# (Dis)trust in the healthcare system, medical technology, and medical support considering (severe) health decisions
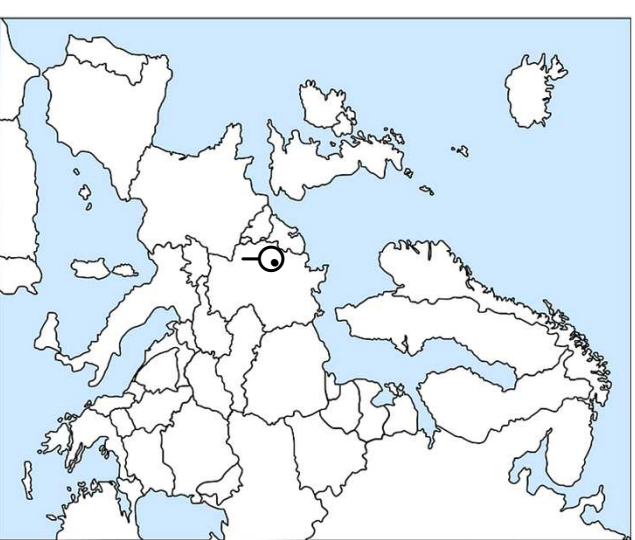
ESR 2. **Sophia Otten**

RWTH Aachen, Germany

- 24 yrs old & German, working at the Chair of Communication Science at RWTH Aachen, Germany

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- **MScRes in Differential Psychology**, University of Edinburgh, GB (2021)

ESR 2. Sophia Otten – Overview of the Project

- **Why?** Trust in the healthcare system is the key variable embedded in a complex system leading to the adoption of medical technology, i.e. AAL solutions

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- **What?** Perceptions, attitudes, (pre)determinants, and decisions influencing trust in the medical system

- **Who?** Various target groups, including old & frail people, handicapped people, & medical personnel

- **How?** Assessing context- and user-specific influences of trust and decisions about their health, as well as health behaviours

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    ⋯→ important for therapy outcomes and the improvement of the healthcare system

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  ⟶ missing trust requirements in intimate and sensitive context?

- 1st qualitative study presented at the ICT4AW 2022 (23.-25.04.)

## Exploring Trust Perceptions in the Medical Context: A Qualitative Approach to Outlining Determinants of Trust in AAL Technology

Sophia Otten [a] and Martina Ziefle [b]

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Keywords:    Trust, Medical Care, AAL, Medical System.

Abstract:    Due to a demographic change of the society, health care worker shortage and rising co- and multimorbidity within older adults, constant care at home and at care facilities face a difficult task to combat these challenges. Medical AAL technology offers many opportunities to relieve health care workers and assist older adults with difficulties in managing activities of daily life (ADL). This study has adopted an exploratory interview method to explore the users' perceptions of trust in the medical context and specifically, related to medical AAL technologies. Eleven participants ranging from 20 years to 87 years old ($M = 52.27$; $SD = 24.2$) were interviewed and, in line with previous results in the literature, results revealed three categories of influences, namely user factors, technology factors, and context factors. This implies a network of trust dependent on various external and internal influences. These findings have practical implications for clinicians, developers, policy makers and legal professionals.

- **Participants (N=11)**

⤳ recruited from the researchers' social network

⤳  age range 20-87 yrs *(M= 52.27; SD=24.21)*

⤳  6 female & 5 male participant

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- **Exploratory qualitative approach**
  - ⤳ open-ended interviews (via *Zoom*) lasting from 30 to 60 minutes
  - ⤳ from free association to specific scenarios
  - ⤳ examples from the medical context and daily life
  - ⤳ thematic analysis with MAXQDA 2018 (VERBI Software, 2019) into three categories as  previously outlined in literature

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**Structure of the interview**

**general & medical trust**

1. What does trust mean to you (in the healthcare system)?
2. What does your feeling of trust consist of (in the healthcare system)?
3. How do you deal with a breach of trust (in the healthcare system)?
4. How is trust in general different from trust in the healthcare system?

**trust in AAL technology**

1. How is trust in the healthcare workers different from trust in medical technology?
2. How would you rate different examples from the medical context on your subjective trust "scale"?
3. Specific scenarios including AAL technology – evaluation of participants

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# ESR 2. Sophia Otten – Implications of 1st study

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- Necessary to outline the conditions of trust in the health care context and weigh them in a network
  ⇢ trust as key variable in acceptance of medical technology

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# ESR 2. Sophia Otten – Research in Progress

