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Aggressive events on-board buses between drivers and passengers: an analysis of CCTV footage

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**AGGRESSIVE EVENTS ON-BOARD BUSES
BETWEEN DRIVERS AND PASSENGERS:
An Analysis of CCTV Footage**

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ABSTRACT

Bus drivers face an increased risk of customer violence and there have been a number of high profile assaults across Australia in recent years. However little is known about the nature of these aggressive encounters. Existing research is focused on taxis, trains and airlines, tends to be cross-sectional, and there is very little emanating from Australian-based research that recognises local differences. The current study utilises CCTV as a novel observational tool to analyse 20 cases of physical violence between drivers and passengers on-board. It adopts an in-depth qualitative case study approach and draws on frameworks offered by Situational Crime Prevention and Routine Activity Theory to foster a crime event sensibility and understand the dynamic, interactive nature of the encounters. Specifically, the research examined how aggressive driver-passenger events emerge, unfold and evolve in time and space, paying attention to proximal contributing factors, types of violence, who is involved and how. Subsidiary issues include the fluid nature of violence, including processes of volatility and escalation, and the role of the audience in aggressive encounters.

Key findings to emerge include an absence of volatility during the incidents. Conflict is precipitated by a multiplicity or build-up of proximal factors operating in the immediate environment that progressively increase frustration for all parties involved. This frustration is logical and rational, relating to four main issues: disputes over fares, refusal of service, service quality and rule enforcement. There are distal factors at play, including isolation, mobility and the low status nature of bus driving. Conflict escalates from the verbal to the physical realm, although there is not a one-directional linear pattern. The violence increases and decreases in severity, and potentially increases again. Similarly, there are exit or termination points where aggression can cease or continue. The violence has ripple or spill over effects where other people become involved and affected, which can influence perceptions of service, safety and security in the bus environment. These findings combined encapsulate the concept of the “wave of crime” revealed in the present research.

Keywords: workplace violence, customer aggression, bus drivers, passengers, crime event perspective, CCTV as a research tool, crime prevention.

DECLARATION

This thesis is submitted to Bond University in fulfilment of the requirements of the higher research degree of Master of Philosophy. This thesis represents my own original work towards this research degree and contains no material which has been previously submitted for a degree or diploma at this University or any other institution, except where due acknowledgement is made.

By.....

Adrienne Gregory, BSocSci

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PREFACE AND ACKNOWLEDGEMENTS

The genesis of this thesis grew out of work undertaken while employed as principal research assistant on a federally-funded project into the nature, extent and prevention of violence and incivility against urban bus drivers (hereafter the “RiB Project”). One of my responsibilities during the project was to research and write an introduction and comprehensive literature review on workplace violence, transit crime and occupational health and safety in the bus industry. Excerpts from these sections were presented and adapted across several project related reports and papers, one of which has been published (see Lincoln & Gregory, 2015). As a point of disclosure, I note that there is some, albeit limited, overlap between that which appeared in those project related papers and parts of this thesis, including small sections of the introduction and literature review pertaining to the risk of workplace violence among bus drivers and patterns in occupation related illness, but redrafted in this dissertation.

I was also tasked with collecting and conducting an exploratory quantitative analysis of a limited sample of the CCTV data provided by the key project partner, Surfside Buslines, as well as writing up the associated methodology and results. The project supervisor, Assistant Professor Robyn Lincoln, assisted in editing and advancing certain conceptual and operational ideas throughout the early stages of this process. While some of the files and variables from the original CCTV analysis were used in the research upon which this thesis is based, it must be stressed that additional CCTV footage was collated and a wholly new set of variables was devised to form the analytical component.

I am grateful to have had the opportunity to work on the RiB Project as it provided excellent training in “real-world” research. It also furnished me with the topic for this higher degree research — a topic which I believe has both practical implications for prevention of aggression in workplace settings and also explores a totally new form of data, being CCTV images, that have the potential to make a significant contribution to our understanding of crime events. I therefore offer my gratitude to both Bond University and the partners on the project for making the research collaboration possible.

I would like to thank Assistant Professor Robyn Lincoln for her mentorship over the last three years, and the many opportunities she has facilitated to help me grow both professionally and academically. Thank you for your input and guidance in researching and writing this thesis, as well as your unwavering patience and encouragement in overcoming the many hurdles along the way. Your continual support has been invaluable in helping me reach this milestone. I am also grateful to my family and friends for their love and support throughout all of my studies, and particularly during the time I have been undertaking this higher degree research. I am especially thankful to my father Byron for his financial and logistical support, which enabled me to finish this thesis. Most of all, I would like to thank my partner Daniel for his unconditional warmth and understanding through what has been one of my most personally challenging experiences to date; I could not have done this without you.

INTRODUCTION

Buses are one of the fastest growing modes of public transport for commuters, school children, tourists and those participating in the night-time economy (Transport NSW, 2002). A number of factors make buses popular among these groups and will continue to do so in the future, including population growth, affordability, accessibility, increased traffic congestion and environmental concerns (Department of Infrastructure and Regional Development, 2014). The drivers of buses play a pivotal social role in addition to driving and transporting passengers because they also engage in broader community functions pertaining to public safety, social inclusion and tourism. For example, they facilitate safe travel for attendees of the night-time economy and enhance access to educational and employment opportunities, particularly among socioeconomically disadvantaged groups (ABS, 2008; Currie et al., 2009; Edwards et al., 2013; Tillmann, Haveman, Stoppler, Kvas, & Monninger, 2013). Therefore, bus drivers make an important contribution to the longer term social and economic sustainability of communities and this underscores the public service role of their occupation.

However, bus driving is challenging and there is now a significant body of work that addresses the health consequences of the occupation. This research literature spans more than five decades and even in the present much empirical work is being carried out both in Australia and overseas (Shapiro, Western, Jones, & Makkai, 1983; Tse, Flin, & Mearns, 2006). The studies have focused on physical, psychological and behavioural outcomes (e.g. morbidity, mental health, substance use) and many have examined stress related elements, therefore acknowledging that driving a bus is a noxious occupation. This is largely because it involves high job demands and low decision latitudes which together produce job strain and eventually poor health outcomes (Carrere, Evans, Palsane, & Rivas, 1991). However, few studies have explored violence as one of these stressors that has the potential to contribute to the well-being of bus drivers and their ability to carry out their daily functions.

International research suggests that compared to the average worker, public transport staff, particularly bus drivers, face a high risk of abuse (Chappell, 1998; Mayhew, 2000a; Essenberg, 2003; Morgan & Smith, 2006). The threat of passenger

aggression toward bus drivers is correlated with a suite of situational factors inherent to their workplace setting. These include low levels of guardianship, mobility, immediate proximity to passengers, cash-handling, overcrowding, service delays, ticketing issues and dealing with intoxicated passengers (Essenberg, 2003; Chappell & Di Martino, 2006; Morgan & Smith, 2006; Mayhew & Chappell, 2007; Felleson, Salomonson, & Aberg, 2013). Such features are deemed to create “flashpoints” on buses where low levels of conflict (e.g. verbal exchange) can escalate into proscribed criminal behaviours (e.g. physical assault) in a volatile manner (Lincoln & Huntingdon, 2013; Lincoln & Gregory, 2014a).

Studies have demonstrated that passenger aggression is a significant stressor affecting urban bus drivers in a variety of countries. For example, the threat of physical assault from passengers was deemed the highest reported stressor among UK bus drivers (Duffy & McGoldrick, 1990). In Mozambique, 64 percent of drivers and conductors in the bus, minibus and taxi industries reported being victimised at the workplace in the last 12 months, mostly by passengers (Couto, Lawoko, & Svanstrom, 2009). Around 70 percent of Norwegian bus drivers reported experiencing workplace bullying in the last six months, commonly involving passengers (Glaso, Bele, Nielsen, & Einarsen, 2007). The RiB Project in southeast Queensland yielded parallel findings, with 89 percent of drivers enduring physical and verbal assaults as well as incivility and being witness to property damage in the last 12 months (Lincoln & Gregory, 2014a). These findings suggest that passenger aggression is a common occurrence in urban bus environments in a range of countries.

Passenger aggression elicits a suite of negative implications for drivers, other passengers and transit operators. For drivers, passenger aggression has been linked to increased anxiety, stress disorders, depression, temporary or permanent physical ailment and diminished productivity (Fisher & Jacoby, 1992; Tse et al., 2006; Couto & Lawoko, 2011). Among other passengers, witnessing driver assaults can increase fear and anxiety about personal safety and even lead to a normalisation of such conduct (Morgan & Cornish, 2006). For transit operators, passenger aggression has both direct and indirect financial consequences, including litigation, staff turnover, injury related claims, absenteeism, lost revenue through a reduction in usage and costs owing to staff recruitment, training and retention (Essenberg, 2003; Tse et al., 2006). Developing

effective strategies to reduce passenger aggression against urban bus drivers thus represents a key challenge facing transport providers.

