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Driver as flashpoint: Designing out crime in the Australian urban bus transport sector

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DRIVER AS FLASHPOINT:
DESIGNING OUT CRIME IN THE AUSTRALIAN URBAN BUS TRANSPORT SECTOR

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ABSTRACT

This paper explores the prevalence, incidence and consequences of verbal and physical attacks against bus drivers as part of the initial descriptive phase of an ongoing research project. There appear to be no Australian studies investigating on-board violence against drivers and very few in the international literature. In addition there is a low level of reporting of incidents (10%) and so a key focus of the current project is to design an innovative data collection tool. The ultimate aim of the year-long study, however, is to explore design features (largely drawing on the field of situational crime prevention) that may impact on this apparently increasing phenomenon of antisocial behaviour and criminal offending on urban buses. Preliminary discussions with drivers and initial observation sessions have identified a number of "unsafe" features that highlight significant vulnerabilities for drivers, and these are presented here.

1. DRIVER AS FLASHPOINT

The potential for violence against bus drivers is exacerbated by a suite of factors relating to their isolation, low levels of guardianship, immediate proximity to passengers and the fact that they engage in cash handling procedures (Couto et al 2009; Essenberg 2003; Kompier & DiMartino 1995; Moore 2010; Morgan & Smith 2006). Studies indicate that the majority of public transport-related workplace violence (73%) is linked to buses ahead of other transit sectors such as trains and taxis (Burrell 2007; Merecz et al 2009) and that these offences are predominantly of a serious and violent nature (83%), such as robbery and wounding (Burrell 2007).

Over the last two decades consistent patterns of occupationally related illness have been reported in urban drivers such as cardiovascular disease, fatigue, high blood pressure, early death (Evans & Johansson 1998) and elevated levels of stress-related hormones such as adrenaline and cortisol (Kompier & Di Martino 1995). One study found that 13 percent of bus drivers suffered mental ill-health that was comparable with psycho-neurotic outpatients (Duffy & McGoldrick 1990) and another that 23 percent met criteria for chronic posttraumatic stress disorder, a rate similar to victims of natural disasters (Fisher & Jacoby 1992). Other research has reported on psychological outcomes for drivers that include high levels of pervasive and persistent feelings of hopelessness, clinical depression, anxiety and hypervigilance (Tse et al 2006).

2. LOW REPORTABILITY AND ABSENCE OF DATA

Although some Australian studies have considered occupational stress for bus drivers (Shapiro et al 1983), crime prevention in the transport sector (Easteal & Wilson 1991), assaults on taxi drivers (Mayhew 2000) and more recently general workplace violence (Mayhew & Chappell 2007), research specifically involving violence against Australian bus drivers is non-existent. Furthermore, there are no central data collection agencies with the remit to gather and analyse the incidence of disorder and crime in our bus networks as is available in places like the UK (Morgan & Smith 2006).

In regard to the reliability of driver incident reports which are most often held by private providers of transport services it is suggested, from the international arena, that less than ten percent of attacks are reported by drivers in any official capacity (Bishop et al 2009). Three main reasons have been posited for this underreporting (Bishop et al 2009):

• Management inaction — that nothing would result from the reporting of incidents despite policies to the contrary
• Time constraints and paperwork — that the complex forms require additional time and commitment at the end of a busy shift
• Hypermasculine culture — that there is a perception that low-level incidents should be dealt with by the drivers and it was better not to cause a "fuss".

3. DRIVERS' PERSPECTIVES

Preliminary discussions with drivers and initial observation sessions yielded a number of common themes about environments and facilities identified as "unsafe". The following seven images provide examples of problematic bus design, safety features and external environments. Images 1 to 4 demonstrate the heightened vulnerability of drivers related to aspects of the interior and exterior bus design and amenities. While screening drivers (Image 1) has been implemented in some jurisdictions in Australia, concerns have been expressed about the capacity of offenders to cause physical harm while simultaneously using the screen for their own protection. Similarly there have been attempts to address cash handling issues but here as is shown (Image 2) the cash is highly visible, unprotected and in close proximity to the driver. A further design feature is the emergency door release (Image 3) that is on the outside of the rear door and is not alarmed. When pressed, the back door can be opened without the authority (and sometimes without the knowledge) of the driver.

