"I Never Imagined Grandma Could Do So Well with Technology": Evolving Roles of Younger Family Members in Older Adults' Technology Learning and Use

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Introduction

Older adults often **face challenges** in technology learning and use because of digital illiteracy, declines in physical and cognitive abilities, etc. [Pang et al., 2022; Leung et al., 2012]

Younger family members are one of the major support sources of older adults [Hunsaker et al., 2019; Portz et al., 2019]

Family support is often **challenging** because of difficulties in teaching, disagreements on technology use, etc. [Portz et al., 2019; Luijkx et al., 2015; Xie, 2007]

Research Question

Unpacking the family dynamics: How do younger family members support older adults' technology learning **over the long term**?
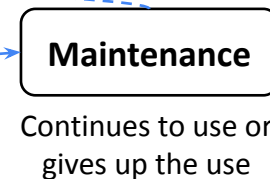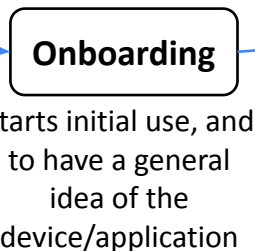
Method

- one-on-one semi-structured interviews with **20 older adults** and **18 younger adults in China**, including **9 families**

- demographic information:
  - older adults: **12** female, Age **61-88** (Mean = **71.15**);
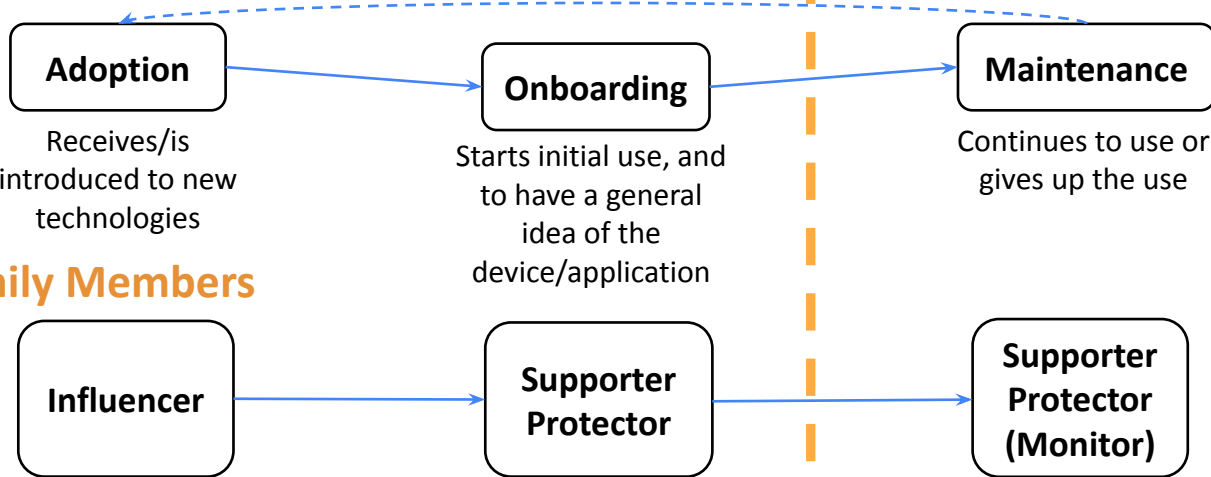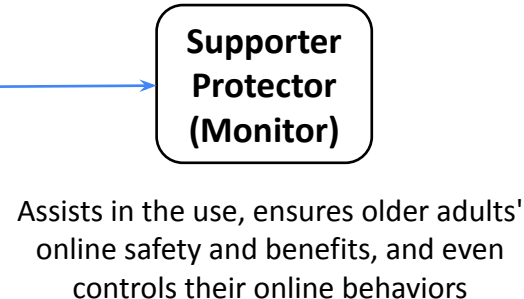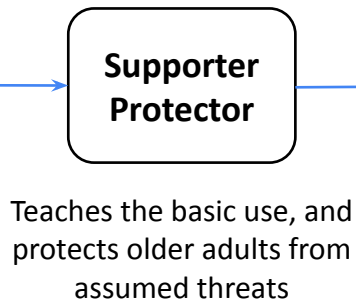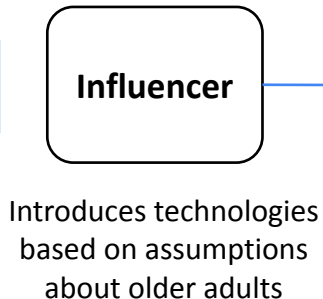 - younger adults: **11** female, Age **22-52** (Mean =**34.27**)

