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

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

<table>
<thead>
<tr>
<th>Scale Type</th>
<th>Description</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Interested</td>
<td>Somewhat Interested</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Very Much</td>
<td>Somewhat Like Me</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Very Much Like Me</td>
<td>Somewhat Happy</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Very Happy</td>
<td>Sometimes</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Almost Always</td>
<td>Every Once In a While</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
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<td>Not Really</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
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<td>Not at All Like Me</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
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<td>Not Very Happy</td>
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<td>2</td>
<td>1</td>
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</tr>
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</tbody>
</table>

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**