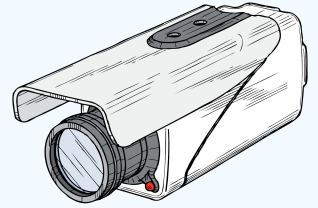


Balancing Power Dynamics in Smart Homes: Nannies' Perspectives on How Cameras Reflect and Affect Relationships

Julia Bernd, Ruba Abu Salma, Junghyun Choy, and Alisa Frik

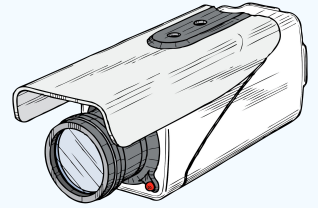


Motivation: Smart Home Dynamics



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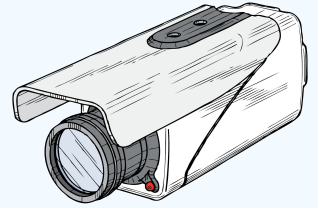
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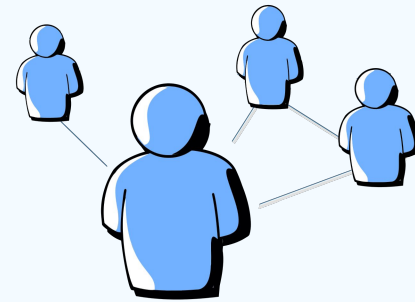
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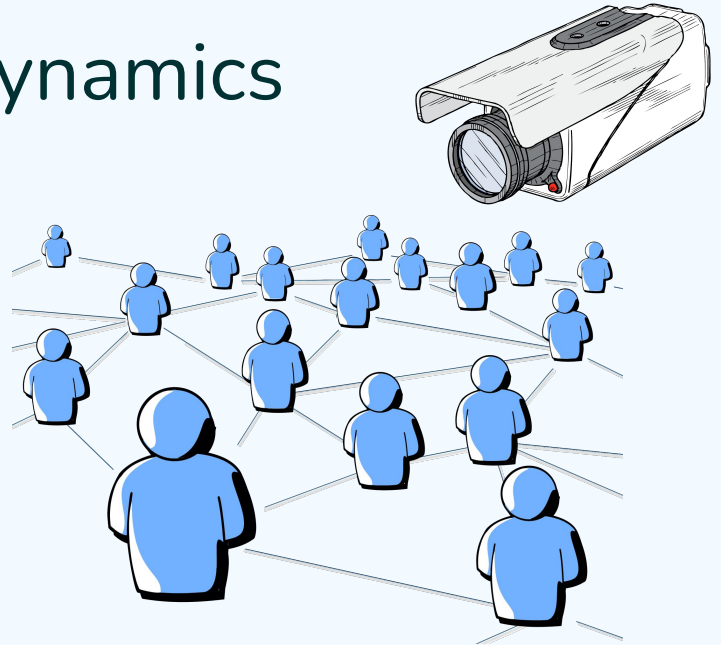