Research Rationale

While some research has explored the incidence and prevention of workplace violence in Australia and specifically in the transit sector, very little has focused on violence against bus drivers on-board until the RiB study in Queensland (Lincoln & Gregory, 2015). Instead, the focus has been on taxi drivers (Mayhew, 2000a, 2000c), rail staff (van Barneverld & Jowett, 2005) and flight attendants (Williams, 2000; Goldsmid, Fuller, Coghlan, & Brown, 2016). Although parallels can be drawn between these occupational groups and the settings in which bus drivers work, each mode of public transport contains unique environmental features, and hence the nature of abuse on each system differs and requires a discrete set of solutions (Easteal & Wilson, 1991). Clearly, this has significant implications for the design and implementation of prevention strategies aimed at reducing the problem. Thus, there is a need for research specifically focused on the nature of aggression between passengers and bus drivers. Without such data, it is not only difficult to appropriately tailor responses to the scope and features of the problem, but also difficult to evaluate the effectiveness of implemented schemes (Lincoln & Gregory, 2015).

This is not to deny that the international studies described above on the prevalence of passenger aggression have garnered some data on the nature of the encounters. In Mozambique, frequently reported types of aggression were verbal abuse, pushing and physical assault with objects such as guns, stones, bottles and sticks (Couto et al., 2009). In the US and Canada, problematic types of passenger aggression again included verbal abuse, as well as spitting and projectiles thrown at or inside the bus (Nakanishi & Fleming, 2011). Triggers for driver assaults have been shown to include disputes over fares, intoxication, passenger disdain for drivers, rudeness on behalf of drivers, failure to meet passenger expectations, overcrowding and other rule enforcement (Couto et al., 2009; Paterson, Moreau, Vermuelen, & Cools, 2010; Nakanishi & Fleming, 2011). Most of these findings had parallels in the recently conducted RiB Project (Lincoln & Gregory, 2014a).

While these studies provide some insight into the nature of passenger aggression against bus drivers, a number of limitations remain. Sometimes these relate to the composite nature of the research, for example samples that include taxi or train drivers and ticket collectors as well as bus drivers (e.g. Couto et al., 2009). Additionally, the generalisability of findings may be context-specific. The research conducted in Mozambique is limited to other low income countries with similar transport conditions. Similarly with regard to US research, the transport systems examined involved exact-fare policies and automated fare-collection systems where drivers are not required to engage in any cash-handling procedures. In Australia, however, bus drivers are often required to engage in cash transactions with passengers, and this characteristic alone may result in more diverse manifestations of and contributors to abuse. Additionally, the research has been overwhelmingly quantitative and from the perspective of drivers. There has been little attention paid to the dynamics underlying these aggressive encounters, including the reciprocal nature of violence, and processes such as escalation, volatility and audience involvement. Thus, knowledge about the nature of aggressive driver-passenger encounters on bus networks remains limited.

Research Overview

The current study evolved from a larger federally-funded pilot research strategy into the nature, extent and prevention of violence and incivility against bus drivers (Lincoln & Gregory, 2014a). That project was established in January 2013 under the Enterprise Connect Researchers in Business Scheme (RiB), which supports the placement of researchers into commercial organisations (Enterprise Connect, 2014). It was based in southeast Queensland where the research team were involved in partnerships between Bond University and Surfside Buslines (and their parent company Transit Australia Group), as well as the Queensland Bus Industry Council (a peak industry body), Translink (the state government transport department) and the Transport Workers Union (a national trade union). That exploratory project adopted a multi-method design involving focus groups with drivers, field and CCTV observations, employee surveys, examination of official incident data and policing information, plus formal interviews.

Originally, analysis of CCTV footage was not planned as part of the RiB Project. Yet, one of the prime benefits of undertaking collaborative projects is having access to

data already gathered by industry. While the project involved several other methodologies that each brought their own strengths, the capacity to analyse CCTV footage was an opportunity too important to ignore given that they could be considered the most robust and objective accounts of violent incidents. Presented with this unique opportunity, a preliminary analysis of a small selection of CCTV data was undertaken, although it was limited and somewhat superficial because of budgetary and time constraints. That preliminary examination did not do justice to analysing this unique data source and therefore the present thesis sought to refine the methodology, include better defined variables, and employ a more rigorous sampling frame. To this end it utilised a different and expanded data set up to the year 2014 and a wholly new set of variables was devised to form the analytical component. More importantly, whereas the analysis done for the federally-funded project was highly quantitative and focused on descriptive statistics, the present study adopted an in-depth qualitative approach to address the underlying dynamic processes involved in workplace aggression in a transit setting.

The current research centred on observations of 20 aggressive incidents occurring between bus drivers and passengers captured on the CCTV system of the private bus company. It adopts a case study design as it is of a single company operating in southeast Queensland and treats each incident as an individual case. Some quantitative variables were “counted” to assist in developing an overall picture of the incidents represented in the dataset. The focus however was on the highly detailed and extensive qualitative narratives constructed for each incident to empirically capture the full extent of the event and underlying dynamics. The research firmly adopts an event based perspective whereas most research on workplace violence, and buses in particular, has utilised a cross-sectional, static view of incidents with a binary focus on either targets and perpetrators or causes and outcomes. This fails to account for the interactive, dynamic and social nature of aggressive events in public places where there are a multitude of factors that impinge on violent workplace incidents, which are revised in a continuous loop, encompassing elements such as volatility, escalation and audience involvement. These processes are difficult to capture using more traditional methodologies such as surveys and analysis of official incident reports. Thus, the qualitative, observational and event based approach adopted here is deemed to provide

the platform to explore and tease out these nuanced elements for it is not just about their presence or absence but how they interact in time and space.

The present research is informed by the sub-field of criminology known as Situational Crime Prevention (Clarke, 1997). It is a scientific approach to crime problems firmly grounded in empirical evidence but also applied and practical, comprising a set of techniques for addressing environmental and situational features of crime events. There are five categories for dealing with crime problems: increasing effort and risk, reducing rewards and provocations and removing excuses. Specifically, the framework of Routine Activity Theory is used to inform the present analysis, which encourages examination of the “triangle of crime” or the convergence of actors, targets and guardians in time and space (Cohen & Felson, 1979). It is one of the few theoretical strands that acknowledges the role of third parties and onlookers in the initiation and progression of criminal incidents. Both Situational Crime Prevention and Routine Activity Theory stress the need to examine specific offence categories in-situ and urge the adoption of a crime event approach where the context or situational features and the interrelations among them are fundamental and examined in a detailed manner. Therefore, the present research endeavours to investigate the aggressive events in their situational setting and to examine the minutiae of the four-way intersection among drivers-passengers-guardians-settings. However, it must be stressed that the present study is not intended to be a critique or test of any situational theory or measures but rather draws on its principles to frame the research questions and findings.

Specifically, the research sought to examine how aggressive driver-passenger events emerge, unfold and evolve in time and space, paying attention to proximal contributing factors, types of violence, who is involved and how. Subsidiary issues include the dynamic and fluid nature of violence, paying attention to processes such as volatility and escalation and how these play out during aggressive encounters. Attention is also paid to the role of the audience, including group members or other passengers and members of the public off-board. These broad research questions are reflected in the below to contextualise the present study:

- What are the key proximal factors contributing to abuse on-board buses between drivers and passengers?
- What are the reactions/responses to aggressive events on-board buses?

- What individual or environmental factors are related to the volatility and escalation of violence between drivers and passengers?

A final thread to the observations and analysis is how these results can improve our understanding to assist in developing more tailored responses with reference to crime prevention techniques.

Research Aims and Objectives

The research on which this dissertation is drawn aims to address three main lacunae in our current body of knowledge on workplace aggression (see Table 1). The first major thrust acknowledges that while there is a growing body of research on workplace violence and customer aggression especially for frontline service workers, this has largely been confined to onsite workers such as those in the hospitality and call centre industries. There has been some attention to those who work in the transport sector (taxi drivers, rail staff, flight attendants), but relatively little focus on aggression on-board buses. This is an important area where there has been considerable media attention about violent attacks in Australia in the past four years (e.g. Lewis, 2012; Snowdon, 2014). This thesis will contribute to our knowledge about public transport sector violence and offer some suggestions to deal with this particular form of workplace aggression.

Second, the research provides a unique methodological framework through its use of CCTV as a data source. It takes a novel approach by harnessing and creatively engaging with the products of the ubiquitous installations of CCTV cameras that are used for crime reduction purposes. Few studies have availed themselves of this technological resource, with some exceptions canvassed in the review of the literature that follows. Therefore, the design of this research yields new methodological contributions, particularly but not limited to the discipline of criminology, in the manner in which crime events can be studied. It will shed light on the potential utility of CCTV as an observational research tool, including both the benefits and limitations of this valuable data source.

Finally, the thesis comprises a fresh perspective on some aspects of workplace violence because it draws on key theories and frameworks from the discipline of

criminology. While there has been a considerable corpus of literature on workplace violence and customer aggression, it tends to adopt an occupational health or psychology perspective and focuses on personal and organisational causes and outcomes. By contrast, this thesis is informed by the broad field of Situational Crime Prevention and the theoretical framework offered by Routine Activity Theory to foster a crime event sensibility that addresses the interactive aspects and dynamic nature of workplace violence.

Table 1: Summary of the three objectives of the present research.

