EXPERIMENT DESIGN

• Passive 3D TV (Hyundai S456D 46 inch)
• Splitting PVS in two set of equal quality distribution
• Repeating SRCxHRC set as common set (Basket)
• Two viewing distances (3H and 5H)

<table>
<thead>
<tr>
<th></th>
<th>3H</th>
<th>5H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>VideoSet A</td>
<td>VideoSet B</td>
</tr>
<tr>
<td>Group 2</td>
<td>VideoSet B</td>
<td>VideoSet A</td>
</tr>
</tbody>
</table>
### USED SCALES

Rate the following properties of the video sequence

<table>
<thead>
<tr>
<th>Video quality</th>
<th>Visual discomfort</th>
<th>Sense of presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>No discomfort</td>
<td>Excellent</td>
</tr>
<tr>
<td>Good</td>
<td>Strange feeling, but not uncomfortable</td>
<td>Good</td>
</tr>
<tr>
<td>Fair</td>
<td>Slightly uncomfortable</td>
<td>Fair</td>
</tr>
<tr>
<td>Poor</td>
<td>Discomfortal</td>
<td>Poor</td>
</tr>
<tr>
<td>Bad</td>
<td>Very uncomfortable</td>
<td>Bad</td>
</tr>
</tbody>
</table>

[OK]
TEST SUBJECTS

• mean 33.7, median 29, max 62 and min 18
• 14 Swedish subjects and 14 international
• 1 pre-screened and 3 post-screened
## CROSSLAB CORRELATION

<table>
<thead>
<tr>
<th></th>
<th>FRA</th>
<th>KOR</th>
<th>SWE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRA</td>
<td>1,00</td>
<td>0,97</td>
<td>0,98</td>
</tr>
<tr>
<td>KOR</td>
<td>1,00</td>
<td></td>
<td>0,98</td>
</tr>
<tr>
<td>SWE</td>
<td></td>
<td></td>
<td>1,00</td>
</tr>
</tbody>
</table>
QUALITY @ 3H AND 5H

• Analysis only separate (so far)
• Difference non-significant

![Graph showing Visual Quality overall MOS](image-url)
QUALITY @ 3H AND 5H

- VideoSet A
- VideoSet B
QUALITY VS DISCOMFORT

Correlation: 0.87 for 3H and 0.95 for 5H
QUALITY VS PRESENCE

Correlation: 0.86 for 3H and 0.93 for 5H
QUALITY VS DISCOMFORT

Quality Mean Opinion Score

Comfort Mean Opinion Score

- Video set A, subjects Group 1, 3H distance
- Video set A, subjects Group 2, 5H distance
- Video set B, subjects Group 1, 5H distance
- Video set B, subjects Group 2, 3H distance

Significant difference between Group 1 and Group 2 in discomfort
QUALITY VS PRESENCE

No Significant difference found
CONCLUSIONS

• No significand visual quality difference: 3H & 5H
• In questionniare a majority preferred 5H
• Close relation between different scale
  • Likely due to the conditions are not demanding enough
• Group 1 discomfort ratings significantly different each other (Questionnaire supports that)