

THE ROAD TRAFFIC INJURES RESEARCH NETWORK

Grant for Junior Researchers

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Risky Driving Behaviors and Driving Style: Their relation to Alcohol Drinking Patterns

Aims

1. to evaluate the association between drinking patterns and driving style
2. to evaluate the association between drinking patterns and specific risky driving behaviors

Participants

A convenience sample of 650 drivers drawn from the general adult population in Mar del Plata, Argentina.

Measures and data analysis

A structured questionnaire was developed to assess drinking patterns, alcohol use disorders, driving style and traffic crashes during the previous twelve months before the study. Driver social desirability bias was also evaluated. Four mutually exclusive drinking patterns were created. Logistic regression analyses were subsequently performed.

Results

Aim 1.

Heavy drinkers (either binge or not) were more likely to engage in speeding [OR=3.2 (95% CI: 1.8-5.9), $p < .05$] and running red lights [OR 4.1 (95 % CI:1.9-9.2) $p < .05$].

This association was observed even after adjusting for impulsive sensation seeking [OR=2.8 (95% CI:1.5-5.2), $p < .05$], [OR=3.7 (95% CI: 1.6-8.2) $p < 0.5$], and for impulsive sensation seeking and driver social desirability [OR=2.0 (95 % CI: 1.0-3.7), $p < 0.5$], [OR=2.6 (95 % CI: 1.1-6.0) $p < 0.5$].

Aim 2

Heavy drinkers (either binge or not) were also more likely to present an aggressive driving style [OR=4.0 (95% CI: 2.3-6.8) $p < 0.5$], OR =3.7 (95% CI: 1.8-7.7) $p < 0.5$] and less likely to present an anxious driving style [OR=.5 (95% CI:.3-.9) $p < 0.5$], [OR=.4 (95% CI: .2-.9) $p < 0.5$].

Conclusion

Although alcohol impaired driving has been widely studied, less is known about the influence of heavy chronic alcohol intake on driving behavior. Our work allows to provide reliable information on this topic. We found that some risky driving behaviors and some driving styles are significantly associated with heavy drinking patterns. This findings are of a great importance, and as far as we know are the first of this kind in our country. This results allow the identification of groups of drivers who tend to perform risky behaviors, and thus could be involved in traffic crashes. Results could contribute to a better allocation of resources and prevention efforts.

Limitations

- The use of a convenience sample which might generate a selection bias
- The use of self-reports measures

Lines of research

- 1.- Development and validation of driving self-reports.
- 2.- Individual differences in driver inattention.
- 3.- Emotion while driving.
- 4.- Personality traits and driving behavior.
- 5.- Risk behaviors in motorcycle riders.