Contribution	Description
Empirically	Addresses paucity of research both locally and internationally on violent incidents involving bus drivers and passengers.
Methodologically	Pioneering new method in customer aggression and general violence literature by using CCTV as a data source.
Theoretically	Exploring the phenomenon from an event based perspective (exploring the context) as well as adopting a criminological framework via Situational Crime Prevention and Routine Activity Theory.

Structure of the Dissertation

This Introduction has outlined the rationale for the present thesis and provided an overview of the research approach and design. Chapter 1 provides a critical appraisal of research on customer aggression towards frontline service workers, which emerges from many sub-disciplines. It presents what is currently known about the antecedents and consequences of aggressive encounters involving frontline service staff, and provides a critique of the current state of literature where some methodological shortcomings are addressed. This leads into a description of the two criminological approaches used to inform the research questions and findings, namely Situational Crime Prevention and Routine Activity Theory. Chapter 2 builds on the empirical and theoretical material about customer aggression by looking specifically at the literature on urban bus driving as an occupation. It summarises research on health and stress in the sector, and particular attention is paid to empirical research pertaining to the risk and nature of aggression towards bus drivers. There are many problems inherent in the limited corpus of works which are canvassed.

Chapter 3 provides an overview of the research framework and methodology. It examines the use of secondary audio-visual data as an emerging tool in social research and considers the utility of CCTV as an observational research tool. It then outlines the qualitative case study approach adopted by this research, and describes the procedures used to select and analyse the digital AV material. It ends by summarising basic details of the dataset, including the number and types of footage included. Chapter 4 presents the descriptive findings to emerge from the analysis, including characteristics of the buses, drivers, passengers and the aggressive incidents themselves. This is extended in Chapter 5 where some of the broader, more abstract findings to emerge from the research are elaborated and there is an examination of how the results fit with the current literature on customer aggression. It has reference to some of the practical and policy implications of the research from a prevention perspective. The chapter ends by discussing the utility of CCTV as a research tool, including the benefits and limitations, as well as the potential ethical issues that arise.

CHAPTER 1

REVIEW OF CUSTOMER AGGRESSION LITERATURE

Introduction

Workplace violence is a significant social problem associated with a range of emotional, legal and social implications for both organisations and their employees (Chappell & Di Martino, 2006). Much of the extant literature on workplace aggression has focused on organisational insiders (i.e. employees, supervisors, managers) as both the source and target of abuse (e.g. Neuman & Baron, 1998; LeBlanc & Barling, 2004; Duprè & Barling, 2006; Hershcovis et al., 2007; Aquino & Thau, 2009; Hershcovis & Reich, 2013). It is now acknowledged however, that for many workers in service industries, the most serious and frequent threats come from the very people being served, namely the customers (Yagil, 2008). Thus, there has been increased attention to examining the antecedents, forms and outcomes of aggression from this specific source. This contrasts to the once widely espoused view, particularly in the service sector, that aggression in the workplace should be tolerated as simply “part of the job” (Chappell, 1998).

This chapter provides a critical appraisal of the multifaceted research on customer aggression towards frontline service employees, given that the study underpinning this thesis examines passenger abuse of bus drivers. It is focused on what are deemed low-level, consumer-based service occupations (e.g. retail, hospitality, call centres). This directly relates to the role of bus drivers and their interactions with members of the public, being customers, clients or passengers. The review does not cover research on fields such as health and welfare, special education and policing. The literature typically emerges from one of three primary disciplines: marketing and consumer studies, organisational health and psychology, and criminological and risk reduction fields. The chapter then delves into the proximal and distal correlates of customer aggression which are organised according to three principal categories: enabling, legitimising and triggering factors. The next section addresses the consequences of these aggressive encounters, where attention is paid to employee coping behaviours and response tactics. This is followed by a critical evaluation of the existing research where some methodological shortcomings are addressed, namely the cross-sectional and self-report nature of most studies. The chapter concludes by

presenting the criminological framework utilised in the present research, drawing on explanations provided by Situational Crime Prevention and specifically Routine Activity Theory.

Frontline Service Workers and Customer Aggression

Customer aggression is not isolated to specific industries, although some occupations are deemed to face a higher risk than others (Mayhew & McCarthy, 2005; Mayhew, 2012). Research has established that the risk of client or customer aggression is particularly high in certain occupations, including law enforcement, corrections, nursing and special education (e.g. Chappell & Di Martino, 2006; Useem & Piehl, 2006; Ervasti et al., 2012; Speroni, Fitch, Dawson, Dugan, & Atherton 2013; Buckley, 2014). Recently, however, the incidence and prevalence of customer aggression in what were once considered low-risk service jobs (e.g. hospitality, retail) have also been uncovered. For example, call centre employees in the US report experiencing customer verbal aggression around seven to 10 times per day (Grandey, Dickter, & Sin, 2004). Similarly in the UK, retail staff claim being subjected to verbal abuse from customers once every four days, threatening behaviour every 15 days, and physical violence every 31 days (USDAW, 2004). Frequent aggressive encounters are also experienced by employees in hospitality (Reynolds & Harris, 2006), tourism (Harris & Reynolds, 2003), libraries (Kean & McKoy-Johnson, 2009) and public transport industries (Boyd, 2002). These findings have led some researchers to conclude that customer misbehaviour is systemic throughout the service economy (Reynolds & Harris, 2006; Korczynski & Evans, 2013). Thus there has been increased attention towards understanding the antecedents and outcomes of aggression by customers towards these workers.

The literature tends to span three disciplinary fields, namely: marketing and consumer research, organisational health and psychology, and criminological and risk reduction. Studies in marketing and consumer patterns focus on the wider context of misbehaviour and how customer interactions with servicescape variables can contribute to aggression (e.g. Harris & Reynolds, 2003). This body of literature has uncovered some of the more tangential or distal antecedents to customer abuse (i.e. enabling and legitimising factors discussed below) that are generalisable across service enterprises. The empirical works based in organisational health and psychology generally examine

the psychological processes underlying customer aggression, including personality traits, cognitive and emotional predictors as well as health outcomes for employees (e.g. Barling, Duprè, & Kelloway, 2009). This corpus of research has highlighted how factors such as perceptions of justice affect the enactment of aggression during service encounters. Finally, the criminological and risk literature includes broad statistical or reporting documents, such as those from the World Health Organization or the International Labour Organization which provide policy and comparative analyses (e.g. Chappell & DiMartino, 2006; Mayhew & Chappell, 2007). It also includes crime prevention studies such as those focusing on staff intervention with patrons in pubs and clubs (e.g. Graham, Bernards, Osgood, & Purcell, 2005). This area of research has demonstrated which occupations possess higher risk, and how to design or evaluate prevention programs and techniques.

These sets of literature adopt two main perspectives with which to study aggression (Fisk et al., 2010). The first is a norm-based perspective which comprises deliberate behavioural acts by customers within the exchange setting that violate generally accepted norms of conduct (Reynolds & Harris, 2009; Daunt & Harris, 2012; Fellesson et al., 2013), and is found most often in the marketing and consumer literature. It covers a wide range of covert and overt acts from minor incivilities up to assaults which are motivated by both instrumental and expressive means (e.g. Harris & Reynolds, 2004). The behaviours may be directed towards marketers (e.g. wilful disobedience of rules, abuse), merchandise (e.g. shoplifting), other customers (e.g. jumping queues), financial assets (e.g. credit card fraud) and physical or electronic sites (e.g. vandalism) (Fullerton & Punj, 2004; Berry & Seiders, 2008). One problem with this perspective is that it ignores the fact that normative evaluations of behaviour are dependent on the environment, culture and the perspectives of those involved, rendering the definition of aggressive behaviour ambiguous (Krahe, 1996; Rogers & Chappell, 2003).

By contrast, the second perspective, most often utilised in the organisational health/psychology and criminological/risk reduction literatures, takes a harm-based view. This treats aggression as intentional behaviour by customers in the exchange setting that is potentially physically or psychologically damaging and that the target seeks to avoid (Duprè, Dawe, & Barling, 2014). This body of research typically focuses on more interpersonally directed and overt behaviours, causing direct harm (Graham et

al., 2005; Mayhew & Chappell, 2007). While some conceptualisations focus on acts of physical violence (assault, homicide), others incorporate acts of psychological violence (threats, verbal abuse, obstructive behaviours) (Chappell & Di Martino, 2006; Mayhew & Chappell, 2007). Similarly, aggression may constitute an isolated incident or occur over a protracted period, as in the case of bullying, mobbing and sexual harassment (Baron & Neuman 1996; McDonald, 2012; Branch, Ramsay, & Barker, 2013). The harm-based perspective implies that customer misbehaviour intentionally causes harm to others rather than being merely a deviation from accepted social norms, which shifts the focus from a socially constructed standard to a more target-constructed standard (Fisk et al., 2010).

In addition to these divergent perspectives (norm- versus harm-based), the literature on customer aggression employs a confusing array of overlapping labels. Such behaviour has been previously referred to as consumer misbehaviour (Fullerton & Punj, 2004), dysfunctional customer behaviour (Harris & Reynolds, 2003), customer mistreatment (Skarlicki, van Jaarsveld, & Walker, 2008) and client-initiated aggression (Mayhew, 2000b; Duprè et al., 2014). Similarly, the perpetrators of such aggression are referred to as jaycustomers (Lovelock, 2001; Harris & Reynolds, 2004), unfair customers (Berry & Seiders, 2008) and problematic customers (Madupalli & Poddar, 2014). These labels carry subtle definitional variations because the disparate disciplines characterise the activities and the actors using variant terminology, and highlight the fragmented nature of the field.