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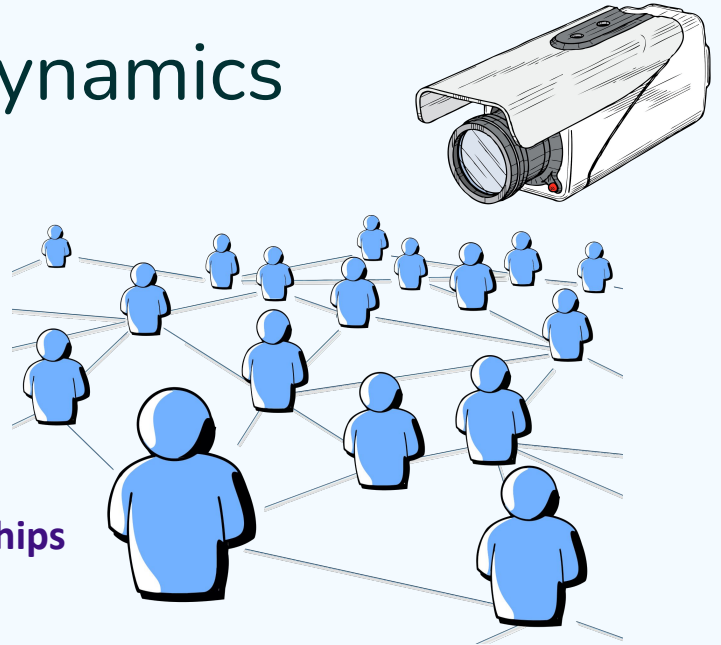
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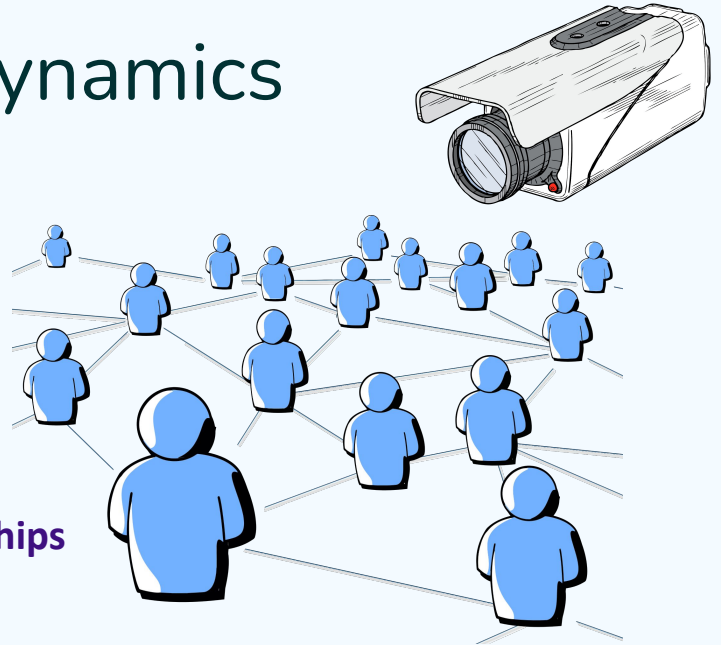
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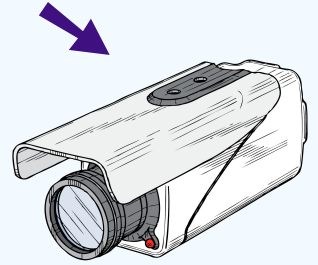


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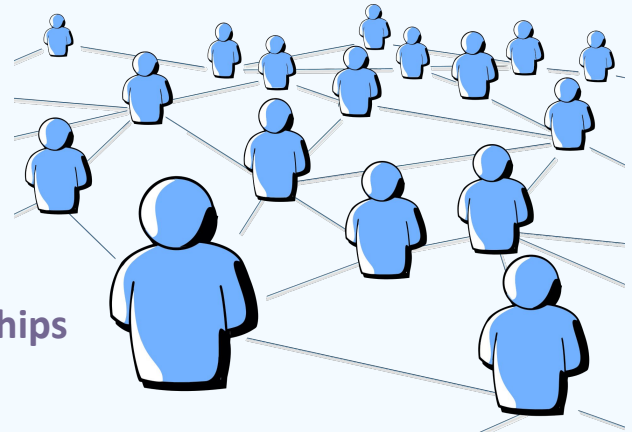
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- Ability to control data flows **depends on relationships**
 - Employer-employee relationship: Parents and **nannies**
- Smart home **cameras** have **distinct implications** for nannies' working conditions





Research Approach



Research Questions

✧ RQ 1

How are nannies' **privacy attitudes, experiences, expectations, concerns, and choices** with regard to working with smart home cameras **shaped by their relationships** with their employers?

