

Telepresence Robots and Their Impact on Human-Human Interaction

Lisa Keller, Nicholas Müller

- **FHWS: University of Applied Sciences**
- **Projects**
- **Outlook**

FHWS

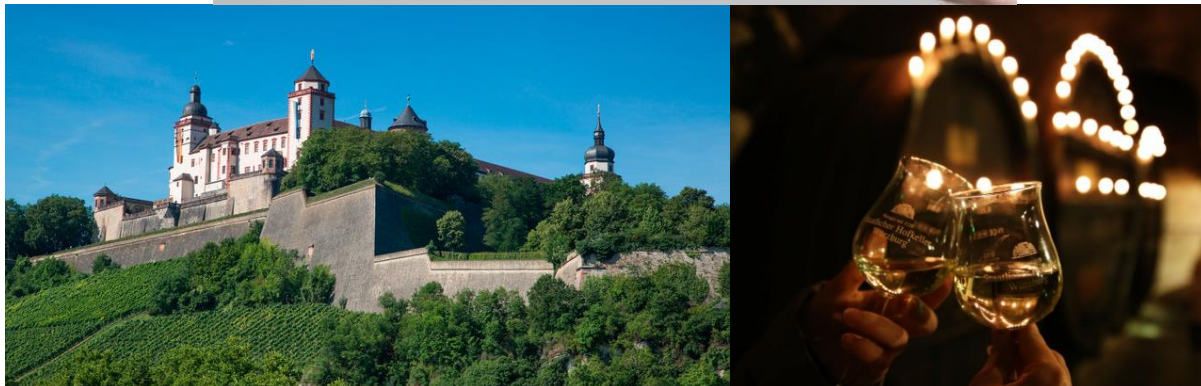
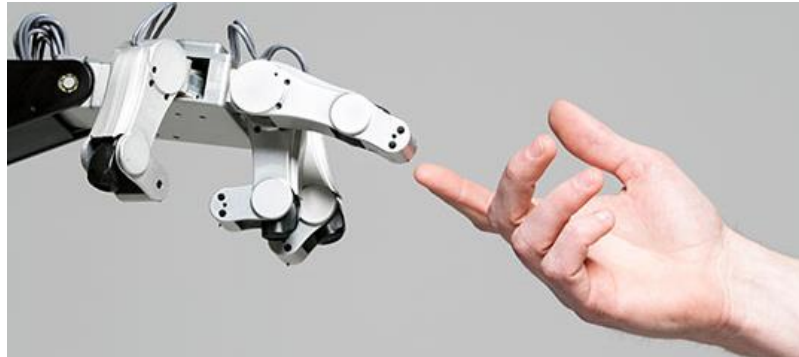
■ Locations

- ▶ Würzburg (computer science, social sciences, ...)
- ▶ Schweinfurt (robotics, mechanical engineering,...)



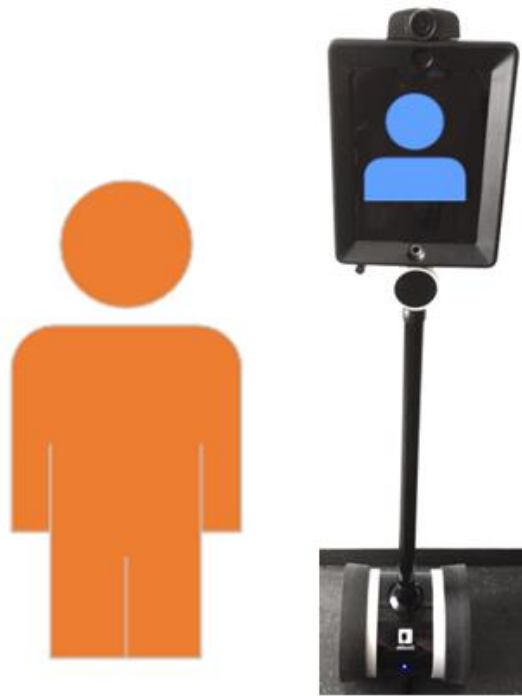
■ Würzburg

- ▶ Faculty of Computer Science and Business Information Systems
- ▶ Chair of Socio-Informatics and societal aspects of digitalization