Correlates of Customer Aggression

Two core characteristics inherent to most service roles, namely routine interaction with the public and cash-handling, have been associated with an increased risk of customer aggression (Mayhew & Chappell, 2007). However, there are additional factors specific to service environments that contribute to violence against frontline service workers (Fullerton & Punj, 2004; Yagil, 2008; Reynolds & Harris, 2009). These can be organised according to Salin's (2003) threefold categorisation of workplace bullying which includes enabling, legitimising and triggering factors. Enabling factors include workplace conditions such as the low status nature of service work, customer anonymity and working outside of the organisation. Legitimising factors refer to

organisational processes that serve to normalise customer aggression for all parties involved, including the notion of customer sovereignty and organisational policies that foster tolerance or even denial of abuse. Triggering factors include situational circumstances that precipitate customer aggression, such as intoxication, customer perceptions of injustice and environmental or technological stressors. It is noted that as with many typologies, these categories are not mutually exclusive and some overlap is present. Each category is canvassed in more detail below.

Enabling factors

Service roles are generally performed by workers who are unskilled or have a weak position in the labour force, such as young people, migrants, women and those with low education (Yagil, 2008). As a result, customers often view service employees as being of low relative status, and may perceive that they are entitled to act in a deviant manner with impunity, particularly if their expectations have not been met (Korczynski & Evans, 2013). This is consistent with the power-differential model used to explain sexual harassment and bullying among co-workers, which states that low status employees are often targeted due to the perception that they are unable to control and effectively respond to mistreatment (Sliter, Jex, Wolford, & McInnerney, 2010; Aquino, Grover, Bradfield, & Allen, 1999). Employee self-appraisals also contribute to the severity of power-differentials during service encounters. For example, a negative association was found between service employee empowerment, defined as confidence in one's ability to control and hence influence others during stressful situations, and the frequency of customer aggression (Ben-Zur & Yagil, 2005).

While some service roles involve repeated interactions with customers that may develop into relationships over time (e.g. hairdressing), many exchanges are one-off encounters where there is no history between the parties or any expectation of future interaction (Grandey, Kern, & Frone, 2007). Such anonymity enables customers to behave aggressively toward service employees due to a lack of perceived consequences, both legally and socially (Korczynski & Evans, 2013). Even if there is an ongoing relationship, as in the case of regular patrons, the high volume of interaction demanded of service employees can make customers feel as if they are anonymous (Grandey et al., 2007). Furthermore, customers possess control over whether or not they engage in

future interaction with service employees, given that they can change service providers or avoid going to various locations at certain times (Yagil, 2008).

A number of service employees, such as sales representatives or transport workers, are required to work outside of the office or retail setting for extended periods (Cohen, 2010). There are many employees, contractors or the self-employed — perhaps many more than might be thought — who are geographically “mobile”, such as plumbers, electricians and other trades (Perrone, 1999; Cohen, 2010). These workers face increased risk of victimisation because their environment is typically less structured, and they are removed from the normal protections available to employees, including guardianship from co-workers, supervisors and security personnel (Chappell & Di Martino, 2006). This reduces their ability to deal with customer aggression, particularly if there is no organisational policy or training upon which to rely, and ultimately reinforces the perception among customers that service employees are unable to effectively deal with mistreatment (Reynolds & Harris, 2006). Moreover, working outside of the organisation often involves operating alone in remote environments. In such situations, employees are not only prevented from removing themselves from threatening encounters, but are also likely to experience delays in the arrival of back-up support. As a result, they may be forced to use their own skills and resources to deal with aggressive customers and their behaviours are likewise unconstrained by any organisational supervision (Yagil, 2008).

Legitimising factors

The notion of customer sovereignty, manifested in the epithet that “the customer is always right”, has become a basic rule in the consumer-based service economy. Customer sovereignty demands that service employees treat customers in a polite and courteous manner, regardless of their behaviour, and such “display rules” are rigidly enforced through supervisory monitoring and customer evaluations (Grandey, Rafaeli, Ravid, Wirtz, & Steiner, 2010). Customers, on the other hand, have no formal obligations to behave in a functional and compliant manner towards service employees (Korczyński & Evans, 2013). This lack of behavioural symmetry communicates a power imbalance during the service exchange and affords customers the opportunity to push the boundaries of fair behaviour without fear of retaliation (Reynolds & Harris, 2006).

In addition to legitimising aggressive behaviour among customers, the notion of customer sovereignty can foster organisational tolerance of such behaviour. Forced by market pressures to compete for business, managers often instruct service employees to achieve customer satisfaction at any cost, including disregarding customer misbehaviour (Yagil, 2008). This was demonstrated in a survey of service employees across multiple countries, which revealed high agreement that workers must suppress negative emotions when interacting with customers, but customers have the freedom to express anger towards employees (Grandey et al., 2010). When such managerial expectations are in place, customer aggression can be subject to a process of normalisation, where abuse comes to be seen as “simply part of the job” (Chappell, 1998). The potential for organisational tolerance of customer aggression is also evident in surveys of employers, who report not wanting to respond to incidents in a way that may confound the organisation’s commitment to provide high quality service or risk losing potentially profitable customers (Berry & Sieders, 2008; Bishop, Korczynski, & Cohen, 2005; Yagil, 2008).

At the more extreme end, some service organisations adopt policies and procedures that can lead to systematic denial of customer aggression towards employees. A study of client violence in British employment centres identified two principal mechanisms through which management may render customer aggression as invisible to the organisation (Bishop et al., 2005). The first is individualisation and culpabilisation of employee victims, whereby incidents of customer aggression were construed by management as being the result of poor service delivery on behalf of their employees, rather than organisational limitations or customer deviance. The second is failure to acknowledge high levels of customer aggression, wherein management perceived and subsequently portrayed employees as being at low risk of victimisation. This contrasted with the experiences of frontline workers, who considered a significant proportion of their interactions with customers as being aggressive. However, due to fear of culpabilisation, employees did not formally report their victimisation in official incident logs, which were the source from which management derived incidence statistics (Bishop et al., 2005).

Triggering factors

A key precursor of customer aggression identified in the literature is intoxication, which can also serve to escalate incidents towards service employees. The risk of intoxication related aggression is highest in service settings where customers consume alcohol, such as in pubs, restaurants and aeroplanes (Graham et al., 2005; Goldsmid et al., 2016), or where employees transport large groups of intoxicated passengers, including buses, trains and taxis (Boyd, 2002; Cornish & Smith, 2006). Intoxication has been shown to trigger customer aggression in these settings when employees attempt to intervene with affected passengers, and particularly if they refuse to provide continued service (Graham et al., 2005; Morgan & Smith, 2006). In addition, alcohol can escalate incidents because intoxicated people have a tendency to misinterpret behavioural cues, and are therefore more likely to respond to minor interpersonal conflict with hostility and violence (Graham, West, & Wells, 2000).

Another main trigger is the so-called “customer justice” concept — referring to customer perceptions regarding the extent to which an organisation has succeeded in fulfilling the experience and outcomes it promised (McColl & Sparks, 2003). It is synonymous with whether patrons feel “ripped off” or dissatisfied with the service (Daunt & Harris, 2012), and is a multifaceted concept involving three dimensions: distributive, procedural and interactional justice. Distributive justice refers to the perceived fairness of service outcomes relative to monetary investment, such as the amount and quality of service received compared to its cost (Blodgett, Hill, & Tax, 1997). Procedural justice refers to the apparent fairness of organisational policies and procedures governing service delivery, including those related to efficiency and unusual requests (Yi & Gong, 2008). Interactional justice concerns perceptions regarding interpersonal treatment from staff, encompassing politeness, objectivity, honesty and genuine interest (McColl & Sparks, 2003). Research suggests that when customers perceive injustice, they experience negative emotional states such as dissatisfaction, frustration and anger that, in turn, can motivate them to restore equity through verbal or physical aggression (Yagil, 2008; Hershcovis et al., 2007). For example, one study describes a positive association between all three forms of injustice and customer dysfunctional behaviour within service settings, mediated by negative affect (Yi & Gong, 2008).

Further, there is now a significant body of work that has identified a range of situational or environmental factors that have the potential to trigger customer behaviour. Studies have shown that many features of service environments, such as crowding, high temperatures, defective facilities and uncleanliness, can influence aggressive outcomes, moderated by elevated levels of stress and frustration (Daunt & Harris, 2012). In other instances, customer aggression may be triggered by administrative and technical features built into the design of the service system itself (e.g. automated systems) (Felleson et al., 2013). Under adverse circumstances where the environment might be hot, crowded and dirty, or have defective products, patrons are more likely to engage in hostile reactions to seemingly minor disruptions, such as queuing and delays (Yagil, 2008). The seminal suite of studies about licensed premises by Homel and colleagues (1995, 2001) shows clearly that situational and environmental factors play a significant role in the nature and frequency of violence that a venue attracts. In particular this work found a direct relationship between unclean toilet facilities and increased aggression in pubs and clubs (Graham & Homel, 2008).

