Driving attitudes and risk perceptions of high-frequency speeders

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Overview

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• Methodology
• Results
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The speeding mismatch

Speed and crash risk

- Increased vehicle speed results in increased road trauma and more severe consequences (Elvik, Christensen & Amendsen, 2004)
- Speeding a contributing circumstance in 22.3% of all fatal crashes in QLD, 2008-2012 (TMR, 2013 unpublished)
- Nilsson’s power model (Nilsson, 2004)

Speeding behaviour and attitudes

- Observational studies (Kloeden, 2012)
  - 20 - 50% of QLD motorists exceed speed limit
  - Majority of speeding >10km/h over speed limit
- Attitudinal surveys
  - 79% of respondents agree “it’s ok to drive a few kilometres over the speed limit” (Austroads, 2013)
  - Widespread belief that “driving slightly over the speed limit did not increase the risk of crashing” (Delaney, Diamantopoulou & Cameron, 2003)
The speed camera mismatch

Effectiveness of speed cameras

- Queensland speed camera program estimated to be responsible for a 22.9% reduction in police reported crashes (Cameron, 2012)

Auditor-General reports

- New South Wales (The Audit Office of NSW, 2011)
- Victoria (Victorian Auditor-General, 2011)

Conclusions

- Speed cameras have a positive impact on road safety
- A substantial proportion of the community view speed cameras as having little or no impact on driver behaviour and as revenue raisers only

Community attitudes

- 52% of respondents agreed that ‘speed cameras are mainly intended to raise revenue’ (Austroads, 2013)
RSPAT Survey

• Road Safety Perceptions and Attitudes Tracking Survey
• 14 years of community attitudes trend data
• Issues covered include:
  • Speeding, drink and drug driving, risky behaviours, vehicle safety, fatigue, school transport safety, young drivers, seatbelt use and motorcycle safety.
RSPAT speed trends

- % Agree:
  - Speed cameras are just revenue raising
  - Speed cameras help reduce the road toll
  - What constitutes speeding?
    - Any speed over the speed limit

Survey Year:
- 1997
- 2000
- 2003
- 2006
- 2009
- 2012

Great state. Great opportunity.
High-frequency speeders (H-FS)

- How often do you drive/ride over the speed limit, even by only a few kilometres?
  - H-FS were defined as those who self-reported speeding 50% of the time, or more.

- High-frequency vs. high-range
- Speeding increases crash risk at any level
- Why do some individuals continue to speed despite road safety education and speed enforcement? Who are they? What can be done to curb their speeding?
Research questions

1. Demographic characteristics of H-FS and L-FS?

2. Are there differences in the attitudes towards speeding and speed enforcement of H-FS and L-FS?

3. In what situations are H-FS more likely to speed?

4. Are there any differences in H-FS’ risk perceptions of various high-risk and illegal driving behaviours?
Method

• Online research panel
• Eligibility
  • reside in Queensland
  • be aged 16 years old or over and
  • drive or ride on the road for at least one hour per week
• Strict quotas each year
• Data combined from survey years 2010-2012
• Total sample N = 1,655
  • 863 males (52.1%).
Demographics

• 36.86% of total sample were classified as H-FS
Attitudes towards speed and enforcement

Compared to L-FS

- **H-FS perceived less risk with speeding**
  - *Speeding can be safe in some circumstances* (79.7% vs. 51.8%)
  - *5km/h above speed limit increases crash risk* (25.9% vs. 46.4%)

- **H-FS more sceptical about the effectiveness of speed cameras**
  - *Speed cameras help reduce the road toll* (48.6% vs. 62%)

- **H-FS perceived less risk of being detected speeding**
  - *I know where I can expect to see speed cameras* (49.8% vs. 36.7%)
  - *I only avoid speeding where I’ve seen speed cameras* (37.4% vs. 12.8%)
H-FS What situations?

<table>
<thead>
<tr>
<th>Top 5 Situations</th>
<th>Bottom 5 situations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overtaking</td>
<td>For the thrill</td>
</tr>
<tr>
<td>78.8%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Dry/fine/daylight</td>
<td>Winding road</td>
</tr>
<tr>
<td>71.6%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Keep up with traffic</td>
<td>To blow off steam</td>
</tr>
<tr>
<td>51.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Down a hill</td>
<td>Wet roads</td>
</tr>
<tr>
<td>50.8%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Quiet road</td>
<td>With passengers</td>
</tr>
<tr>
<td>47.4%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

- H-FS more likely to speed when:
  - road conditions permitted it and/or did not increase perceptions of risk
  - familiar with the road
  - time pressures necessitated it
- H-FS less likely to speed when:
  - dangerous conditions
  - carrying passengers
  - for emotional reasons like thrill seeking or out of anger
H-FS Risk Perceptions

- Speeding <10km/h
- Speeding >10km/h
- Disobeying a red light – 97.0%
- Driving under the influence of illegal drugs – 92.7%
- Driving while over legal BAC – 87.5%
- Texting while driving – 86.6%
- Disobeying a stop sign – 86.3%
- Disobeying a give way sign – 80.9%
- Driving while tired – 79.3%
- Not wearing a seatbelt – 79.0%
- Following another vehicle too closely – 72.1%
- Talking on a hand held mobile while driving – 67.3%
- Talking on a hands free mobile while driving – 18.2%
- Speeding in excess of 10km/h – 66.6%

Speeding less than 10km/h – 14.9%
Conclusions

1. Young drivers overrepresented as H-FS
2. H-FS perceive less risk with speeding than L-FS
2. H-FS perceive less risk of being caught than L-FS
3. H-FS more likely to speed in good conditions or when under time pressures.
4. Less H-FS perceive speeding to be Very Risky than other illegal driving behaviours
Limitations

- Reliance on existing data source
- Exclusively self-report data
- Frequency not severity
- Role of punishment experience and avoidance
Take home

• High-frequency speeding also of road safety interest not just high-range speeders

• Merit of regularly tracking attitudes and behaviours

• Potential to examine in-depth issues by examining sub-groups of large samples
References

Austroads (2013). Driver attitudes to speed enforcement. AP-R433-13, Austroads, Sydney, NSW.


Questions?

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