Family Support Pattern

Explores new devices/applications/features

Challenges in teaching and tensions in protection may emerge in this stage

Older Adults

Older adults' technology learning stage

Adoption

Receives/is introduced to new technologies

Onboarding

Starts initial use, and to have a general idea of the device/application

Maintenance

Continues to use or gives up the use

Younger Family Members

Younger family members' roles

Influencer

Introduces technologies based on assumptions about older adults

Supporter Protector

Teaches the basic use, and protects older adults from assumed threats

Supporter Protector (Monitor)

Assists in the use, ensures older adults' online safety and benefits, and even controls their online behaviors

- introducing and teaching technology to older adults based on **assumptions about aging**

> *"Older adults had better enjoy a simple life. The simpler, the better. Older adults can use smartphones for shopping and watching online videos, but* ***they don't have to use phones with too advanced functions.****" (Y8)*

- teaching in the context of **assumed difficulties**

> "It was much easier than I had anticipated when I first began teaching her… My grandmother is eager to learn, which was beyond my expectations, though it was still not as quick as I had hoped. **I expected her to be unable to understand after one or two years, but she was able to use the smartphone after only two or three months.**" （Y12）

- creating a **safety net** for older adults by simplifying the use and selecting applications for older adults carefully

> "**Older adults don't have to know too much information; they don't need it.** They can get what they need through trustworthy sources, like television, instead of reading online information." （Y8）

Stage 3: Maintenance

- teaching strategies need to **evolve** (because of older adults' forgetfulness and digital illiteracy)

*"My grandfather cannot understand what home button is, and **I need to work hard to explore a more childish way of teaching.**"（Y7)*

- **impatience** in teaching

*"I will not ask my son for help… If I ask him again, he'll say something like, "Older adults don't have to learn [to use technology]; **[my teaching is meaningless because] you can't understand what I'm saying.**"（O7)*

Stage 3: Maintenance

- younger adults would **adjust** their perceptions of older adults because many older adults are **far more active online than they assumed**

- **tensions** may result from their desires for protection; younger adults would regularly **check and even control** older adults' technology use

> "I was surprised to see that my father had Alipay on his phone. I guessed it might have been downloaded when he went to his bank, and I immediately made a complaint against the bank. How can they fudge older adults for profits? **I deleted Alipay and unbound his cards in WeChat Wallet.** My father doesn't have a full understanding of these services, and he often didn't know what he did in the application."（Y1）

"*Xiao/XiaoShun*" – Filial Piety

- **Filial piety** as a cultural factor that can buffer burdens and tensions in family support, i.e., respect, obedience, and care towards older family members[*]

> *"I told myself this (the checking and controlling behavior of her daughter) is "xiaoshun" from my daughter. Actually, I have nothing to hide on my phone. If she can help me identify misconduct online, that would be beneficial." (O8)*

[*] "*xiaoshun*" usually represents an authoritative hierarchical parent-child relationship, rather than an equal and reciprocal relationship centered around care between two individuals [Yeh and Bedford, 2003]

Takeaways

- Let us treat older adults' technology learning as a **collaborative** activity.

- Older adults' technology learning is a **recurrent, dynamic, and evolving** process that needs long-term and stage-based care.

- We draw attention to **filial piety** as an important cultural context that shapes a unique family support pattern in China (and similar cultures), which is different from the Western model emphasizing older adults' preference towards **independent learning** [Pang et al., 2021; Leung et al., 2012].

Thank you!

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