Relationships between Sensation Seeking, Speeding Attitudes and Driving Violations among a Sample of Motorsports Spectators and Drivers

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Once there was only horse racing...

Motor racing started in the late of 1800`s with the invention and development of motorized vehicles and has become a popular sport.
Commonly held in Canada, Australia, and the US

Both positive and negative effects on the general public and attendees:

**Positive:**
- Safety related messages
- Social and psychological benefits

**Negative:**
- Promotion of alcohol
- Noise and air pollution
- Collision and injury risks on the race track
Motorsport and risky driving on public roads

- **Fischer, Hatch, and Paix (1986)**
  - Grand Prix in 1985 in Australia
  - 34% increase in causalities resulting from collisions on public roads
  - Off-track imitation of motorsports driving
Motorsports and risky driving on public roads

  (among males under 25 years of age)

- Interest in motorsports
- Self-reported driving violations
- Speeding attitudes
Motorsports and risky driving on public roads

- Tranter and Warn (2008)
  (among males over 25 years of age)

- Interest in motorsports
- Speeding violations
- Speeding attitudes

INTRODUCTION
Sensation seeking

- A trait defined as the need for novel and intense sensations and experiences (Zuckerman, 1994)
  - Associated with involving in dangerous sports
  - Demonstrated relationships with interest in motorsport, speeding attitudes, and driving violations (Warn, et al., 2004; Tranter & Warn, 2008)
Theoretical framework

Vicarious learning (Bandura, 1986)

1. Acquire new behavior patterns and evaluative standards just by observing other people`s behaviors and the results of these behaviors
   - Particular acts performed and glorified such as high speed driving

2. Strengthen/weaken inhibitions on already learned behaviors based on rewarding or punishing consequences
   - May be perceived as less dangerous
   - Drivers` high-level skills and crash-protective cars

3. Vicarious emotional arousal
   - Anticipate experiencing similar emotions if they are to perform similar behaviours
Theoretical framework

- These points are mainly related to spectators` exposure
- Motorsport drivers had more speeding violations on public roads than non-racing drivers (Williams and O’Neill, 1974)
- No study on spectators and drivers

Objective

To examine the relationships between sensation seeking, speeding attitudes and speeding violations among motorsports spectators and drivers
Procedure

- Web-based survey
- Members and visitors of car club and racing websites in southern Ontario
- 134 identified websites
- 111 had an active email address
- The response rate was 26.1%
Sample

- 408 subjects (381 male, 27 female)

- Driving frequency (h/week): $M = 14.2$; $SD = 10.8$
Measures

Motorsport involvement

- “Have you ever attended an official racing event as a **SPECTATOR**?”
- “Have you ever been a **DRIVER** in an official racing event?”

A new category formed including:

- 136 only spectators
- 224 drivers
- 48 not involved
Measures

Sensation seeking

- Driving-specific measure
- 8-item Driver Thrill Seeking Scale (Stradling et al., 2004)
  - “I get a real thrill out of driving fast”
  - “I sometimes like to frighten myself a little while driving”

Scored on “1=strongly disagree – 7=strongly agree”
Measures

Attitudes

➢ **Attitudes towards speed limits on roadways**

➢ **Competitive attitudes towards driving**

- If the current speed limits on different roadways should be changed (e.g. roads in the city, two-lane highways)
- Scored on “1=lowered, 2=kept the same, 3=raised”
Measures

Attitudes

- Competitive attitudes towards driving

5-item scale (Patil, et al. 2006)

- “It is fun to beat other drivers when the light changes”

- “It is a thrill to out-maneuver other drivers”

- Scored on “1=strongly disagree – 4=strongly agree”
Measures

Self-reported driving violations

- 16 general driving violation items (based on the DBQ)
- Frequency of performing each violation in general
  - Exceed the speed limit in populated areas (*speeding*)
  - Honk your horn out of frustration (*aggressive driving*)

Scored on “0=never – 5=nearly all the time”

Factor analysis:
- *speeding violations* & aggressive violations
Path analysis

Spectators:

- Sensation seeking
- Competitive attitudes towards driving
- Attitudes towards speed limits
- Speeding violations

\( \chi^2/df = 1.58/1; \ RMSEA = .065; \ SRMR = .03; \ CFI = 1.00 \)
**RESULTS**

Path analysis

**Drivers:**

- Sensation seeking
- Competitive attitudes towards driving
- Attitudes towards speed limits
- Speeding violations

\[ \chi^2/df = 1.02/1; \ RMSEA = 0.01; \ SRMR = 0.02; \ CFI = 1.00 \]
Spectators & Drivers

- Sensation seeking
- Speeding violations
- Competitive attitudes

Only Drivers

- Sensation seeking
- Attitudes towards speed limits
- Speeding violations
THANK YOU

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