Projects

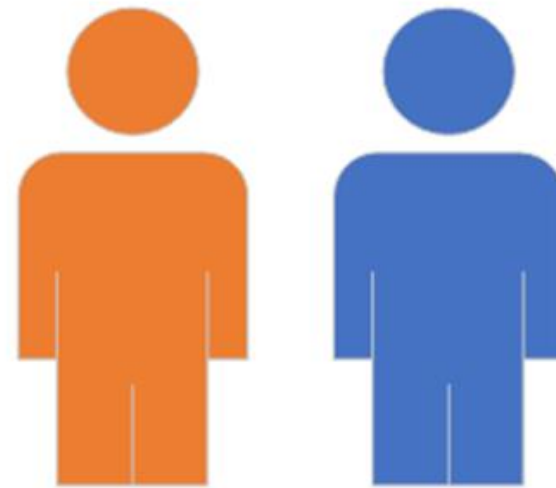
Group 1



Guide

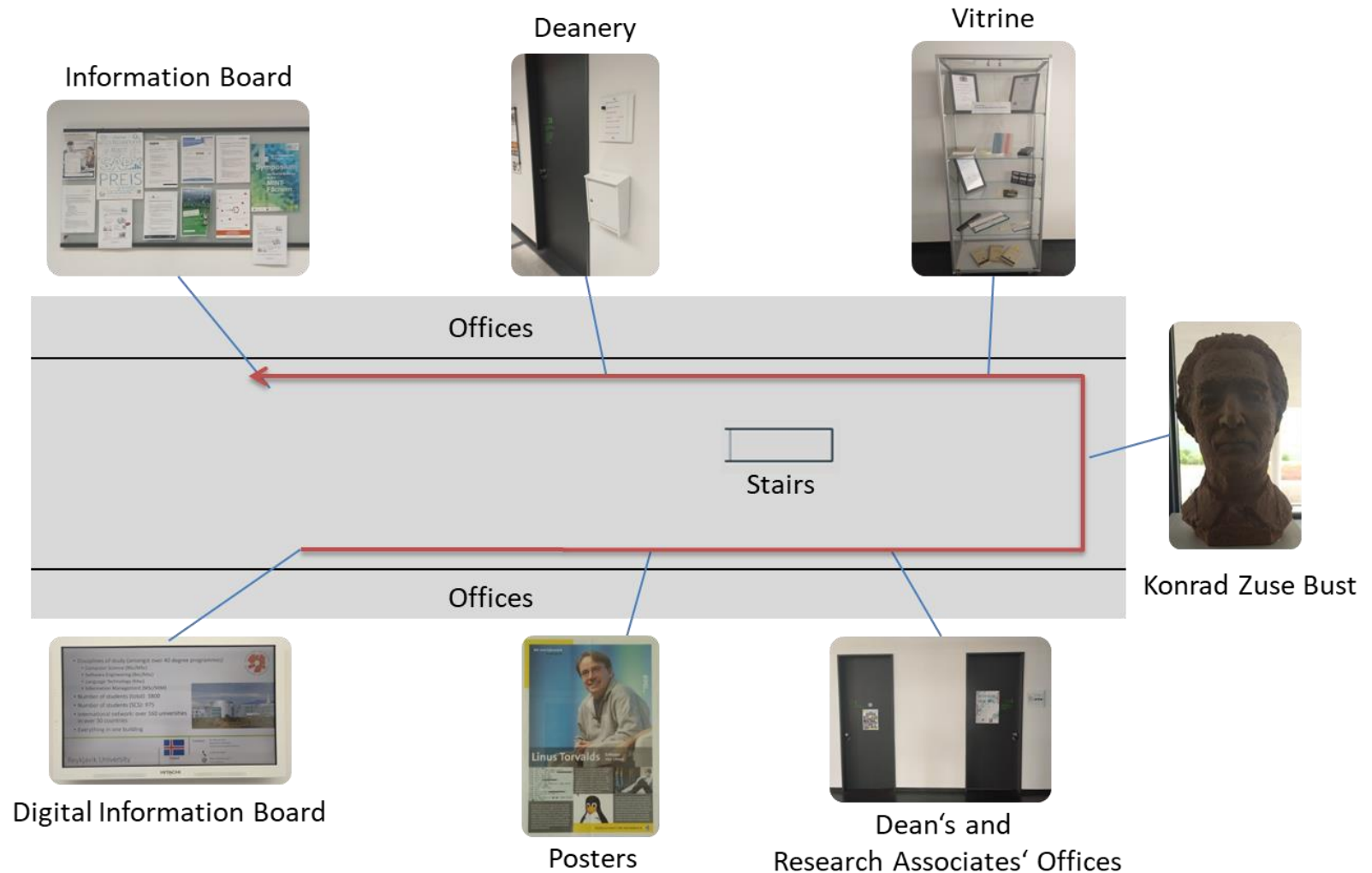
Test Subject

Group 2



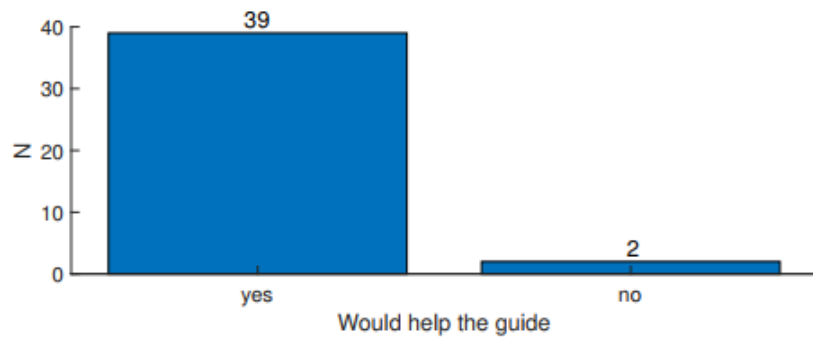
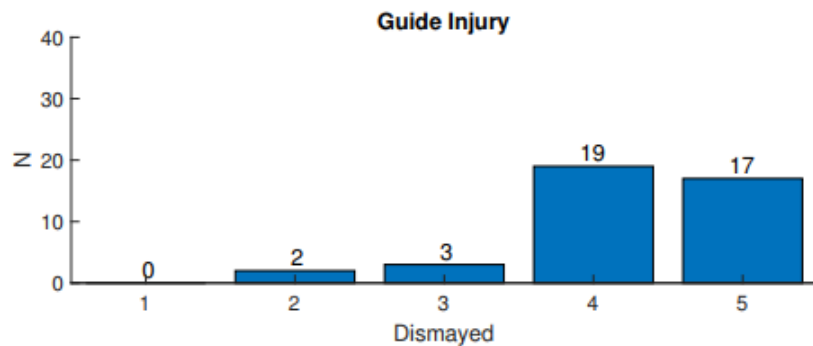
Guide

Test Subject

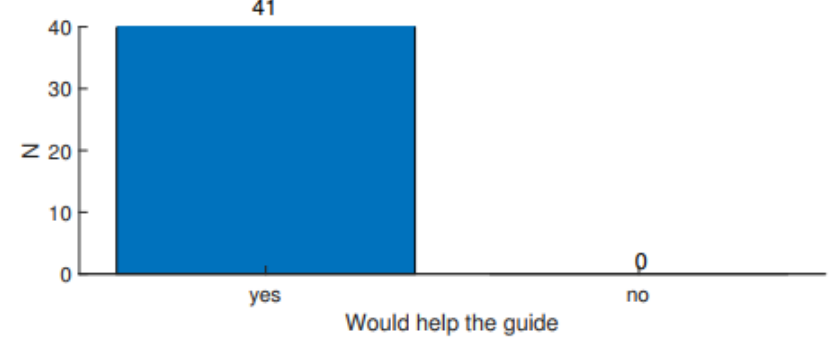
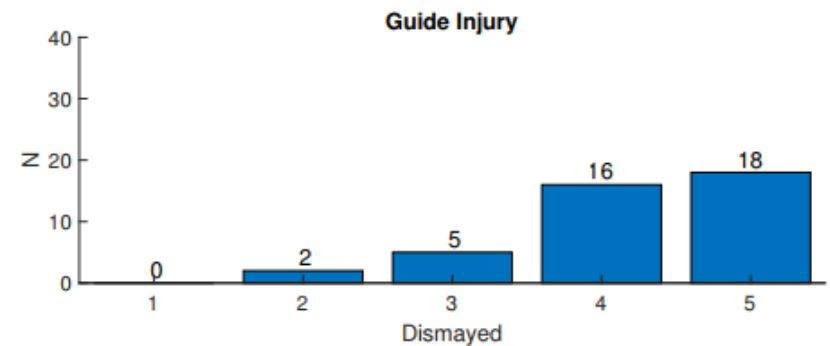


- **H₁**: If test subjects are connected on the telepresence robot and guided by a human, then the test subjects show less human affinity towards the human guide compared to test subjects who were directly guided by the human guide.

- **Mixed-methods study**
 - ▶ Concurrent nested
- **MDMQ (Multidimensional Mood State Questionnaire) before and after tour**
- **Questionnaire (quantitative and qualitative methods) after tour**



