

Identifying the support needs of the informal caregivers of long-term care residents: The potential benefits of a mobile application

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Introduction

- The Canadian population is in a state of rapid growth and is heading towards becoming super-aged (with 1 in every 4 Canadians being 65 years or older)
- Canadians prefer to age at home; however this is often not an option for those living with complex medical needs
- As the population grows older, the need for long-term care placement grows proportionately
- Older adults living in long-term care facilities are often dependent on staff to fulfill basic needs, however; long-term care facilities tend to be understaffed and resident's institutional informal caregivers (ICCs; i.e., those who provide ongoing, unpaid care to a long-term care resident) tend to have knowledge of the resident's needs
- ICCs perform crucial tasks such as visiting the resident, physical touch, monitoring meals, advocating for the resident
- ICCs are at an increased risk of experiencing burden, loneliness, and a lack of social support as a result of fulfilling their caregiving role

Objective

To examine ICCs' experiences of loneliness, social support, and subjective burden in addition to the support needs of these informal caregivers and potential benefits of a mobile application.

Methodology

Participants:

- 219 informal caregivers of long-term care residents
- At least 18 years of age
- Providing care for at least 1 month
- Currently residing in Canada

Procedure:

- Online survey
 - Demographic Information Sheet
 - Zarit Burden Interview
 - UCLA Loneliness Scale
 - Multidimensional Scale of Perceived Social Support
 - Unified Theory of Acceptance and Use of Technology Questionnaire
 - Technology Readiness Index 2.0
 - Mobile Application Questionnaire

Analysis:

- Frequencies were calculated for the demographic variables
- Series of multiple linear regression models were carried out to test predictors of technology readiness and acceptance
- Directed qualitative content analysis was used for the Mobile Application Questionnaire
- Exploratory analyses consisted of one-way ANOVAs, t-tests, and frequencies

Quantitative Results

Subjective Burden

- Younger ICCs reported significantly lower levels than older ICCs
- Substitute decision-makers (SDMs) reported significantly greater levels
- Those with additional dependents reported significantly greater levels

Loneliness

- Older ICCs reported significantly greater levels than younger caregivers
- Women were significantly more lonely than men
- SDMs were significantly less lonely than non-SDMs

