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Organisational Driving Safety Systems Analysis: Fleet Safety Situational Issues and System Gaps

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Abstract

The identification of safety hazards and risks and their associated control measures provides the foundation for any safety program and essentially determines the scope, content and complexity of an effective occupational health and safety management system. In the case of work-related road safety (WRRS), there is a gap within current knowledge, research and practice regarding the holistic assessment of WRRS safety systems and practice. In order to mitigate this gap, a multi-level process tool for assessing WRRS safety systems was developed from extensive consultation, practice and informed by theoretical models and frameworks. Data collection for the Organisational Driving Safety Systems Analysis (ODSSA) tool utilised a case study methodology and included multiple information sources: such as documents, archival records, interviews, direct observations, participant observations, and physical artefacts. Previous trials and application of the ODSSA has indicated that the tool is applicable to a wide range of organisational fleet environments and settings. This paper reports on the research results and effectiveness of the ODSSA tool to assess WRRS systems across a large organisation that recently underwent considerable organisational change, including amalgamation of multiple organisations. The outcomes of this project identified considerable differences in the degree by which the organisation addressed WRRS across their vehicle fleet operations and provided guidelines for improving organisations' WRRS systems. The ODSSA tool was pivotal in determining WRRS system deficiencies and provided a platform to inform mitigation and improvement strategies.

Introduction

In Australia a large proportion of motor vehicles on the road are utilised for work purposes (AFMA, 2008; Rowland, Wishart, McKenzie & Watson, 2012). Research and occupational safety statistics indicate that road crashes are the most common form of work-related fatalities; with a high proportion of work-related deaths occurring during work-related vehicle travel (Haworth, Tingvall & Kowadlo, 2000; SafeWork Australia, 2012). The Australian Work, Health and Safety Act 2011 requires employer organisations and other stakeholders to ensure a safe place to work and safe system of work in the use of all work-related vehicles. However, despite the legal obligations associated with national Work, Health and Safety legislation, many organisations lack commitment and systems to address work-related driving safety. For example, many organisations fail to develop and implement the necessary risk management frameworks and processes central to minimising work-related road safety (WRRS) risk (Rowland, Watson & Wishart, 2006; Rowland, Wishart & Davey, 2005; Rowland, Wishart, McKenzie & Watson, 2012).

Previous research has suggested that upon a serious event occurring, organisations immediately express a strong desire for future prevention of similar incidents however are unclear about where to start or are generally limited in specific knowledge and experience relating to WRRS issues and subsequent control measures (Wishart, Rowland, Freeman & Davey, 2011). Consequently, organisations tend to focus on intervention strategies targeted towards the driver and driving behaviour without investigating the systems or processes impacting upon driver behaviour and safer vehicle operation (Haworth Greig & Wishart, 2008; Rowland, Davey, Freeman, & Wishart, 2008; Rowland, Wishart, McKenzie & Watson, 2012). In contrast, evidence suggests that strategies to address the WRRS problem should be directed toward the employer organisation and its safety system, as well as driver skills, ability and behaviour

(Rowland & Wishart, 2014). This concept is similar to the safe systems approach utilised in general road safety whereby road safety improvement is holistically undertaken and not solely focussed on individual factors.

Method

The identification of safety hazards and risks and their associated control measures provides the foundation for any safety program and essentially determines the scope, content and complexity of an effective occupational health and safety management system. In the case of WRRS, there is a gap within current knowledge, research and practice regarding the holistic assessment of WRRS safety systems and practice. In order to mitigate this gap, the Organisational Driving Safety Systems Analysis (ODSSA), a multi-level process tool for assessing WRRS safety systems was developed from extensive consultation, practice and informed by theoretical models and frameworks. In addition, the development of the ODSSA further expands previous tool and process development (Rowland & Wishart, 2014). Data collection for the ODSSA tool utilised a case study methodology and included multiple information sources: such as documents, archival records, interviews, direct observations, participant observations, and physical artefacts. The multi-level process adopted a triangulation approach with the data from each stage (or part) of data collection being drawn from different sources. For example, the data collection process of the original ODSSA is divided into four major parts (see Appendix A): 1) a review of organisational WRRS records, documentation and initiatives, including an analysis of crash data, prior to any organisation site visits; 2) on site interviews with all levels of staff related to WRRS practice within the organisation; 3) observations of WRRS activities at sites/workplaces; and 4) organisational physical artefacts including site and vehicle inspections. Previous trials and application of the ODSSA has indicated that the tool is applicable to a wide range of organisational fleet environments and settings (Rowland & Wishart, 2014; Wishart, Davey, Rowland, Freeman & Banks, 2009; Wishart & Rowland, 2010; Wishart & Rowland, 2012).