- On the basis of the 1st study --> development of questionnaire

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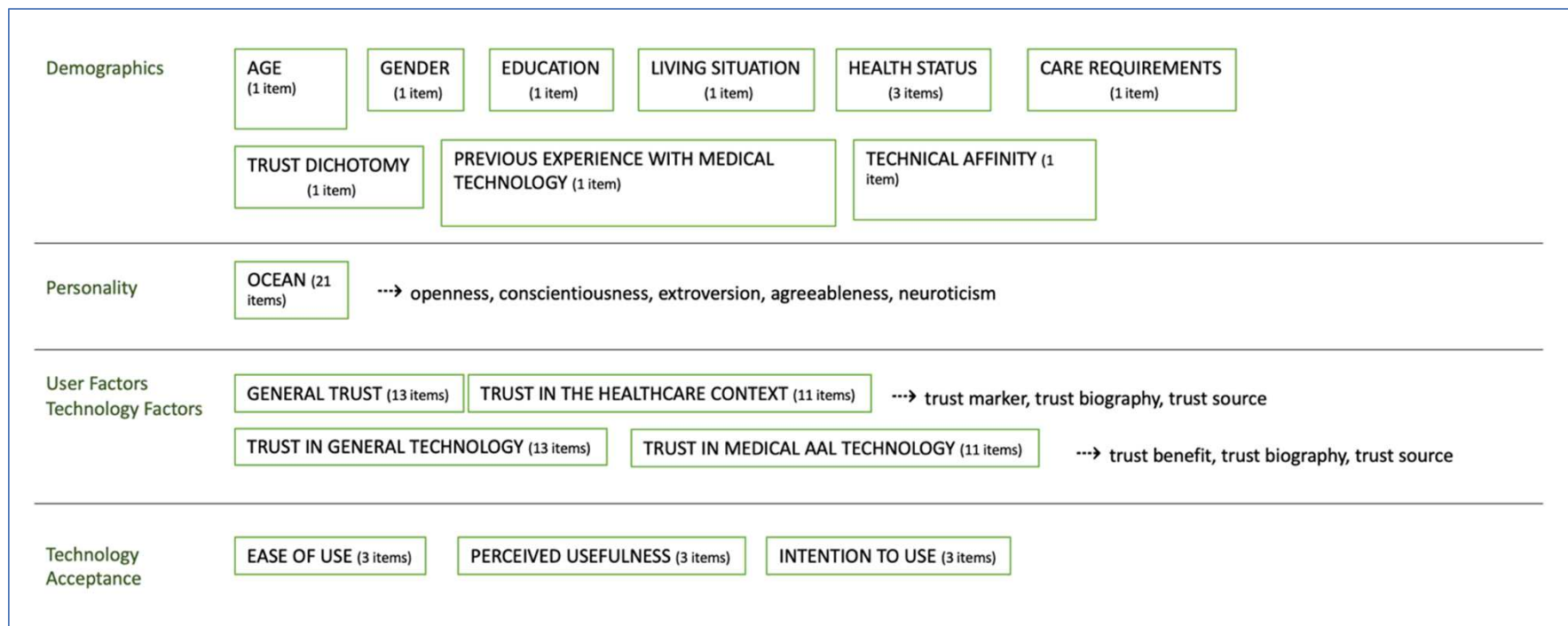
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- Collaboration with Wiktoria Wilkowska (RWTH)
    ⋯→ investigate trust with a focus on disease characteristics with cluster analyses and AN(C)OVA's

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## ESR 2. Sophia Otten – Future Research

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  - ⤳ combine trust, privacy, and AI in one study

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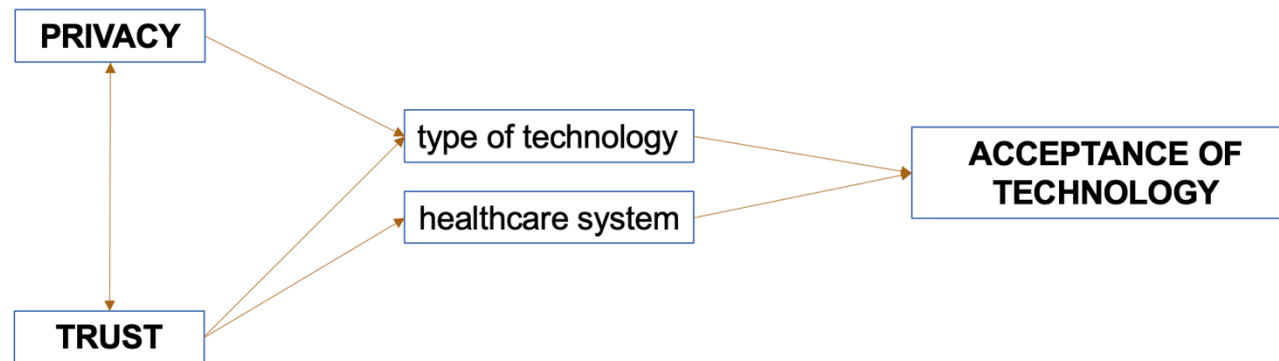
# Thanks for your attention!

Any questions?

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TRUST

PRIVACY

healthcare system

type of technology

**ACCEPTANCE OF TECHNOLOGY**