

Übung zur Vorlesung
Mensch-Maschine-Interaktion 1

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Qualitative vs. Quantitative Data

- Deals with descriptions.
- Data can be observed but not measured.
- Colors, textures, smells, tastes, appearance, beauty, etc.
- Qualitative → Quality

- Deals with numbers.
- Data which can be measured.
- Length, height, area, volume, weight, speed, time, temperature, humidity, sound levels, cost, members, ages, etc.
- Quantitative → Quantity

Oil Painting

Qualitative data:

- blue/green color, gold frame
- smells old and musty
- texture shows brush strokes of oil paint
- peaceful scene of the country
- masterful brush strokes

Oil Painting

Quantitative data:

- picture is 10" by 14"
- with frame 14" by 18"
- weighs 8.5 pounds
- surface area of painting is 140 sq. in.
- cost \$300

Likert Scales

Very Interested	Somewhat Interested	Neutral	Not Very Interested	Not at All Interested
5	4	3	2	1
Very Much	Somewhat	Undecided	Not Really	Not at All
5	4	3	2	1
Very Much Like Me	Somewhat Like Me	Neutral	Not Much Like Me	Not at All Like Me
5	4	3	2	1
Very Happy	Somewhat Happy	Neutral	Not Very Happy	Not at All Happy
5	4	3	2	1
Almost Always	Sometimes	Every Once In a While	Rarely	Never
5	4	3	2	1

<http://allpsych.com/researchmethods/images/likertscales.gif>

Example: **Study Design Script**

Study Procedure

1. Explanation of Procedure

- Introduction of three NFC-Applications: interactive advertisement, interactive catalogue and interactive door sign.
- Different designs for each scenario
- Task for each design
- No competition, how usable are the different designs and personal impression
- Tasks and Questionnaires - **THINK ALOUD!**
- Video recording during study

Further questions?

Consent Form

General Questionnaire

2. Explanation of NFC-Device

3. Test of Designs

- Introduction to scenario and procedure (various designs, for each design the same task)
- Introduction of task
- **START APPLICATION** on mobile device
- **START CAMERA**
- **SHOW DESIGN**
- **START TASK**

Post Scenario Questionnaire

Post Study Questionnaire