This extended abstract reports on the effectiveness of the ODSSA tool to assess WRRS systems across a sizeable organisation operating a large and diverse vehicle fleet. Although the organisation stated that they wanted their organisation name and specific area of operations to remain confidential, the organisation's industry is a local government authority operating in regional Queensland, Australia.

Results

Results indicated that across the organisation there was a lack of recognition and prioritisation of the dangers and risks associated with work-related driving with the same consideration as other workplace hazards. As explained below this was evidenced by deficiencies identified in processes associated with policy documentation, employee interviews, crash reporting and recording and direct observations. Additionally, the organisation failed to adequately allocate effective ownership and accountability for WRRS operations, with many in management neglecting commitment and support for fundamental aspects of their respective WRRS system. Overall the organisation has a range of initiatives and processes occurring that aim to improve work related driving safety within the organisation. However, potentially due to issues such as amalgamation and diversity of departments across different geographical locations there is evidence indicating that many of these processes are substantially compartmentalised.

The ODSSA highlighted limited documentation related to organisational WRRS policy, procedures, processes and practice. Policy and procedures state the "rules" by which all staff are required to comply, thereby ensuring that all staff are operating under the same guidelines and conditions. For example, safe driving procedures, induction requirements, risk assessment, fatigue management, journey management, maintenance and pre-start vehicle check guidelines, licence requirements, infringement and repeat offender management were not formally addressed by the organisation. Staff interviews also highlighted a

lack of WRRS awareness, formalised policy and procedures, communication, responsibility, accountability and commitment. In addition, reporting, recording and analysing data, such as crash-related data, was poorly undertaken. The major concern in this area is a lack of attention to the details in reporting and recording crashes. Observations indicated considerable inconsistency across the organisation in relation to WRRS, with operational processes, practice and training varying across departments. For instance, although certain WRRS training was developed in one department, the training was not formalised or recognised across the organisation. In addition, management commitment to WRRS also differed across the organisation. From the site and vehicle inspections there seemingly exist elements of poor attitude and behaviour towards the organisation's vehicles and their use; such as "it's not my car I don't care" attitude. Examples include poor condition of some vehicles and objects inside the vehicle cabin which could become a dangerous safety hazard in the event of a crash.

Conclusion

The ODSSA tool was pivotal in determining the extent of WRRS policy, procedures, processes and practice within the participating organisation. In addition, the results suggest that the ODSSA tool may be applicable to a wide range of organisational fleet environments to assess WRRS, associated safety systems and inform strategies to reduce organisational work driving risk. Encouragingly, the organisation expressed a willingness to improve its current WRRS systems albeit lacking the necessary knowledge, experience and current allocation of resources to make all the necessary changes. However, results indicated that across the organisation there was a lack of recognition and prioritisation of the dangers and risks associated with work-related driving with the same consideration as other workplace hazards. Additionally, the organisation failed to adequately allocate effective ownership and accountability for WRRS operations, with many in management neglecting commitment and support for fundamental aspects of their respective WRRS system.

A further data collection stage for the ODSSA is currently under development which involves including a process that provides a baseline indicator of the level where the organisation is in regard to safety development (see Appendix A). The psychosocial measures stage will enable the quantitative evaluation of a range of potential influences to work driving safety such as organisational culture, attitudes and motivations.

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Appendix A: Organisational Driving Safety Systems Analysis

