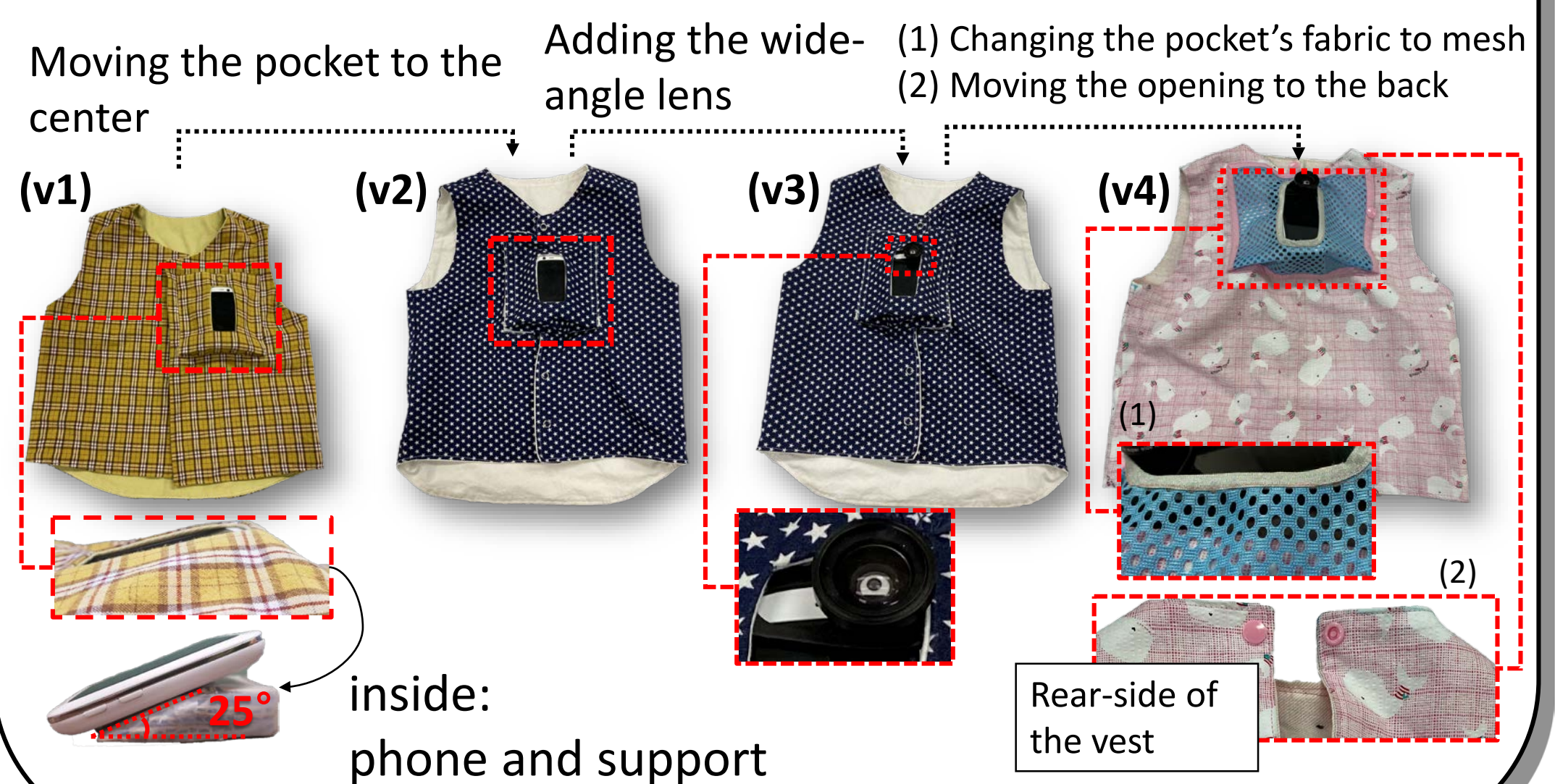
Motivation

- Parenting, a vicious loop of **conflicts and regrets**
- **Goal:** Facilitating **everyday parent-child interactions** to be more **considerate, empathetic, and moderated**
- **Parental Reflective Functioning**
 - One's capacity to understand mental states of self (**self-awareness**) and others (**perspective-taking**)
- **Challenges: Knowledge differs from practice!**
 - Excessive mental and physical **stress**
 - **Diverse** conflicting situations in daily life
 - Lack of timely and direct **channel** to be aware of feeling or expressions

Form Factor Design

Lightweight vest with a pocket to hold the [tiny smartphone](#) (designed in collaboration with [tailor-made clothing designer](#))

- **Design considerations:**
 - Minimizing the burden of wearing
 - Maximizing the opportunity to capture the face
 - Avoiding overheating of the phone
- Design iterations for usability

