Practicing for and performance on driver’s license tests in relation to gender differences in crash involvement among novice drivers

Anders Nyberg & Nils Petter Gregersen
Problem

Young (18-24 years old) male novice drivers are overrepresented in injury crashes compared to females in the same category.
The difference assumed to be related with e.g. the following tendencies exhibited by young males in general

- Sensation seeking
- Reckless driving
- Overestimation of driving ability
- Higher degree of risk acceptance
- Drive in more difficult situations (e.g. darkness)

- Drive while intoxicated
- More passengers
- Other goals with their driving
- Drive more frequently
- Less use of seat belts
The higher crash involvement among young male drivers might also to some extent be due to diversity in how females and males practice before receiving a driver’s license.
The aim was to explore whether there are any gender differences among 18-24 year old drivers regarding

» How and what they practiced to get a license
» The results of the written and driving tests
» Involvement in crashes during the first year of licensure
Materials (all data from 2005)

» Questionnaires (Questions about background, general practicing issues, lay instruction, behind the-wheel lessons at a driving school)
» Data on driving tests
» Data on crashes (conflict types, light/road/weather conditions, time of the crash, most severe outcome)
Not possible to follow the same individuals through all stages or in all analyses
Questionnaires

» Distributed to a randomly drawn sample of 1,716 drivers aged 18-24 years who got a license in September 2005 (52% males, 48% females)

» 1,135 (66%) were completed correctly and returned (46% males, 54% females)
General practicing questions

» No difference in total amount of practicing (average 54 hours)
» Females studied more theory;
  - At home (24.6 hours vs. 18.8 hours)
  - At driving school (6.5 hours vs. 4.7 hours)

31% of the females and 41% of the males did not study a minute theory at a driving school
Gender differences in the context of driving practice

Compared to males, females do the following (examples):
- Perform lay-supervised driving for the specific purpose of training
- Practice more skills and in several different environments
- Lay-instructed driving under more favorable conditions
- Larger proportion of their driving tuition from professional instructors
Percent passing the written and driving test

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written test</td>
<td>58.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Driving test</td>
<td>64.3</td>
<td>63.3</td>
</tr>
</tbody>
</table>

18-24-year-old drivers
Year: 2005
Police reported injury crashes for 18-24-year-olds during their first year with a licence in 2005

» 868 injury crashes
» 275 (31.7%) involved females
» 593 (68.3%) involved males
» About 18% of these crashes led to fatalities or severe injuries
Injury crashes per 1,000 drivers during their first year of licensed driving

18-24-year-old drivers

Year: 2005
Relative distribution of crash conflict types leading to injury during their first year of licensed driving

18-24-year-old drivers

- Oncoming vehicle
- Rear end
- Turning
- Intersecting course
- Overtaking/Lane change
- Vehicle-Bicycle/Moped
- Vehicle-Pedestrian
- Vehicle-Animal
- Other/Unknown

Year: 2005
Conclusions

» More structured training while learning appears to be one of the reasons why females do better than males the first period as a novice driver

» Driver education should focus not only on the amount of time spent on practicing and preconditioning but also to a greater extent on the importance of structuring the process of learning to drive

» This includes the significance of studying theory as well as all those higher order skills (e.g. risk awareness and self assessment) that are important issues for safe driving