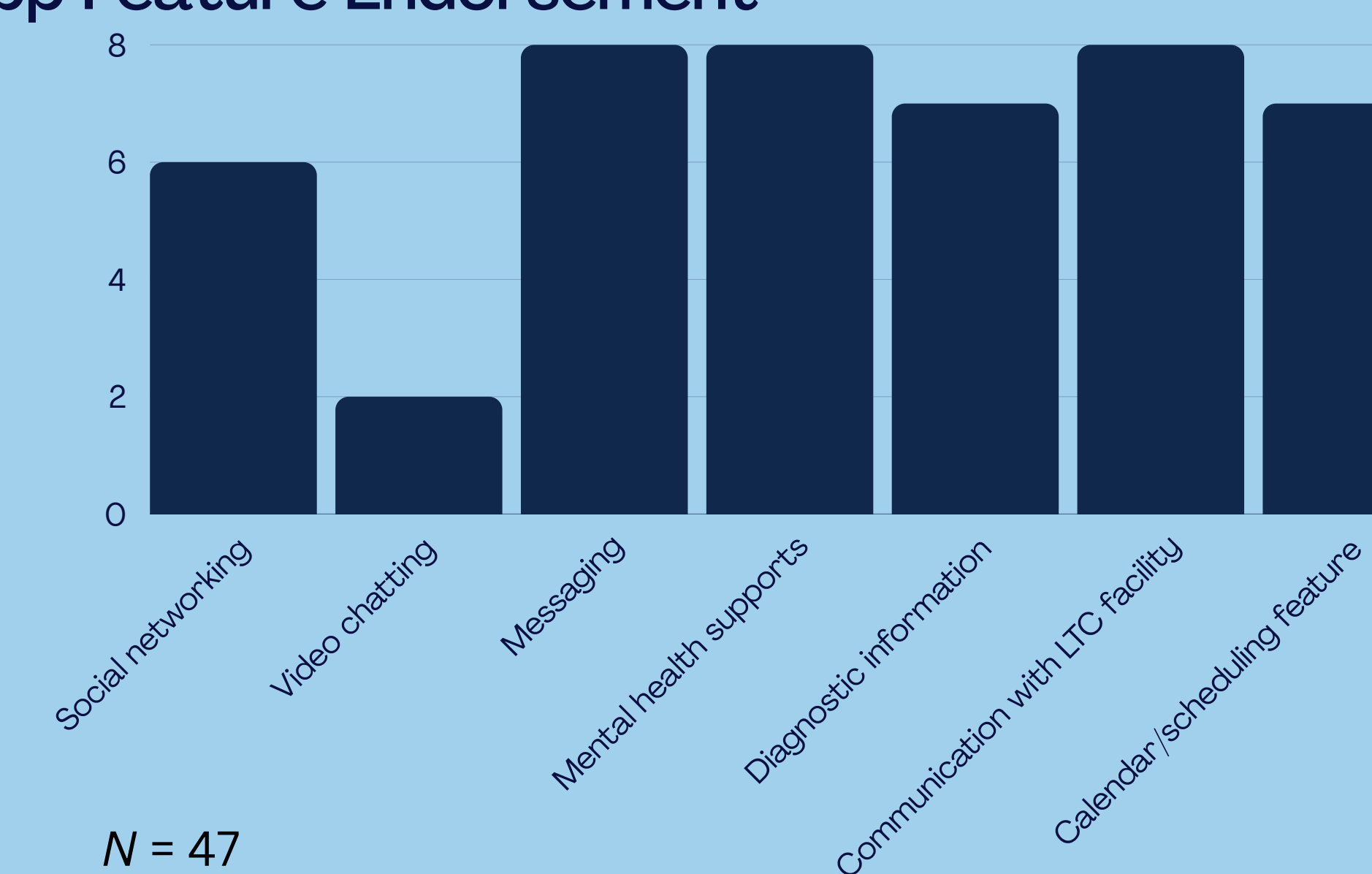
Social Support

- Older ICCs reported significantly greater levels than younger
- ICCs married ICCs reported significantly more support from all sources than single ICCs

Technology Acceptance and Use

- ICCs who identified as female were significantly more accepting than male
- Perceived social support from significant others was a significant predictor of technology acceptance
- Loneliness and subjective burden were not significant predictors of technology acceptance

Mobile App Feature Endorsement



Qualitative Results

Technology-Related Themes

Theme	Supporting Quote
Performance expectancy	“When I am overwhelmed I need a real person support to take away some of the burden. An app could not do that.”
Effort expectancy	“Create an intuitive app that can be customized to different situations.”
Facilitating Conditions	“How would you train someone how to use it? Can you do it on a computer instead of a phone?”

Qualitative Results Continued

Informal Caregiving Themes

Theme	Supporting Quote
All-consuming	“I’m constantly thinking about how to organize my life so I can do the things I need to for my mom.”
Stress	“Spending time with them [the resident] and watching the decline and family interactions/decisions regarding them has increased my stress level daily.”
Relationships and social activities	“It [caregiving] increased my stress quite a bit, especially when my brother and I disagree about the appropriate care for our father”
Use of personal time	“Due to visiting twice daily at noon and evening, how is there time for other things?”
Balancing competing roles	“I’m sandwiched between being a wife, mother, grandmother, and friend.”
Employment	“I actually took an early retirement so I could look after my mother”
Physical well-being	“I am physically exhausted from looking after my parent for years and now my mother in law too. My health is deteriorating and I feel I can’t even focus on that because there is always an issues arising with my father.”
Mental well-being	“Emotionally draining.”

Discussion

- Perceived social support from significant others is associated with technology acceptance within the informal caregiving population.
- Several demographic characteristics influence ICCs' psychosocial outcomes, including subjective burden, loneliness, and perceived social support
- ICCs find caregiving to be all-consuming, impacting most aspects of their lives.
- Results may have implications for future interventions:
 - Focus on the institutional informal caregiving community's unique needs

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