Another important consideration relates to the venues provided for drivers for meal and comfort breaks. Image 4, for instance, shows a designated meal location that includes a small public toilet block deep within a park where drivers state that they feel at risk of assault. Images 5 and 6 provide examples of problematic commercial and environmental design. In these locations missiles are commonly thrown at or dropped on buses from the top verandah of a popular inner-city hotel (Image 5) and a maze of shrubbery at a major bus interchange (Image 6) affords concealment for offenders throwing rocks and other objects. Image 7 demonstrates that antisocial behaviours may be addressed by changes in interior design or décor, even on "hot" routes and during "hot" times. This image of a "Santa" bus with its themed lights and garlands has been employed on busy routes at peak times and reportedly remains relatively "trouble-free".

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Our initial discussions with informants in this study have also yielded criticisms and considerations regarding some prevention techniques and the manner in which they have been implemented. It should be noted that many of these strategies are not currently operating in the study area of the Gold Coast, but some drivers have experience of them in other states/territories. Drivers complain that target hardening using screens makes it difficult for them to hear and interact with passengers and the design of the screens means that there remains ample potential for them to be physically attacked. Other reactive measures such a spit kits to capture DNA or the use of CCTV, garners little support from drivers because they had little faith in the justice processes that would render these techniques effective.

With respect to the provision of additional measures such as the use of alarms to summon police, mobile security units or security staff at bus stops, there was a general pessimism about the efficacy of these interventions. Finally, in regard to the introduction of automated ticketing systems (eg the Go-Card in Queensland), drivers reported that there had been no discernible decrease in cash-handling as passengers were frequently asking for top-ups of small amounts such as five dollars when boarding.

IMAGE 1. Driver security screen

IMAGE 2. Unprotected cash handling

IMAGE 3. Exterior door release

IMAGE 4. Isolated driver stop

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IMAGE 5. Hot spot for drivers

IMAGE 6. Concealment behind hedge

IMAGE 7. Decor influences behaviour

FIGURE 1: Drivers' perspectives on a range of crime prevention measures

SCREENS	Can't hear, still accessible, disrupts interaction with passengers
SPIT KITS	Reactive only, lack of faith in justice processes, may be no match
CCTV	Reactive only, often not operational, rarely monitored
SIGNS	Mostly ignored, not attractive/hard to read, too many/cluttered
ALARMS	Too few units to respond, only useful if quick response time
SECURITY	Need to be on-board, often poor personnel choice
FARE CARDS	Few machines, increased cash handling, frequent small top-ups

4. THE RESEARCH PROJECT

An earlier phase of our research program involved the production of a scoping paper, Behind the Wheel and in the Line of Fire (Huntingdon & Lincoln 2012) that summarised the international literature, isolated promising crime prevention techniques and included a media content analysis of the state-based daily newspaper over a five-year period. The findings of the media analysis revealed that service issues (43%) comprised the largest proportion of bus-related newspaper articles followed by crime/disorder incidents (29%) as the next largest category.

The scoping paper provided a platform for discussions with industry groups and to that end a presentation was made to representatives of the Transport Workers Union in August 2012, and in attendance was the Minister for Transport in Queensland, Mr Scott Emerson. This has now led to significant federal government funding from the Researchers in Business scheme where the criminology researchers from Bond University will collaborate with industry partners (namely, the Transport Workers Union, Surfside Buslines, the Queensland Bus Industry Council and TransLink). While the project is limited, at present, to southeast Queensland there are plans to embark on national research in the future.

