Are attitudes towards autonomous vehicles (AVs) affected by a ride in an automated vehicle?

We found that a ride has a positive effect on attitude towards AVs and its presumed constructs, except perceived usefulness.

Pilot project: quasi-experiment

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 participants</td>
<td>Survey on attitudes towards AVs</td>
<td>Test drive with level 2 AV in Ghent, Belgium (20 min.)</td>
<td>Survey on attitudes towards AVs</td>
</tr>
</tbody>
</table>

Conceptual framework for the intention to use autonomous vehicles (7-point Likert scale)

- AV anxiety ***
- Perceived enjoyment ***
- Perceived ease of use ***
- Subjective norm *
- Image
- Result demonstrability ***
- Comfort
- Functional risk ***
- Physical risk ***
- Security risk ***
- Perceived risk *
- Perceived usefulness
- Attitude towards AVs ***
- Intention to use AVs
- Technology anxiety
- Technology trust

Participants with higher levels of technology anxiety show a remarkable increase in attitude towards AVs after the ride.

<table>
<thead>
<tr>
<th>Willingness to pay (N=10)</th>
<th>Min</th>
<th>Max</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>€ 3.000</td>
<td>€ 10.000</td>
<td>€ 6.400</td>
</tr>
<tr>
<td>Semi</td>
<td>€ 1.000</td>
<td>€ 5.000</td>
<td>€ 3.325</td>
</tr>
</tbody>
</table>

Participants have a more positive attitude towards autonomous vehicles after the experience of a ride in an automated vehicle.

A participant’s level of technology anxiety in general should be taken into account when evaluating their attitude towards autonomous vehicles if the experience of a ride in an automated vehicle is not feasible.