Outcomes of Customer Aggression

For service employees, customer aggression has been linked to persistent feelings of degradation (Harris & Reynolds, 2003), depression (Hershcovis & Barling, 2010), stress disorders (Grandey et al., 2004) and temporary or permanent physical ailment (Boyd, 2002; Duprè et al., 2014). These can lead to burnout (Ben-Zur & Yagil, 2005), impaired performance (Hershcovis & Barling, 2010), lowered job satisfaction (Kim, Ro, Hutchinson, & Kwun, 2014) and heightened turnover intention (Karatepe, Yorhanci, & Haktanir, 2009). Some of these outcomes, including reduced physical and mental health and greater willingness to leave jobs, have also been shown to occur among employees vicariously exposed to customer aggression, whether through direct observation or hearing about incidents from colleagues (Duprè et al., 2014). Organisations are also liable to suffer both direct and indirect consequences of customer aggression. Direct consequences include restoring damaged or stolen property, increased insurance premiums, litigation and providing compensation (Harris & Reynolds, 2003). Indirect consequences include increased workload (van Jaarsveld, Walker, & Skarlicki, 2010), staff absenteeism (Grandey et al., 2004), reduced customer patronage (McColl-

Kennedy, Patterson, Smith, & Brady, 2009) and costs owing to staff recruitment, training and retention (Harris & Reynolds, 2003). Businesses can suffer when other customers witness such behaviour for it creates a “spoilt consumption” or “domino” effect, whereby the aggressive behaviour of one customer spreads to those in close proximity (Harris & Reynolds, 2003).

Another strand of research on the outcomes of customer aggression is how service workers manage the stress and demands created by such behaviour. Studies have revealed that despite being exposed to training in how to deal with problematic customers, service employees frequently disregard managerial prescriptions and adopt their own set of informal strategies (Reynolds & Harris, 2006). These strategies have been classified as either problem-focused or emotion-focused, thereby delineating the function that they serve. Problem-focused strategies are directed toward the stressor itself, and involve practical attempts to reduce or eliminate the problem (Ben-Zur & Yagil, 2005). Examples include bribing customers, manipulating the servicescape by modifying or removing objects, altering appearance, bending organisational rules, eliciting support from other customers, personally relating to the customer, referring to rules, letting the customer talk, using neutral language and assuming responsibility (Reynolds & Harris, 2006; Yagil, 2008; Salomonson & Fellesson, 2012).

Emotion-focused strategies are aimed at regulating negative emotional reactions triggered by the stressor, and involve implicit or explicit attempts to reduce feelings of frustration or distress (Krisher, Penney, & Hunter, 2010). Examples include mentally preparing for work, substance use, ignoring or trivialising difficult customers, shifting the blame to customers or co-workers, feigning positive emotion, regaining composure in private, isolating oneself from customers and other employees and explicitly seeking emotional support from colleagues (Korczynski, 2003; Goussinsky, 2011; Echeverri, Salomonson, & Aberg, 2012). Thus, service employees are not simply passive to acts of customer aggression; they are reflexive and adaptive, responding with a wide range of informal tactics.

One particular response to customer aggression recently subject to increased empirical attention is employee retaliation. Research in hospitality and call centre settings suggests that when faced with mistreatment, service employees may engage in counterproductive responses that can result in harm to the customer, overtly or covertly

(Hunter & Penney, 2014; Walker, van Jaarsveld, & Skarlicki, 2014). Overt retaliation comprises physical or psychological responses, such as raising one's voice, acting rudely, getting blunt, being derogatory, purposely irritating the customer and insulting or threatening them (van Jaarsveld et al., 2010; Mullen & Kelloway, 2013; Hunter & Penney, 2014; Madupalli & Poddar, 2014; Walker et al., 2014). Covert retaliation is said to be more common, and is reflected in service sabotage, or the purposeful failure to perform job tasks or do them correctly (Skarlicki et al., 2008). Examples include making the customer wait longer than necessary, increasing their tip without permission, contaminating their food, transferring them to the wrong department and telling them something has been fixed when it has not (Skarlicki et al., 2008; Mullen & Kelloway, 2013; Hunter & Penney, 2014; Madupalli & Poddar, 2014). This is consistent with Andersson and Pearson's (1999) spiral model of insider workplace incivility, which suggests that targets of mistreatment are likely to reciprocate so that the line between perpetrator and target eventually fades. It is noted, however, that the likelihood of enacting retaliation is influenced by dispositional factors, such as trait anger (Hunter & Penney, 2014), moral identity (Skarlicki et al., 2008) and overall perceptions of civility in customer interactions (Walker et al., 2014).

Two broad explanatory categories help elucidate why service employees may engage in retaliatory behaviours towards customers who have mistreated them (Wang, Liao, Zhan, & Shi, 2011; Groth & Grandey, 2012). The first revolves around justice-based theories where, just like the customer's perspective, perceptions of interpersonal injustice from customers excite reactionary emotions in employees that in turn predict spontaneous, affectively-driven behavioural reactions such as retaliation (Rupp & Spencer, 2006; Skarlicki et al., 2008). The second category centres on resource-based theories, which suggest that the demands created by frequent exposure to difficult customers, such as maintaining a friendly demeanour in the face of mistreatment, drains employees' cognitive and emotional resources and subsequently their ability to remain civil in customer interactions (Karatepe et al., 2009; Sliter et al., 2010; van Jaarsveld et al., 2010). Thus, employee retaliation against customers may be understood as both an immediate expression of negative emotions resulting from perceived injustice, or as a manifestation of resource depletion caused by frequent exposure to customer mistreatment.

Critical Appraisal of Existing Research

Most research on customer aggression has employed samples from the hospitality and call centre industries (e.g. Graham et al., 2005; Reynolds & Harris, 2006; Skarlicki et al., 2008; van Jaarsveld et al., 2010; Daunt & Harris, 2012; Mullen & Kelloway, 2013; Madupalli & Poddar, 2014;). However, there are other service roles where, in addition to providing quality service, employees have a control or sanction function to enforce rules or organisational policies. Little is known about how this inherent tension between service and control contributes to and plays out in aggressive service encounters (see Graham et al., 2005 and Suquet, 2010 for exceptions). Focusing on hospitality and call centre workers also has implications for research on employee retaliation towards customers. Interactions in call centre settings are limited to phone-based conversations, and are subject to electronic performance monitoring which can increase the risk of being sanctioned for counterproductive work behaviours (van Jaarsveld, 2010). Similarly, while hospitality workers engage in face-to-face interaction with patrons, their behaviour is constrained by the presence of supervisors and managers. Therefore, these employees are limited in the types of behaviour they may engage in to “get even” with deviant patrons. Service employees who work alone or outside of the organisation may engage in a different range of response tactics or retaliatory behaviours than currently specified for on-site workers because they are isolated but also less restricted in the need to “save face” in front of supervisors (Chappell & Di Martino, 2006; Yagil, 2008; Cohen, 2010).

The research on customer aggression has largely incorporated quantitative methodologies to gauge the incidence, prevalence and impact of the phenomenon (Keashly, 2001). There has been an overreliance on cross-sectional, self-report survey data, which raises issues surrounding bias and underreporting (Fisk et al., 2010). For example, those involved in aggressive encounters often have conflicting views about the initiation and nature of the aggressive event (see Keashly & Neuman, 2008). Additionally, surveys adopt the perspective of either the “targets” or “perpetrators” (Hershcovis & Reich, 2013), despite the fact that theory has repeatedly emphasised that workplace aggression is a dynamic not static phenomenon where perpetrators often become targets and vice versa (Andersson & Pearson, 1999; Groth & Grandey, 2012). Compounding this problem is the cross-sectional nature of survey designs where the variables are seen as either causes or outcomes (Hershcovis & Reich, 2013; Keashly &

Neuman, 2008). Thus, the literature remains somewhat bifurcated, with one body perceiving problematic customers as the source of strain, anger and retaliation for service employees, and another centering on employee service delivery failure as a starting point in examining negative service outcomes among customers.

This ignores the fact that certain responses or outcomes (e.g. frustration, retaliation) can serve as inputs for further negative behaviour, leading to what has been termed a “spiral of aggression” (Andersson & Pearson, 1999; Grandey et al., 2012). For example, Groth and Grandey (2012, p. 210) note how “the outcome of one negative exchange is the input for another, and things can quickly go from bad to worse for both parties unless measures are taken to intervene”. However, when aggregating over incidents, such information about the co-occurrence or patterning of behaviours within a particular incident is lost (Glomb, 2002). Therefore, cross-sectional methods do not permit researchers to assess whether the aggression is part of a cycle of mistreatment. Consequently, little is known about the underling dynamics of aggressive service encounters such as escalation and volatility. While these concepts are often referred to in an endeavour to describe the uncertainty and malleable nature of such incidents, few studies have actually elucidated these factors empirically.