The project will be funded for twelve months from January 2013 and comprise three stages. The first stage involves a series of focus groups with bus drivers to gather qualitative data on general workplace and service issues, crime and disorder problems, and their perspectives on potential prevention strategies. Another descriptive stage of the project involves ride-along observational sessions targeting a selection of the most problematic routes as well as in-depth interviews with key stakeholders (politicians, union leaders, commuter groups). A survey of drivers is to be distributed to yield broader quantitative data. The third stage comprises the design and installation of tablet devices on buses that will be programmed to capture details about incidents of violence and antisocial behaviour. The results of the analyses of these data will provide, for the first time in Australia, a comprehensive picture of the nature and level of disorder and crime on buses in an urban environment and potential crime prevention measures to deal with these issues.

REFERENCES

Bishop, V, Cassell, C & Hoel, H 2009, 'Preserving masculinity in service work: an exploration of the underreporting of customer anti-social behaviour', Human Relations, vol. 62, no. 1, pp. 5-25.

Burrell, A 2007, Violence On and Around Public Transport, West Midlands Crime Science Lab Research Report, Jill Dando Institute of Crime Science, UCL, London.

Couto, MT, Lawoko, S & Svanstrom, L 2009, 'Exposure to workplace violence and quality of life among drivers and conductors in Maputo City, Mozambique', International Journal of Occupational and Environmental Health, vol. 15, pp. 299-304.

Duffy, C & McGoldrick, A 1990, 'Stress and the bus driver in the UK transport industry', Work and Stress, vol. 4, pp. 17–27.

Easteal, P & Wilson, P 1991, 'Preventing crime on transport: rail, buses, taxis, trains', Crime Prevention Series, no. 8, Australian Institute of Criminology, Canberra.

Essenberg, B 2003, Violence and Stress at Work in the Public Sector, International Labor Office, Geneva.

Evans, G & Johansson, G 1998, 'Urban bus driving: an arena for the study of occupational health psychology', Journal of Occupational Health Psychology, vol. 3, pp. 99-108.

Fisher, N & Jacoby, R 1992, 'Psychiatric morbidity in bus crews following violent assault: a follow-up study', Psychological Medicine, vol. 22, pp. 685–693.

Huntingdon, Y & Lincoln, R 2012, Behind the wheel in the line of fire: a preliminary study of violence against bus drivers from a crime prevention perspective, Bond University, Gold Coast.

Kompier, M & Di Martino, V 1995, 'Review of bus drivers' occupational stress and stress prevention', Stress Medicine, vol. 11, no.1, pp. 253-262.

Mayhew, C 2000, 'Preventing assaults on taxi drivers in Australia', Trends and Issues in Crime and Criminal Justice, no. 179, Australian Institute of Criminology, Canberra.

Mayhew, C & Chappell, D 2007, 'Workplace violence: an overview of patterns of risk and the emotional/stress consequences on targets', International Journal of Law and Psychiatry, vol. 30, nos. 4-5, pp. 327-339.

Merecz, D, Drabek, M & Moscicka, A 2009, 'Aggression at the workplace: psychological consequences of abusive encounter with coworkers and clients', International Journal of Occupational Medicine and Environmental Health, vol. 22, no. 3, pp. 243-260.

Moore, S 2010, 'Preventing anti-social behaviour on public transport: an alternative route?', Crime Prevention and Community Safety, vol. 12, no. 3, pp. 176-193.

Morgan, R & Smith, M 2006, 'Crimes against employees: assault and robbery' in M Smith & D Cornish (eds.), Secure and tranquil travel, Jill Dando Institute of Crime Science, UCL, London.

Shapiro, R, Western, J, Jones, J & Makkai, T 1983, 'The driver driven: a study of stress in Brisbane bus drivers', Social Alternatives, vol. 3, no. 4, pp. 43-45.

Tse, J, Flin, R & Mearns, K 2006, 'Bus driver well-being review: 50 years of research — transportation research part F: traffic, Psychology and Behaviour, vol. 9, no. 2, pp. 89-114.

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