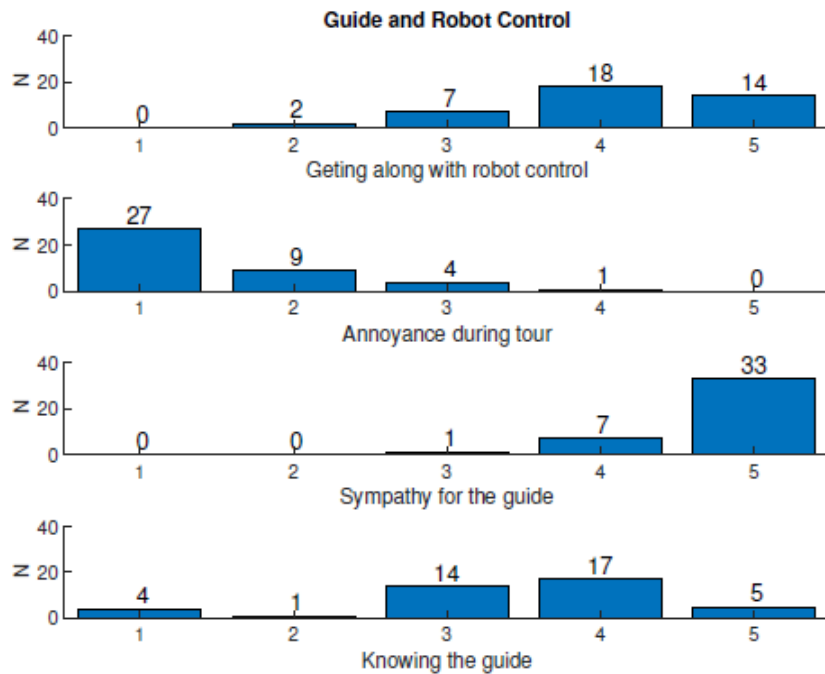
(a) Group 1



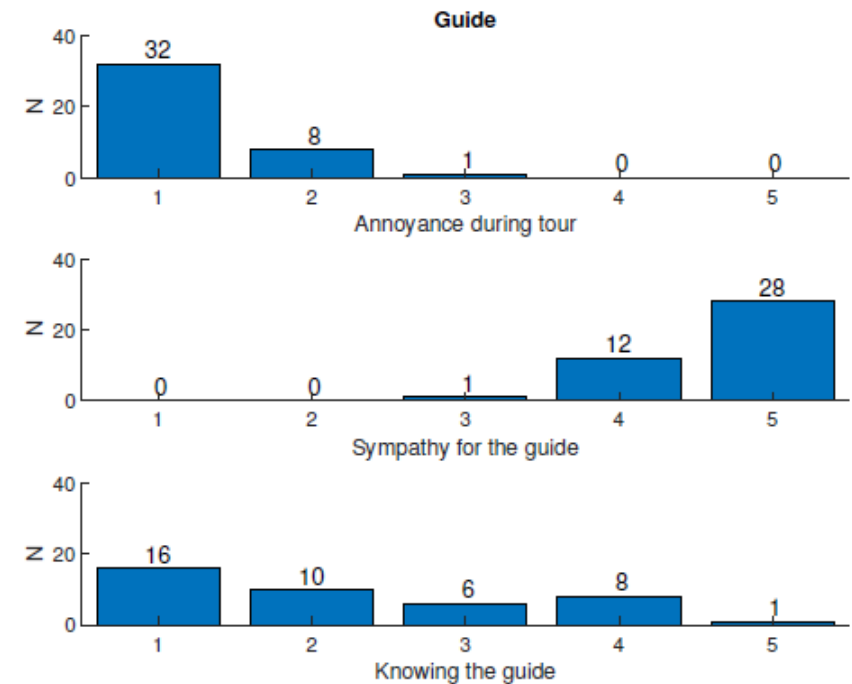
(b) Group 2

- **Why not dismayed**

- ▶ Group 1: distance through display, guide seems to be athletic
- ▶ Group 2: happens, don't know the guide well



(e) Group 1



(f) Group 2

- **Weak correlation between**
 - ▶ Knowing guide, likeable, dismayed
- **No significant mood changes**
- **H_0 cannot be rejected**

Outlook



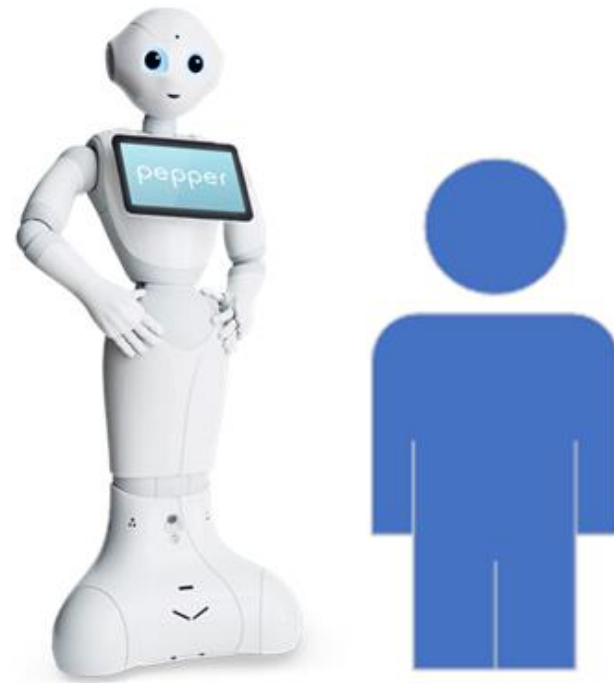
Group 3



Guide

Test Subject

Group 4



Guide

Test Subject



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