Finally, the primacy of frequency over content has meant that few studies have examined questions associated with incident context (Hershcovis & Reich, 2013). This includes environmental factors such as audience features which may accelerate or break the negative exchange spiral. Such information is important because customer aggression does not occur in a vacuum but often in the public realm. Various calls have been made for increased attention to the impact that aggression can have on other patrons in the service environment (van Jaarsveld et al., 2010; Groth & Grandey, 2012). For example, Groth and Grandey (2012, p. 208) described their negative exchange spiral as being an “open-loop”, acknowledging that aggression can spill over to third parties (i.e. other customers and employees). However, the role of third parties in the initiation, progression and outcomes of violent workplace events remains relatively unexplored.

Theoretical Framework

A sizeable proportion of research on workplace violence draws on psychological or marketing perspectives, focusing on the causal, moderating or outcome variables related to aggression and the interrelations among them. Yet, calls have been made for greater application of criminological theory to workplace violence because it can extend our understanding of this form of interpersonal aggression and provide new insight into its prevention (e.g. Graham et al., 2005; Graham, 2009; Schindeler, 2014; Daunt, 2015). While there has been some excellent analysis from the discipline of criminology (e.g. Chappell & Di Martino, 2006; Graham et al., 2005; Daunt, 2015), this remains fairly limited and yet this social science has much to offer. In particular, it has the capacity to invoke the growing contributions from the field of crime prevention to focus our attention on the situational and environmental aspects of workplace aggression. It urges the adoption of an event based approach which moves away from broad quantitative studies to assess the foreground or proximal elements of criminal events. The “situational” perspective of crime prevention and its theoretical foundations are summarised below.

Situational Crime Prevention seeks to reduce perceived opportunities for specific forms of crime through systematic modification of the immediate environment (Clarke & Mayhew, 1980; Clarke, 1997). It is therefore focused on the settings for crime, rather than those committing the criminal acts. Situational Crime Prevention comprises three main components: a clear theoretical framework, an established methodology for addressing specific crime problems, and a set of opportunity-reducing techniques (Clarke, 1997). The established methodology is guided by the action research paradigm and involves carrying out five sequential tasks in conjunction with practitioners: 1) collection of data about the nature and features of a specific crime, 2) analysis of the situational conditions facilitating the crime, 3) systematic examination of possible measures to block opportunities for the crime, 4) implementation of feasible and economically viable measures and 5) continual monitoring and dissemination of results (Clarke, 1997). The opportunity-reducing techniques include a grid of 25 measures that address five purposes implicit in the assumptions of the Routine Activity, Rational Choice and Crime Pattern perspectives (Cornish & Clarke, 2003). These include increasing the perceived risks and efforts and reducing the perceived rewards, provocations and excuses associated with the commission of the specific offence. The

utility of this framework is that it acknowledges how aggressive incidents often culminate from and are influenced by an array of factors operating in the immediate temporal and spatial environment.

Situational Crime Prevention is grounded in theories which emphasise the role of opportunity and ecological factors in time and space (Cornish & Clarke, 2003). In particular, it draws on assumptions implicit in Routine Activity, Rational Choice and Crime Pattern perspectives. Routine Activity is the most relevant framework to the present research as it focuses on the convergence of multiple parties and factors involved in the crime event, which is important given the mobile nature of bus transport. Routine Activity Theory views crime as a function of patterns of everyday movement and interaction. Initially proposed by Cohen and Felson (1979), the theory posits that crime is a function of three elements converging in time and space, namely: a motivated offender, a suitable target and an absence of capable guardianship. A motivated offender refers to anyone who is willing and able to engage in criminal conduct, while suitable targets include any person or object that is valuable, visible and accessible (Felson & Eckert, 2015). An absence of capable guardianship involves both the inability of the target to avoid or fend off a victimisation attempt, and a lack of formal or informal supervision to intervene or deter a criminal event (Felson, 2008). When these three elements are present, an opportunity for crime presents itself. In support of their theory, Cohen and Felson (1979) demonstrated that the increase in residential burglaries in the US between the 1960s and 1970s could be explained by an increase in the proportion of empty homes during the day due to greater female participation in the workforce, and an increase in the portability of household goods due to technological advancements.

The Situational Crime Prevention paradigm and the three theories that guide it have been refined and expanded in the past three to four decades (Sutton, Cherney, & White, 2014). The triangle of crime as described by Cohen and Felson (1979) has been elaborated by Eck and Weisburd (1995) who extended the model to include “place managers”. The categories of situational prevention have been updated by Wortley (2001, 2008) who has applied aspects of it to a variety of institutions and crime event scenarios by noting that utility-maximisers weigh up the costs and benefits of illegal behaviour, and that provocations or precipitators are highly relevant to rational choice. More importantly, there now exists a significant body of empirical evidence and

evaluations, applied and practical, which examine elements of a situational and opportunity structure perspective (Wortley & Mazerolle, 2011; Felson & Eckert, 2015). Indeed, it has supplied some seminal empirical evidence about opportunity-reducing techniques in a range of public and private settings, and specifically in the transport sector (see Chapter 3).

Summary

Drawing on the overview of the workplace violence and customer aggression literature outlined in this chapter, it is evident that much empirical research has been conducted in a relatively short timeframe. It is conceded that the literature is somewhat fragmented, having emerged from a diversity of sub-disciplines and being studied from different perspectives. Nevertheless, a range of proximal and distal factors contributing to the risk and incidence of customer aggression among frontline staff in the service economy have been identified. Enabling factors include the low status nature of service work, anonymity in interactions, and the geographically mobile nature of many service roles, while legitimising factors include the notion of customer sovereignty, which can also promote organisational tolerance or even denial of abuse. Triggering factors encompass intoxication, perceived injustice and environmental characteristics such as overcrowding or defective facilities. In response to mistreatment, employees engage in a range of informal tactics which may be problem-focused or emotion-focused. One particular response is retaliation, which can be understood as an immediate expression of anger, or the result of resource depletion from dealing with problematic customers in a sustained manner.

However, despite the concentrated attention to this issue globally over the past decade or more, the studies are not without flaws and there remains much scope for improving our knowledge. It seems critical to explore different approaches and methodologies to complement existing research and to examine workplace aggression in a dynamic and contextualised way. Any attempt to gain a deeper understanding of escalation, volatility and audience features, for example, requires a qualitative, observational, event based approach that considers the perspectives of both “perpetrators” and “targets” but also firmly takes into account the context in which aggression occurs. Further, there is a need to explore different theoretical perspectives than the familiar

path taken by the services marketing and organisational psychology literatures. In particular, Situational Crime Prevention and Routine Activity Theory encourage analysis of the intersection of various elements in time and space, rather than treating the actors, contributing factors and outcomes in an isolated and mutually exclusive way. Such nuanced information about the dyadic, relational and contextual aspects of customer aggression can enrich our current knowledge of how aggressive incidents unfold and ultimately how they can be prevented.

CHAPTER 2

REVIEW OF PUBLIC TRANSPORT LITERATURE

Introduction

There exists a growing body of research, policy analysis and crime prevention evaluations on transit crime and public transport workers (Needle & Cobb, 1997; Newton, 2014; Paterson et al., 2010; TRACS, 2015). Indeed at this point of time there is considerable research internationally, for example: crime at bus stops and stations in the US (Levine, Wachs, & Shizari, 1986; Loukaitou-Sideris, Liggett, Iseki, & Thurlow 2001); on the mass underground train systems in the UK (Burrell, 2007; Newton, Partridge, & Gill, 2014); and on violence against bus drivers in Mozambique (Couto et al., 2009). This topic has not been ignored in the Australian landscape either with studies on occupational stress for bus drivers (Shapiro et al., 1983), passenger safety (Currie, Delbosc, & Mahmoud, 2013), crime prevention in the transport sector (Eastal & Wilson, 1991), assaults on taxi drivers (Mayhew, 2000a, 2000b), some specific commentary on bus drivers (Chappell, 1998), along with the RiB Project which is aligned with the present research (Lincoln & Gregory, 2015). This chapter concentrates on the specific literature that relates to passenger aggression against frontline transport workers and specifically examines employment conditions for bus drivers.

The chapter begins by describing the occupational role of bus drivers. This includes a summary of general demographic information, the occupational role of bus drivers, and their broader community functions to highlight the public service nature of the occupation. It then canvasses some of the existing research on the stress of urban bus driving, where the work environment is highly demanding and associated with poor physical, psychological and behavioural outcomes. It then examines the broad statistical patterns on the extent and nature of aggression involving bus drivers. A number of international studies have highlighted the prevalence of the phenomenon, and in doing so have gathered general information about the nature of the encounters, although it remains limited. The subsequent section considers the factors contributing to the risk of passenger aggression among bus drivers and transit workers more generally. Here, some material that fits within the field of Situational Crime Prevention and Routine Activity theory is invoked, given that they are the guiding frameworks for

the present research. The chapter concludes with a critical appraisal of the current scope and depth of literature on violent driver-passenger altercations on bus networks. A number of issues are canvassed, including the paucity of Australian research, reliance on quantitative surveys of drivers, the composite nature of sampling across transport sectors and the appropriateness of applying international research to the local Antipodean setting.