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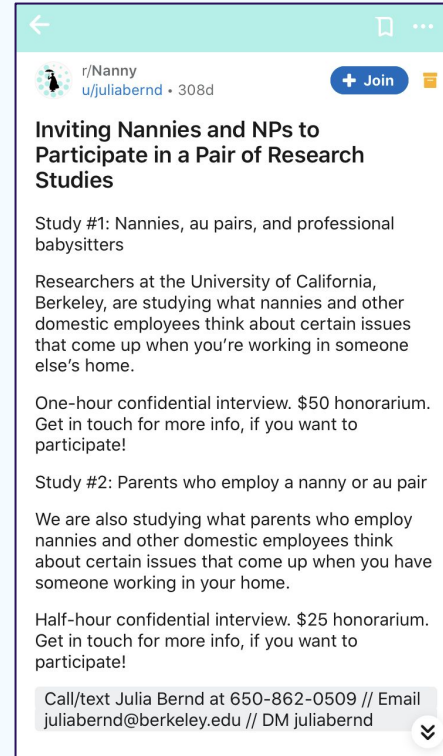
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✧ RQ 3

What are **potential points of intervention** (social and technical) for **mitigating the effects of power imbalances** on how nannies' privacy preferences are enacted with regard to smart home cameras?

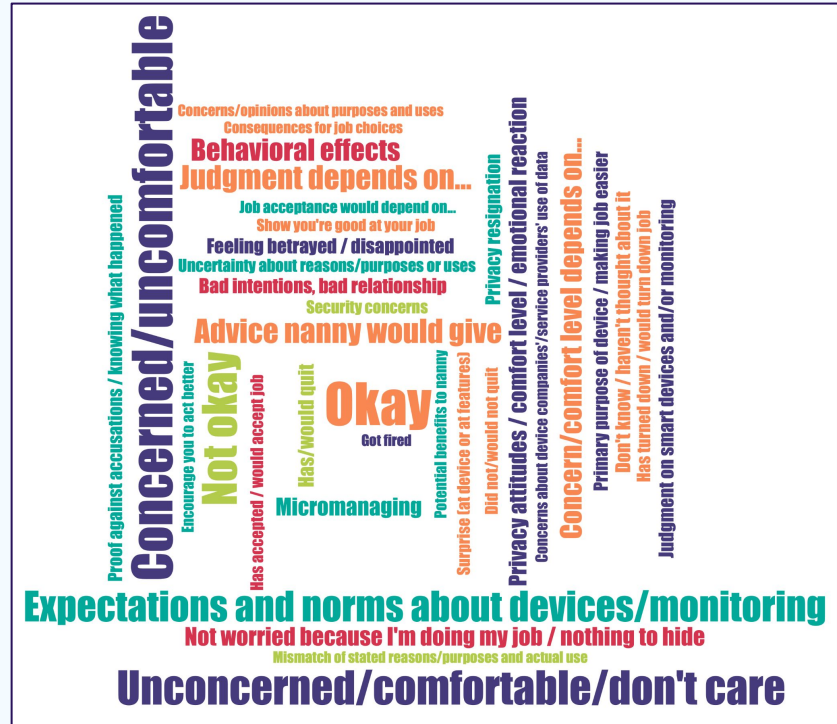
Methods

- One-hour qualitative interviews in English with **25 nannies, au pairs, and professional babysitters** in the U.S.
 - 22 had worked with cameras



Methods

- Qualitative interviews in English with 25 nannies, au pairs, and professional babysitters in the U.S.
 - 22 had worked with cameras
- Inductive coding and **thematic analysis** of transcripts (four coders/analysts)





Findings

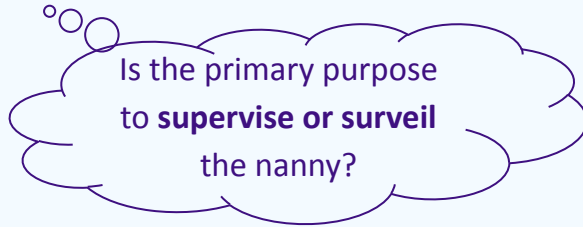


Attitudes, Intentions, and Relationships

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Attitudes, Intentions, and Relationships

