

Supplementary Materials: Comparing Semantic Differential Methods in Affective Engineering Processes: A Case Study on Vehicle Instrument Panels

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<Absolute Evaluation 1>

Sample No. 2

- Please rate the visual or tactile feeling from leather samples in terms of given semantic pairs.
 - Please, use appropriate interaction methods.
- ※ Perform at least one interaction per semantic pair.

	-3	-2	-1	0	+1	+2	+3	
	<div style="display: flex; align-items: center; justify-content: space-between;"> Extremely ← Neither → Extremely </div>							
Dark	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Bright
Matt	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Glossy
Cooling	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Warming
Dry	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Moist
Slippery	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Sticky
Flat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Rugged
Hard	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Soft

Figure S1. An Example of evaluation questionnaire administered in Absolute Evaluation 1.

<Absolute Evaluation 2>

5 – 4 – 1 – 2 – 6 – 3

- Please rate the visual or tactile feeling from leather samples in terms of given semantic pairs.
- Please, use appropriate interaction methods.
- ※ Perform at least one interaction per semantic pair.
- Please, fill out the correct location for each sample.

	Dark	-3	-2	-1	0	+1	+2	+3	Bright
	Extremely ← ————— Neither ————— → Extremely								
Sample 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Sample 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Sample 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Sample 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Sample 5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Sample 6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

Figure S2. An Example of evaluation questionnaire administered in Absolute Evaluation 2.

<Relative Evaluation>

Reference Sample No. 1
Evaluation Sample No. 4

- Please rate the visual or tactile feeling from leather samples in terms of given semantic pairs.
- Please, use appropriate interaction methods.
- ※ Perform at least one interaction per semantic pair.
- Please, evaluate a given sample comparing to a reference sample.

Evaluation sample is more

-3 -2 -1 0 +1 +2 +3

Extremely ← Neither → Extremely

Dark								Bright
Matt								Glossy
Cooling								Warming
Dry								Moist
Slippery								Sticky
Flat								Rugged
Hard								Soft

Figure S3. An Example of evaluation questionnaire administered in Relative Evaluation.

<Perceived Distinguishability>

Please check how difficult it was to feel the difference among samples
for the semantic pair in the Absolute Evaluation 1

Evaluated Semantic Pairs	Distinguishability in Samples						
	Very difficult	Difficult	Little difficult	Neither	Little easy	Easy	Very easy
Dark – Bright	①	②	③	④	⑤	⑥	⑦
Matt – Glossy	①	②	③	④	⑤	⑥	⑦
Cooling – Warming	①	②	③	④	⑤	⑥	⑦
Dry – Moist	①	②	③	④	⑤	⑥	⑦
Slippery – Sticky	①	②	③	④	⑤	⑥	⑦
Flat – Rugged	①	②	③	④	⑤	⑥	⑦
Hard – Soft	①	②	③	④	⑤	⑥	⑦

Figure S4. An Example of evaluation questionnaire administered in Perceived Distinguishability.