High-risk driving in Ontario, Canada: A review on street racing and stunt driving

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High-risk driving

- Operating a vehicle in a dangerous and irresponsible way
- May result in injuries, fatalities, & property damage
INTRODUCTION

Legislation

- Prohibited in Canada Ontario, September 2007
  *Street Racers, Stunt and Aggressive Drivers Leg.*

- Wheelies, ghost riding, excessive speeding, etc.
  *(Highway Traffic Act, 2009)*
Penalties include:

- 7-day vehicle impoundment
- 7-day driver’s licence suspension
- Fine from $2,000 to $10,000
- Loss of 6 demerit points

(Highway Traffic Act, 2009)
Prevalence

- Ontario residents
  1% reported street racing

- High school students
  20.4% reported street racing at least once

(Smart et al., 2011; Vingilis et al., 2011)
Prevalence (cont’d)

- Car and racing enthusiasts
  Over 80% never engaged in stunt driving

- However,
  
  Excessive speeding (never = 64.5%)
  Doing doughnuts (never = 60.7%)

(Vingilis et al., 2013)
Aim

To summarize research studies examining street racing and stunt driving behaviours and their correlates in Ontario
A review of:

1. How effective is the law?

2. What are the correlates of engaging in high risk driving?

3. Are high-risk driving tendencies transferred to on-road driving as violations?
1. Effectiveness of the law

**Extreme speeding convictions**

- Speeding 50 kph and over
- Two periods compared:
  - January 1, 2003 to September 30, 2007
  - October 1, 2007 to December 31, 2011
- A significant reduction in convictions of male drivers but not female drivers

(Meirambayeva, et al., 2014a)
1. Effectiveness (cont`d)

**Speed-related causalities**

- Monthly speeding-related collision casualties
- Two periods compared:
  - January 1, 2002 to September 30, 2007
  - October 1, 2007 to December 31, 2010
- The casualties involving young male drivers decreased
  - 58 less causalities for young males
  (Meirambayeva, et al., 2014b)
1. Effectiveness (cont`d)

Median speed in highways

• The median average speed decreased after September 30, 2007

(Meirambayeva, et al., 2014b)
## 2. Correlates of high-risk driving

**Stunt drivers vs. non stunt drivers**

<table>
<thead>
<tr>
<th>Variables</th>
<th>No Stunt driving</th>
<th>Stunt driving</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (p&lt;.001)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-34</td>
<td>37.0</td>
<td>54.6</td>
</tr>
<tr>
<td>35 and older</td>
<td>63.0</td>
<td>45.4</td>
</tr>
<tr>
<td><strong>Weekly driving average (NS)</strong></td>
<td>M=3.44</td>
<td>M=3.59</td>
</tr>
<tr>
<td><strong>Personality variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driver Thrill Seeking</td>
<td>M=29.21</td>
<td>M=37.84</td>
</tr>
<tr>
<td>Competitive Attitude Toward Driving</td>
<td>M=6.48</td>
<td>M=8.46</td>
</tr>
</tbody>
</table>
## 2. Correlates (cont`d)

Stunt vs. non stunt drivers

<table>
<thead>
<tr>
<th>Attitudes (agree/strongly agree)</th>
<th>No stunt %</th>
<th>Stunt %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontario’s Stunt Driving Law subsections:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 km over speed limit</td>
<td>48.6</td>
<td>20.1</td>
</tr>
<tr>
<td>Ghost riding</td>
<td>82.2</td>
<td>70.5</td>
</tr>
<tr>
<td>Prevent car from passing</td>
<td>61.1</td>
<td>46.4</td>
</tr>
<tr>
<td>Driving with person in trunk</td>
<td>71.3</td>
<td>61.1</td>
</tr>
<tr>
<td>Driving close as possible to other</td>
<td>70.0</td>
<td>56.0</td>
</tr>
<tr>
<td>Performing wheelies</td>
<td>66.1</td>
<td>40.9</td>
</tr>
<tr>
<td>Performing doughnuts/ burnouts</td>
<td>51.7</td>
<td>22.7</td>
</tr>
<tr>
<td><strong>Attitude towards street racing/stunt driving</strong></td>
<td>M=29.73</td>
<td>M=41.7</td>
</tr>
</tbody>
</table>
## 2. Correlates (cont’d)

Stunt vs. non-stunt drivers

<table>
<thead>
<tr>
<th>Driver Behaviours</th>
<th>No stunt %</th>
<th>Stunt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver Behaviour Q.</td>
<td>M=6.29</td>
<td>M=11.34</td>
</tr>
<tr>
<td>Self Report Driver Aggression Q.</td>
<td>M=3.56</td>
<td>M=5.86</td>
</tr>
<tr>
<td>Risk-Taking Driving Scale</td>
<td>M=7.60</td>
<td>M=9.99</td>
</tr>
<tr>
<td>Driver in collision in past 5 years (NS)</td>
<td>17.8</td>
<td>23.3</td>
</tr>
<tr>
<td>Stopped for traffic offence in past year</td>
<td>11.7</td>
<td>31.1</td>
</tr>
</tbody>
</table>
2. Correlates (cont`d)

Predictors of stunt driving

- Driver thrill seeking
- Competitive attitudes toward driving
- Attitudes towards Ontario’s stunt driving legislation
- Attitudes towards street racing and stunt driving

(Vingilis et al., 2013)
3. High-risk driving tendencies & everyday violations

**Everyday violations**

- Ordinary violation (i.e., breaking traffic rules)
- Aggressive violation (i.e., aggressive acts toward another road user)
Findings

\[ \chi^2/df = 30.03/16 \quad \text{RMSEA} = 0.05 \quad \text{SRMR} = 0.04 \quad \text{CFI} = 0.98 \]
Findings

changes in legislation

general attitude

legislation about stunt acts

ordinary viol.

aggressive viol.

offences

(Yildirim-Yenier et al., 2015)
DISCUSSION

- Deterrent impact of the concerned laws
- Correlates of high-risk driving identified
- Transferred to everyday driving
THANK YOU!