Fatigue among private and professional drivers in Norway and Greece: examining the influence of national road safety culture

Tor-Olav Nævestad*, Ross O. Phillips*, Alexandra Laiou**, & George Yannis**

*Institute of Transport Economics, Oslo **National Technical University, Athens

Financed by the Norwegian Research Council, Transport 2025

Working on Safety, Wien, September 25. 2019
Aims and methods:

1) Examine the factors influencing fatigue among private and professional drivers in Norway and Greece, focusing especially on the role of national road safety culture.

2) Examine the relationship between driver fatigue and self-reported accident involvement.

Method data: survey data from private car (N=796) and professional drivers in Norway and Greece (N=416) and qualitative interviews (N=61).
Fatigue is a risk factor involved in 10-25 % of all crashes.

The share is higher among professional drivers (23-52 %).


Greece had one of the worst of all EU-27 countries.

National road safety culture in Greece: aggressive beh.

Qualitative data: «driving is exhaustive» «requires energy»
Have you fallen asleep?

«In the course of the last three months, have you fallen asleep (or dozed off for a moment) while driving a car (or a heavy vehicle)?”

Percentages answering yes:

<table>
<thead>
<tr>
<th>Professional</th>
<th>Norwegian</th>
<th>6 % (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Greek</td>
<td>24 % (24)</td>
</tr>
<tr>
<td>Private</td>
<td>Norwegian</td>
<td>5% (29)</td>
</tr>
<tr>
<td></td>
<td>Greek</td>
<td>8 % (23)</td>
</tr>
</tbody>
</table>
Variables and results: HGV drivers

1) Age group
2) Kilometres driven in the last two years
3) Aggressive violations
4) Work pressure
5) Hours of work on a typical day
6) Drive mostly long distance
7) Only commission pay
8) National road safety culture
9) Norwegian-Greek
National road safety culture: Aggression/violations factor

<table>
<thead>
<tr>
<th>Item: (“When driving in my country, I expect the following behaviour from other drivers:”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) That they sound their horn to indicate their annoyance to another road user</td>
</tr>
<tr>
<td>2) That they become angered by a certain type of driver and indicate their hostility by whatever means they can</td>
</tr>
<tr>
<td>3) That they overtake a slow driver on the inside</td>
</tr>
<tr>
<td>4) That they drive when they suspect they might be over the legal blood alcohol limit</td>
</tr>
<tr>
<td>5) That they drive without using a seatbelt</td>
</tr>
<tr>
<td>6) That they disregard the speed limit on a motor way road</td>
</tr>
<tr>
<td>7) That they disregard the speed limit on a residential road</td>
</tr>
</tbody>
</table>
Questions/discussion:

- Is the relationship between RSC and fatigue for professional drivers a substantial result?

- Why is this relationship weaker for private drivers?

- Are the outcome numbers too low?

- Relationship with accidents? (weak correlation, sig. P=0.01 for private car drivers).