

A longitudinal study evaluating work driving safety interventions implemented by a number of organisations

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Abstract

Driving for work is potentially one of the riskiest activities undertaken in the course of a person's day. This paper reports on a longitudinal study involving four organisations that participated in a work driving safety program. Each organisation implemented a range of driving safety strategies and interventions designed to improve work driving safety. This research investigated the impact of the range of work driving safety intervention strategies implemented by each organisation over a number of years. The practical implications and limitations of the results obtained in this study will be discussed.

Background

Driving for work is potentially one of the riskiest activities undertaken in the course of a person's work, which is evidenced by the over representation of work related crashes and injuries involving the operation of motor vehicles while undertaking work activities (World Health Organization, 2013). In Australia, road trauma is the most common form of work-related death, injury and absence from work (Haworth, Tingvall & Kowadlo 2000; Safe Work Australia, 2015). In contrast to other risks and hazards within the workplace, research indicates that many organisations are failing to adequately manage risks associated with work driving (Haworth, Greig & Wishart, 2008; Wishart, 2015). Consequently, work-related road safety and risk management is an area within road safety that is gaining increased attention due to the substantial physical, emotional, and economic costs to the community that are associated with work-related road crashes. In an effort to improve work driving safety organisations often implement various intervention strategies without comprehensively evaluating the success (or otherwise) of interventions. This research consists of a longitudinal study involving four organisations that implemented a range of different work driving safety strategies specifically to improve work driving safety within their light vehicle fleets.

Methods and Results

Four organisations operating light vehicle fleets participated in the study. A number of self-report surveys were administered to the employees of each organisation over a three year period. Survey measures included self-report driving behaviours, attitudes and safety climate. Vehicle crash data of each organisation was also collated longitudinally.

The results from the survey indicated that each participating organisation demonstrated a decline in self-reported aberrant driving behaviours and unsafe driving attitudes over the period of the study. Results also indicated that two organisations showed an improvement in their safety climate.

The results from the crash data indicated that two organisations reported a reduction in crashes and crash costs over time. In contrast, one organisation demonstrated an increase in the frequency of crashes and costs while another organisation, although increasing the frequency of crashes, a decrease in overall crash costs over time.

Conclusion

The results of this study provide a number of implications for further research within the work driving setting, particularly in regards to the use of both self-report data and actual crash data in evaluating intervention strategies to improve work related driving safety. The practical implications for industries associated with the results of this program of research will also be discussed, along with the limitations of the study.

References

- Safe Work Australia. (2015). *Work-related traumatic injury fatalities, Australia 2014*. Canberra, Australia: Safe Work Australia.
- World Health Organization. (2013). *WHO global status report on road safety 2013: supporting a decade of action (9241564563)*. Retrieved from Geneva:
- Haworth, N., Tingvall, C., & Kowadlo, N. (2000). *Review of best practice road safety initiatives in the corporate and/or business environment (No. 166)*. Clayton: Monash University Accident Research Centre.
- Haworth, N., Greig, K. & Wishart, D. (2008). *Improving fleet safety- Current approaches and best practice guidelines*. Report prepared for Austroads Project SS1026.
- Wishart, D. (2015). *The challenge of developing a fleet driving risk assessment tool: What can be learned from the process?* Queensland University of Technology, Brisbane.