

„Female’ Care & ,Male’ Technology ?

Self-image and technology assessment of professional caregivers in Germany

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Background

- Co-intelligent monitoring and assistive systems in dementia care (CIMADeC) can help meet increasing demands in the care sector [1]
- Professional caregivers are an important group of stakeholders for implementing technologies in practice
- Numerous studies suggest women hold more reserved and skeptical views in regards to technology than men [e.g. 2, 3]
> 85 % of professional caregivers in Germany are women [4]
- Technology development as male-dominated sector
> 85 % of employees in STEM jobs are men [5]
- Both, care and technology deeply embedded in gendered stereotypes and deterministic ideas of assumed ,male’ and ,female’ nature (e.g. women are emotional and caring, men are objective and logical) [6]
→ influence on vocational choices + perceptions of technology in the care sector

Research Questions

- What are professional caregivers’ perspectives on the activity of caring in general and CIMADeC in specific?
- Do professional caregivers reproduce gendered stereotypes in their assessments?
- Are there differences to be found in the assessments and needs for assistance in relation to gender (or age) of the interviewees?

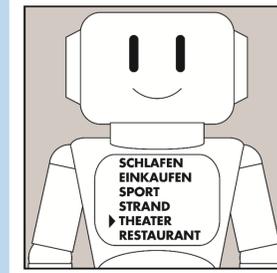
Methods & Sample

Methods

- Semi-structured interviews with guideline → including case vignettes for 5 specific technologies (GPS-tracking, clothes hangers, DRESS-system, shower robot, emotion recognition)
- Ethics approval 09/2020 by Clinical Ethics Committee UMG Göttingen
- Interviews primarily conducted via phone or video meeting
- Qualitative text analysis, utilizing coding guide [7]



GPS-tracking



DRESS-system



Shower robot © Lukas Kummer

Sample

- Study participants (n=21) mixed by:
gender (8 male : 13 female), age (Ø 37,6 yrs.), rank (nurse, caregiver, assistant, management, in training) and work experience (Ø 13 yrs.)

Results

Gender(ed) stereotypes

- **Some (but few) very explicit beliefs about gender and technology were voiced**

Nurse (female, 50):

I believe that evolutionarily men have a more advanced technical understanding than women, and perhaps also a naturally greater affinity for technology.

- **A lot of stereotypes more implicit**
→ especially stressing importance of **empathy** and **communication** (for good care)
- **Participants emphasized that age was a more important factor** in regards to acceptance of and proficiency with technology

Caregiver in training (female, 22):

Yes, definitely age. Age makes a very big difference.

Caregiver in training (female, 36):

Yes, as I said, being older or younger definitely makes a difference.

- **Common motif: younger generations having “grown up with technology” and thus being more used to it**

Burdens and assistance

- **Both male and female caregivers thematize physical and psychological burdens**

Caregiver in training (male, 26):

But it is physically taxing, you often notice it in your back.

Head nurse (male, 43): Also, of course, there is a psychological burden quite often.

Nurse (female, 50): Well the physical burden [...] in basic care activities I wouldn't say is bad.

- **Shortage of technical devices problematized** (e.g. lifting equipment, computers)

- **Time restrictions and shortage of personnel as main source of stress** → wish for **better staffing ratio**

Caregiver in training (female, 22):

Of course, the staffing ratio is the be-all and end-all, it should definitely be increased, so that you can take more time for the individual person.

Types of technology

- **Despite what literature suggests, so far no strong trends identified in relation to gender and/or age of participants**

- **Generally most favourable assessments in regards to GPS-tracking systems ...**

Nurse (female, 35): Especially this bracelet, I believe, would be a help for everyone.

- **... while more negative attitudes were expressed in relation to the shower robot ...**

Caregiver (female, 36): [...] difficult, a bit like a car wash, but for people.

- **... and especially the system for emotion recognition** → themes of surveillance and “feeling watched” play an important role

Caregiver (male, 31): But it's still strange because then I would feel a bit like I was being watched.

Caregiver in training (female, 22): That really borders on, well, Big Brother for old people.

Conclusions

- **No strong impact of gender on assessment of technology could be found**
- **Age of the professionals was seen as more relevant** → but no strong impact of age on technology assessments could be shown either
- **Safety of people with dementia (PwD) rated as very important factor** potentially overriding concerns over privacy or autonomy → related to responsibilities and legal liabilities of professional caregivers/institutions?

- **Should assistive technologies be implemented for PwD from the view of professional caregivers?**
→ **Yes, if PwD can understand/operate technology**
> voice control and/or systems giving vocal instructions might be helpful
> still many concerns over more advanced stages of dementia
→ **Yes, but not now?!**
> when younger generations (who are more used to technology) grow old they will be more accepting of and more proficient in use of CIMADeC

References

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