Everyday Smartphone Use by Older Adults in Germany
An Educational Research Perspective on Person-Technology Interaction

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How, when and where do older adults interact with Smartphones in their everyday lives?
Smartphones, a subject for gerontology?

Some good arguments…

• In Germany almost the half (41%|2017) of the population over the age of 65 owns a Smartphone (rising Trend)
• The Smartphone is a mobile everyday gate to the Internet
• There is a vast variety of content and (useful) applications (2.1 mio Apps in Google Play Store)

➢ The Issue: We have a lack of knowledge how older adults use their devices in their everyday lives
Smartphone use is a complex person-environment interaction.

Motives and gratifications

social-spatial context

Attitude towards device

What applications are used?

To describe the smartphone use of older adults …

We need measurements for every aspect of the smartphone-snteraction to display the smartphone use.

Smartphone use has to be monitored situational.

Smartphone use differs between persons and over time.
How to measure Smartphone Use?

Three different approaches:

1. ambulatory assessment (7 Days | 3 mtp)
2. Log files protocol (7 Days | 24 h)
3. classic survey assessment

Situational context and personal attitudes and motives

‘Objective’ Measurement of actual smartphone use

Socio-Demographic and Trait variables
How long and then Hans and Frieda use their Smartphones?

Average Screentime per hour over the day (pooled Hours | 7 Days)

Persons
- Frieda
- Hans

Hans, 63, former police officer.

Frieda, 62, former state attorney.
Results I: Two Cases in comparison

How long and then Hans and Frieda use their Smartphones?

Hans, 63:
- 326 Interactions

Frieda, 62:
- 153 Interactions
Results II: In depth description of Frieda Smartphone interaction

06. August 2018 (Monday)

Weather: 30°C | Sunny

Total Smartphone Use (24 h: Min. per Hour)

Sum = 51.18 min

Smartphone Use (in Minutes over 7 days)

<table>
<thead>
<tr>
<th>AM (SD)</th>
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<th>Time (min)</th>
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Context (Ambulatory Assessment)

Social & Local: alone, at home

Activities: Wrote something, used the phone

Mood: 10 (10-Point Scale | Bad-Good)

Experience: Easy, useful, helpful

Intention: Goal-driven, Seeking for Information
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Context (Ambulatory Assessment)

Social & Local: alone, at home

Activities: Prepared food, rested slept

Mood: 8 (10-Point Scale | Bad-Good)
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Sum = 51.18 min

17.03 h – 18.03 h

- 00:14:34
- 00:34:16
- 00:06:05
- 00:06:01

Context

Social & Local: With Husband, at home

Activities: Wrote something

Mood: 6 (10-Point Scale | Bad-Good)

Experience: Easy, useful, fun

Intention: Goal-driven, Seeking for Information
Take Home Messages

1. Smartphone use can not be understood without considering personality states and traits + socio-spatial contexts
2. Smartphone use is a variable with between and within person variance
3. An in-depth analysis of the smartphone use could extend our knowledge of the everyday integration of this device
4. This analysis of smartphone use could be the basis for a more participant-oriented training
Towards Capability in Aging – from cell to society

Thank you for your attention
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