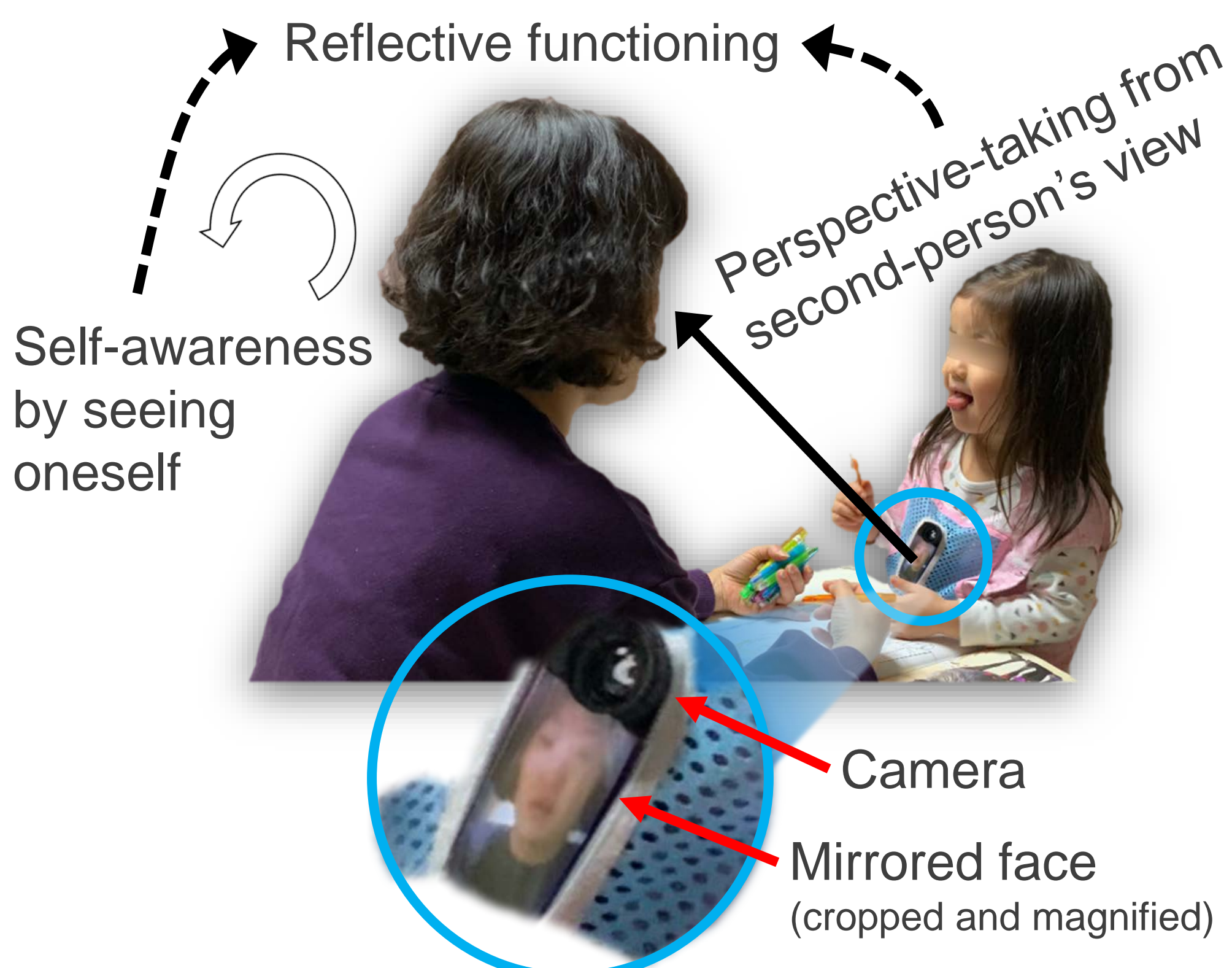


Dyadic Mirror at a Glance

Dyadic Mirror:

A wearable smart mirror to enable **second-person live-view**

Dyadic Mirror helps parents facilitate **parental reflective functioning** during **everyday parent-child interactions** at homes



User Experiences

Field deployment with 6 families over 4 week at their home

Themes

- (**Surprise**) "I knew I don't smile when scolding them, but I was shocked that I **looked 'that' cold**. ... my face was like I just saw something very disgusting. Definitely an **overreaction**."
- (**Empathy**) "I shall look a lot bigger to [my son]. ... Next time I have to scold him, I promised myself to sit down first and **keep our eye-levels the same**."
- (**Behavior Changes**) "Now I don't go too crazy; instead, I spend more time to reason with [my children] quietly."
- (**Double-bind Messages**)
- (**Treating Children Differently**)

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Read our [full paper](#) for more details!