Occupational Role of Bus Drivers

Bus drivers are employed by government transport authorities or private bus companies to carry passengers to and from urban locations according to established schedules and routes. They are distinguished from long-distance coach drivers or charter drivers who do sightseeing tours. As a generalisation, most bus drivers are employed on a casual basis, can be required to work long hours and often on split shifts (Chappell, 1998). The profile derived from the RiB Project of 665 drivers based in southeast Queensland suggested that they tend to be middle aged with an average age of 53 years (Lincoln & Gregory, 2014a). The majority of drivers are male (90 percent), although female participation is increasing. This profile coincides with samples from studies on the occupational health of bus drivers (Tse et al., 2006). Years of service range from a few months to three decades, with an average of five years. There are said to be three typical driver types: those who have been working in the industry for a decade or more as a career choice; those who take up driving later in life as a second career; and those who take up driving as a temporary occupation while seeking alternative employment (Lincoln & Gregory, 2014b). Generally, drivers have few qualifications which underscores the low status nature of bus driving, and the observation that transport workers tend to fall low on the sociodemographic index in Australia (see McMillan, Beavis, & Jones, 2009).

Bus drivers are required to manage a number of different tasks while transporting passengers (Kompier & Di Martino, 1995). The job requirements can be divided into three principal domains: practical, environmental and mechanical. Practical tasks include picking up and letting off passengers at set locations, opening and closing doors for boarding and alighting passengers, monitoring manual or automated fare systems and advising passengers on routes and destinations. Environmental tasks

include enforcing and maintaining passenger conduct and controlling features such as lighting, ventilation and heating. Mechanical tasks include ensuring that the vehicle remains clean and that all technology is working properly. In addition to these tasks, bus drivers must successfully manage a number of often conflicting demands. While transit agencies and the public want drivers to provide courteous and friendly service, such as through the provision of information on routes or timetables, this often conflicts with the requirement to adhere to tight schedules (Kompier & Di Martino, 1995; Evans & Johansson, 1998). Further, adhering to tight schedules conflicts with the need to drive safely in dense traffic while following traffic regulations (Evans, Johansson, Rydstedt, 1998; Tse et al., 2006). Such factors highlight the demanding and stressful nature of the urban bus driving occupation.

The primary function of bus drivers is to manage and maintain smooth operation of service, but they are also engaged in broader community functions pertaining to public safety, social inclusion and tourism. By operating a reliable service over extended hours, bus drivers provide a safe alternative mode of travel for attendees of the night-time economy (Transport NSW, 2002). Because they offer relatively cheap and flexible fare structures and traverse wide geographic areas, buses facilitate access to educational and employment opportunities, particularly among socioeconomically disadvantaged groups (ABS, 2008; Currie et al., 2009; Edwards et al., 2013; Tillmann et al., 2013). Finally, drivers are generally quite knowledgeable about the locales in which they operate, and so they are regularly called upon by tourists to provide directions and information about popular attractions (Lincoln & Gregory, 2014a). Thus, drivers make an important contribution to the long-term social and economic sustainability of communities. This underscores the public service role of bus driving as an occupation.

Stresses of Urban Bus Driving

Urban bus driving is a highly stressful occupation associated with poor physical, psychological and behavioural health. Numerous studies have revealed marked differences in the physical health of bus drivers compared to other occupational groups. For example, a study of 14,677 Norwegian males aged 40 to 49 from a range of different workplaces found that bus drivers were one of the groups with the poorest

health based on key physiological indicators (Holme, Helgeland, Hermann, Leren, & Lund-Larsen, 1997). More specifically, bus drivers demonstrate high levels of cardiovascular, gastrointestinal and musculoskeletal disease (Wang & Lin, 2001; Rugulies & Krause, 2005; Grenier & Krause, 2006; Tse et al., 2006). Other reported problems include hypertension, fatigue, obesity, sleep disturbance and elevated levels of primary stress hormones (Kompier & Di Martino, 1995; Tse et al., 2006; Biggs, Dingsdag, & Stenson, 2009). Given that most drivers in the industry are male, much of the research has been based on samples of men, yet it is important to recognise that female drivers may have specific health or stress related issues (Scheller, 2011).

Bus drivers have also been shown to suffer poor psychological health. For example, a study of 376 UK bus drivers revealed that 13 percent of drivers had mental ill-health comparable to psychoneurotic patients (Duffy & McGoldrick, 1990). In particular, they report experiencing persistent and pervasive feelings of depression, anxiety and hypertension, with the severity of these states positively related to service length (Tse et al., 2006). They are also vulnerable to longer-term psychological outcomes, with 23 percent in one study meeting the criteria for post-traumatic stress disorder (Fisher & Jacoby, 1992). Data on labour force withdrawal reinforce some of these empirical findings. For example, it is suggested that only one in 10 drivers remain in the industry until official retirement age (Kompier et al., 1990). A study of Dutch drivers revealed that most commonly retire due to an inability to work caused by medical disablement from musculoskeletal disorders, mental disorders and cardiovascular disease (Kompier et al., 1990). Alcohol, tobacco and substance use have been identified as frequent methods of coping with health problems among drivers (Rydstedt, Johansson, & Evans, 1998; Ragland, Greiner, Krause, Holman, & Fisher, 1995).

Some researchers have argued that findings regarding the poor physical and psychological health of bus drivers may be confounded by their coping behaviours (e.g. smoking), as well as demographic variables such as age and socioeconomic status (Tse et al., 2006). However, a number of studies adopting rigorous methodological controls have produced similar findings. For instance, Rosengren, Anderson and Wilhelmsen (1991) demonstrated that bus drivers had double the incidence rates of coronary heart disease compared to 30 other occupations, even after controlling for age, smoking habits, blood pressure and socioeconomic status. Such findings suggest that being a bus

driver is an independent predictor of poor health. Therefore, researchers have sought to determine which features of the working environment may augment poor health (Kompier, Aust, van den Berg, & Siergist, 2000). A number of stressors intrinsic to bus environments have been identified, which can be subsumed under three main categories, namely: physical environment, job design and organisational issues (Evans, Johansson, & Rydstedt, 1998; Tse et al., 2006; see Figure 1).

Figure 1: Stressors, mediators and outcomes for bus drivers (adapted from Tse et al., 2006).

Stressors	Mediators/Moderators	Outcomes
<p>Physical environment</p> <ul style="list-style-type: none"> - Poor cabin ergonomics - Violence and aggression from passengers - Traffic congestion - Fumes - Vehicle vibration <p>Job design</p> <ul style="list-style-type: none"> - Inflexible running times - Limited rest breaks and facilities - Social isolation - Rotating shift patterns - Prolonged seating posture <p>Organisational issues</p> <ul style="list-style-type: none"> - Limited decision-making capacity regarding runs, routes and timetabling - Simultaneously manage competing demands of customer service and passenger safety 	<p>Demographics</p> <ul style="list-style-type: none"> - Gender - Age <p>Personality</p> <ul style="list-style-type: none"> - Type A/B - Locus of control - Negative affectivity - Hardiness <p>Other</p> <ul style="list-style-type: none"> - Social support - Control 	<p>Physical</p> <ul style="list-style-type: none"> - Cardiovascular disease - Gastrointestinal disorders - Musculoskeletal problems - Fatigue <p>Psychological</p> <ul style="list-style-type: none"> - Anxiety - Depression - PTSD <p>Behavioural</p> <ul style="list-style-type: none"> - Substance abuse - Sleepiness <p>Organisational</p> <ul style="list-style-type: none"> - Absenteeism - Labour turnover - Accidents

Broad Statistical Patterns of Nature and Extent of Bus Driver Violence

Compounding the stressful and potentially noxious nature of urban bus driving is the threat of aggression faced by these workers. One study by Glaso and colleagues (2007) explored Norwegian bus drivers' exposure to bullying at work and found that 70 percent of drivers had experienced workplace bullying within the last six months. Colleagues were reported as the most frequent perpetrators (71 percent), which is surprising given that drivers spend much time alone and have limited contact with co-workers. However, employee interdependence as a result of connecting routes and swapping vehicles means that some contact is required between drivers and indeed there are potentially frustrating situations such as being parked poorly, pulling out in front of another, or running late. However, the focus here is on passengers as the source of abuse. In this regard, passengers were deemed the second most common threat, being the perpetrators in over a third of the incidents. It is this source of driver-directed aggression that forms the focus of this research and the associated review of the literature.

A number of studies have sought to establish the extent of driver-passenger aggression in the bus industry. One early study of bus drivers in the UK found that the highest reported stressor was the risk of physical assault by passengers (Duffy & McGoldrick, 1990). Couto and colleagues (2009) examined workplace violence among bus, minibus and taxi drivers in Mozambique and found that more than three-quarters of drivers had been a victim of workplace violence in their lifetimes, and almost two-thirds in the past 12 months. Passengers comprised the majority of perpetrators (51.6 percent), followed by co-worker conductors (18.1 percent) and vehicle owners (11.3 percent). The RiB Project in southeast Queensland yielded parallel findings with 89 percent of drivers experiencing physical and verbal assaults as well as incivility and property damage on-board by passengers in the last 12 months (Lincoln & Gregory, 2014b). Violence is considered "white noise" and inevitable to the working environment of bus drivers, where it is the "rule rather than the exception" (Lincoln & Gregory, 2014a). These findings suggest that passenger aggression is a common occurrence in urban bus environments in a variety of countries.

