Occupational driver safety: Conceptualising a leadership-based intervention to improve safe driving performance

Sharon Newnam a,b, *, Ioni Lewis b,1, Barry Watson b,2

a Monash Injury Research Institute, Monash University, Building 70, VIC 3800, Australia
b Centre of Accident Research and Road Safety, Queensland University of Technology, Kelvin Grove, Queensland 4059, Australia

A R T I C L E   I N F O
Article history:
Received 8 March 2011
Received in revised form 29 September 2011
Accepted 4 November 2011

Keywords:
Occupational driving
Work-related driving
Safety climate
Safety values
Leader–member exchange

A B S T R A C T
Occupational driving crashes are the most common cause of death and injury in the workplace. The physical and psychological outcomes following injury are also very costly to organizations. Thus, safe driving poses a managerial challenge. Some research has attempted to address this issue through modifying discrete and often simple target behaviours (e.g., driver training programs). However, current intervention approaches in the occupational driving field generally consider the role of organizational factors in workplace safety. This study adopts the A-B-C framework to identify the contingencies associated with an effective exchange of safety information within the occupational driving context. Utilizing a sample of occupational drivers and their supervisors, this multi-level study examines the contingencies associated with the exchange of safety information within the supervisor–driver relationship. Safety values are identified as an antecedent of the safety information exchange, and the quality of the leader–member exchange relationship and safe driving performance is identified as the behavioural consequences. We also examine the function of role overload as a factor influencing the relationship between safety values and the safety information exchange. Hierarchical linear modelling found that role overload moderated the relationship between supervisors’ perceptions of the value given to safety and the safety information exchange. A significant relationship was also found between the safety information exchange and the subsequent quality of the leader–member exchange relationship. Finally, the quality of the leader–member exchange relationship was found to be significantly associated with safe driving performance. Theoretical and practical implications of these results are discussed.

© 2011 Elsevier Ltd. All rights reserved.

1. Introduction

Considerable research has established the role of safety values/climate (Neal and Griffin, 2006; Newnam et al., 2008; Zohar, 2000, 2010), role demands (e.g., Hofmann et al., 1995), supervisory safety practice (e.g., Zohar, 2002a; Zohar and Luria, 2003, 2004), and social exchanges (Hofmann and Morgeson, 1999; Hofmann et al., 2003) in improving safety outcomes. However, with the exception of two papers (Griffin and Neal, 2000; Newnam et al., 2008) there has been minimal attempt to integrate these streams of research within a conceptual framework designed to distinguish the mechanism influencing safety performance. Utilizing the A-B-C framework of behaviour modification (i.e., antecedents, behaviour, consequences; see Luthans and Kreitner, 1985; Stajkovic and Luthans, 1997), the aim of this study is to examine the contingencies (i.e., antecedents and consequences) that promote effective supervisory safety practices. The performance of interest in the current study is occupational driving.

Supervisory safety practices have been referred to as the frequency of safety-oriented interactions, or task-oriented action patterns, between a supervisor and their subordinate (Zohar, 2002a; Zohar and Luria, 2004). The role of modifying supervisory safety practices as a method of improving safety outcomes has been well established in the research literature (Zohar, 2002a; Zohar and Luria, 2003, 2004). Effective supervisory safety practices have been found to be associated with an increase in group-level safety climate perceptions (i.e., the priority given to safety over competing task demands) and a reduction in injury rates (Zohar, 2002a; Zohar and Luria, 2003). Furthermore, context specific leader attributes have been identified as an indirect determinant of injury rate (Zohar and Luria, 2004). This research establishes strong support for the role of effective supervisory practices in improving safety outcomes.

Past research that has investigated supervisory practices has utilized samples with the capability of high visibility, which has