Elderly’s self-reported driving difficulties and UFOV results: two sides of the same coin

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Background
There are several studies highlighting the association between Useful Field of Vision (UFOV) test results and road safety [1-4]. Accordingly, a study about elderly driving habits and difficulties found a positive association between self-reported difficulties on different driving situations (four or more) and UFOV test and other cognitive tests’ results [5].

Objective
The aim of this study was to verify if presence vs absence of self-reported driving difficulties could differentiate UFOV results in elderly drivers.

Method
Fifty-seven subjects, 24 males (71.4 ±4.5 years-old) and 33 females (66.1 ±4.6 years-old), participated in the study. A driving habits’ questionnaire (DHQ - portuguese adaptation, with twenty-two additional self-reported difficulties) and an UFOV Test were applied. Self-reported driving difficulties and UFOV category of risk were registered.

Results
Analysis of the twenty-two difficulties in driving situations revealed that there were significant differences in UFOV mean category of risk between drivers who reported having difficulties in three of them (table 1) and those who did not.

Table 1: Differences in UFOV risk category between drivers reporting or not specific driving difficulties

<table>
<thead>
<tr>
<th>Driving difficulties</th>
<th>“Yes”</th>
<th>“No”</th>
<th>Z</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other drivers honk you often</td>
<td>8</td>
<td>47</td>
<td>-3.425</td>
<td>0.001</td>
</tr>
<tr>
<td>Hard to react quickly to dangerous situations</td>
<td>4</td>
<td>51</td>
<td>-3.178</td>
<td>0.001</td>
</tr>
<tr>
<td>Four or more difficulties reported</td>
<td>14</td>
<td>42</td>
<td>-2.886</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Besides, UFOV risk category negatively correlated with quality of driving self-assessment (r=-0.301, p=0.024) and positively with the number of situations where subjects reported driving difficulties (r=-0.443, p=0.001).

Conclusion
Subjects that report: i) driving difficulties on more situations, ii) that other drivers frequently honk on them, iii) find it hard to react quickly to dangerous situations and iv) self-evaluate their quality of driving as regular or low, may be in a higher risk of having a driving accident, since, in this study, these subjects’ UFOV risk category was significantly higher. Therefore, the reported difficulties may be predictive of some driving impairment on elderly.

References