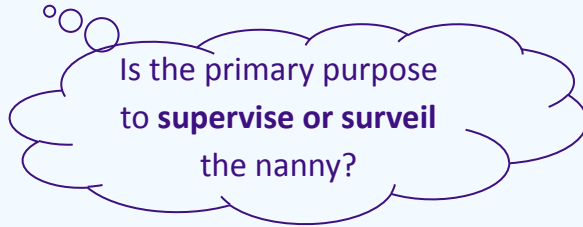
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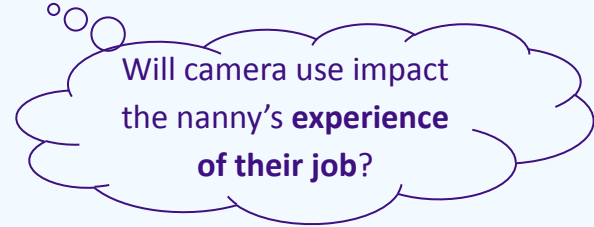
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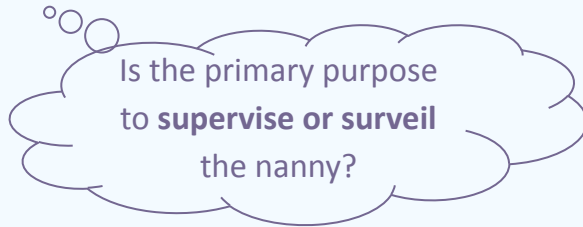
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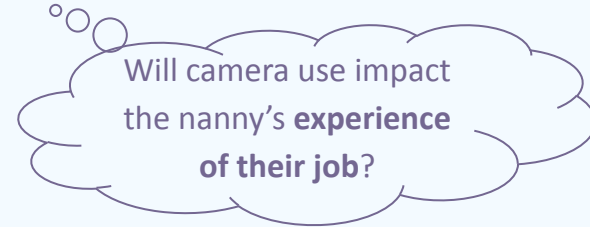
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- How cameras are **used**



- ...And on how purposes and uses *reflect or affect* **employer–employee relationships**

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Trust
Trust

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Trust
111111

“If they felt the need to monitor me 24/7, [...] I would be uncomfortable with that, because **that shows us a level of distrust** that would make me probably leave.” (N14)

How Cameras *Reflect* Relationships

- Particulars of camera use may ***reflect*** relationship qualities
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“I have no problem being recorded **as long as you’re telling me** you’re doing it. You know, as long as there’s some respect for privacy. [...] **Respecting you enough** to let you know.” (N10)

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“There needs to be **two-way communication**, so that I feel trust, so that I can provide good care while still feeling watched.” (N7)

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 - Though sometimes knowing details makes the nanny self-conscious

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“If the **purpose is to babysit me** while I’m nannying the children, then I really feel uncomfortable with that.” (N37)



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“If they were watching me [when] I wasn’t even **with the child**, I probably would leave the job. [...] When they make that unsafe, [...] I **just wouldn’t feel comfortable** in their house again.” (N26)



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“[Having cameras] **gives them the sense** [...] that I am who I am with their kids, and who I said I was at the interview.” (N12)



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“If [the child] runs and falls and smacks her head and gets a bruise, there’s **now proof on camera** that I’m not the one who caused that to happen.” (N20)

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“We’re kind of like outsiders here, **in their private home**. So we need to maybe give in a little bit of our privacy.” (N10)

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“It’s also your job [...] that **for you is a workspace**. So, I do think that it’s important to know **when and where** there are cameras, for basic privacy reasons.” (N4)

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“They have every right to do whatever is in their power to **keep their children safe**, and if they think that includes video recording, then that is their right.” (N29)

Cameras, Power, and Choice

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“That’s actually a reason why I left my previous nanny family. They would **constantly check the cameras** and text me on certain things that they would do differently.” (N35)

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“I would expect [disclosure], but I know **they don't have to**. They're not obligated to. I think they should.” (N32)

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“I **don’t want to make it seem** like I don’t want to be videotaped, [...] like, ‘Oh gosh, what have you seen?’ But then, **I would like to ask** because I’m curious.” (N26)



Implications



Interventions to Support Privacy & Agency

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- Product **design guidelines** that provide recommendations for **supporting domestic workers' privacy**

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Thank you!

And thanks to the U.S. National Science Foundation, the U.S. National Security Agency, and the Center for Long-Term Cybersecurity at University of California, Berkeley, for supporting this work.

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