Two main studies have highlighted the negative effects of passenger aggression on bus driver health. Fisher and Jacoby (1992) found that physically assaulted drivers

were more likely to develop PTSD and mild depression than non-assaulted drivers. Research carried out by the UK Department for Transport found that 44 percent of assaults on drivers were serious enough that the driver took time off work (Morgan & Smith, 2006). In a further 13 percent of assaults, drivers were unable to finish their shift. Clearly this can have flow on-effects for the level of customer service and safety for other passengers. It also has consequences for transit operators, owing to litigation, staff-turnover, injury related claims, absenteeism, lost revenue through a reduction in usage and additional costs due to staff recruitment and retention (Essenberg, 2003; Tse et al., 2006). Developing effective strategies to reduce passenger aggression against urban bus drivers thus represents a key challenge facing transport providers.

While the extent of passenger aggression on bus networks has been established, much less is known about the nature of these aggressive encounters. In examining broad patterns about prevalence, some studies have garnered limited information about the forms and triggers of abuse. Regarding forms, verbal abuse and threats are considered of most concern (Chappell, 1998; Couto et al., 2009; Lincoln & Gregory, 2014b; Nakanishi & Fleming, 2011). These can escalate into physical assaults, including use of objects such as weapons and bottles, where spitting is viewed as particularly problematic (Nakanishi & Fleming, 2011; Couto et al., 2009). Other types include projectiles thrown at or inside the bus and property damage (Nakanishi & Fleming, 2011; Lincoln & Gregory, 2015). Triggers for aggression encompass disputes over fares, intoxication, passenger disdain for drivers, rudeness on behalf of drivers, failure to meet passenger expectations, overcrowding and robbery (Couto et al., 2011; Lincoln & Gregory, 2014a). Rule enforcement, late running, school or youth related violence and mental illness have also been implicated (Nakanishi & Fleming, 2011; Lincoln & Gregory, 2014a). Further, incidents tend to cluster in the afternoon peak period, coinciding with after school and peak hour travel, and late evening or early morning, when patronage is linked to the late-night economy (Nakanishi & Fleming, 2011; Lincoln & Gregory, 2014a).

Some studies have examined the tactics used by public transport workers, including bus drivers, when dealing with troublesome travellers (Echeverri, Salomonson, & Aberg, 2012; Salomonson & Fellesson, 2014). In a Swedish study comprising interviews with regional train conductors and local bus drivers, three groups of practical tactics were identified: appearance, interaction and physical environment (Salomonson & Fellesson, 2014). Tactics based on appearance involved both temporary actions (e.g. altering body posture, gestures), and stable characteristics that deter misbehaviour (e.g. body size, tattoos), where females were noted as being at a disadvantage. Interactional tactics included verbal skills to demonstrate active listening (e.g. letting the customer talk, keeping a friendly tone) or, in contrast, ignoring the customer, lying to them and acting authoritatively. Employees also reported bending organisational rules (e.g. allowing the customer to travel for free) and making use of other passengers as an audience to avoid conflict. Tactics based on the physical environment encompassed both spatial strategies, such as keeping an appropriate physical distance, always facing the passenger and not blocking their way, as well as temporal strategies, such as avoiding conflict until arrival at a station, informing the police about the exit being used by the passenger and delaying opening doors so the police can get into position.

Risk and Contributing Factors

Bus drivers are required to carry out their duties in many of the circumstances that characterise dangerous workplaces. They work alone and outside of the organisation, engage in cash-handling procedures, work irregular hours and traverse through high crime areas (Mayhew, 2000c; Essenberg, 2003; Newton, 2004; Mayhew & Chappell, 2007). They routinely deal with the public, including groups who can present special problems, such as school children, intoxicated people or those with severe mental illness (Essenberg, 2003; Morgan & Smith, 2006; Moore, 2012). What is more, public transport workers are increasingly viewed as “servants of the state” (Lincoln & Gregory, 2014a; Nakanishi & Fleming, 2011; Salomonson & Fellesson, 2014). They can be seen as easy targets of blame for any inadequacies regarding the standard of transport, especially when they are required to enforce rules and system policies (Smith & Clarke,

2006). Given these factors, bus drivers face an increased risk of aggression from passengers due to the design and structure of their working environment.

There are several situational and environmental factors inherent to public transport settings which have been linked to the risk of aggression among public transport employees. In terms of situational factors precipitating aggression, key issues include disputes over fares and intoxication. Research suggests that disputes over fares precede the majority of assaults against public transport workers (Chappell, 1998; Morgan & Smith, 2006; Nakanishi & Fleming, 2011). These precipitating events may surround refusal to pay a fare, disagreement over the cost of a fare, providing incorrect change, the validity of passes or overriding (i.e. staying longer on the bus than for the journey paid). Employees who challenge fare evaders face the highest risk of assault (Paterson et al., 2010). It has been found that fare structure plays an important role, with systems having large differences between child and adult fares or ambiguous travel zones being more likely to foster confrontation (Morgan & Smith, 2006). The second most common factor preceding assaults is intoxication. Alcohol is implicated in up to one-third of assaults on transport workers (Jochelson, 1994), particularly those incidents that occur on Friday or Saturday nights in the late evening or early morning (Morgan & Smith, 2006; Paterson et al., 2010). The problems associated with intoxication increase when large groups of drunken passengers travel together, such as to or from night-time economy precincts and sporting events (Boyd, 2002; Anglin, Neves, Giesbrecht, & Kobus-Matthews, 2003).

There are three other key factors integral to assaults against transport staff. First there are “service problems” where surveys of transit staff indicate that poor quality environments, such as dirty or non air-conditioned trains, often contribute to assaults (Boyd, 2002). Service delays frustrate passengers and increase the risk of confrontation, even if delays are outside the driver’s control, for example traffic congestion (Morgan & Smith, 2006). A second factor is that involving “traffic accidents” where research on bus drivers suggests that the need to make frequent stops to pick up passengers can lead to hazardous driving that angers other road users (Oxley, 1985), which in turn increases the risk of confrontation (Chappell, 1998). A final set is under the heading of “hooliganism” where rowdy, loitering and disorderly behaviour is deemed to underlie some assaults on public transport workers, particularly bus drivers (Morgan & Smith, 2006; Chappell, 1998). These assaults occur when employees intervene in an attempt to

prevent passenger disputes, or when they are in the process of removing them from vehicles or stations (Poyner, Warne, Webb, Woodall, & Meakin, 1988).

There are certain administrative and technical features built into the design of the system itself that can elevate frustration for passengers. In a study of public transport systems, frontline staff reported being frequently confronted with disgruntled travellers due to confusion over the numerous fare and ticketing options available, even though these options were introduced with the aim of enhancing customer satisfaction (Felleson, Salomonson, & Arberg, 2013). Similarly, it was noted that innovative technological features implemented to promote efficient service, such as ticketing machines, are prone to failure and such disorder can trigger assaults against staff. There are two principal causes of system design flaws particularly in the public transit arena (Newman, 2008; Felleson et al., 2013). First, administrative and technological features are often developed prior to and separately from system operation, and therefore run the risk of conflicting with practical reality. Second, service systems are challenged by competing tensions of production logic, which demands large-scale standardisation and efficiency, and service logic, which demands individualisation and adaptability.

Transport Prevention Measures

Situational Crime Prevention and Routine Activity Theory were described in some detail in Chapter 1 for they provide the framework for the current thesis. In this section, there will be further teasing out of how the sub-field of crime prevention can be applied to the transport industry and the specific sector of urban bus transport (Lincoln & Gregory, 2014a). In the triangle of crime, as first described by Cohen and Felson (1979), public transport may constitute part of the routine activities of offenders (passengers, general public), suitable targets (staff, passengers, transit infrastructure), as well as capable guardians (police officers, security staff, CCTV cameras, third parties). The five overarching categories of Situational Crime Prevention and the 25 techniques (Cornish & Clarke, 2003) can similarly be applied to the occupation of bus driving (see Table 2). Here it can be seen that there are several situational factors operating in the environment which can increase the risk of frustration and aggression involving passengers and bus drivers.

Table 2: The five categories of Situational Crime Prevention applied to bus driver assaults (adapted from Lincoln & Gregory, 2014a).

Category	Description
Reduced effort to offend	Open access to driver; “do not leave your seat” notion; mobile environment; insufficient driver training; external emergency release.
Low risks of offending	Limited availability of security personnel; isolation; perceived low status of drivers; anonymity; external hiding places such as bushes and fences.
Rewards for offending	Cash-handling; unprotected personal belongings; “don’t argue, just let them on” notion.
Provocations	Ticketing issues; service quality; driver “bad attitude”; deficient technology; bus mechanical problems; time-tabling and late-running; overcrowding.
Excuses for offending	“No child left behind” policy; drivers seen as “servants of the state”; poor public image, limited consequences for offending.

In light of these considerations, a range of protection measures for bus operators and transit workers have been proffered. The measures cover policing, staff training, technology, education and outreach, and policy and legislation (Easteal & Wilson, 1991; Chappell, 1998; Morgan & Smith, 2006; Morgan & Cornish, 2006; TRACS, 2015). There are many interventions that can be applied and tailored to specific crime problems. Conflict resolution training is more effective for reducing assaults emanating from disputes, while barriers and target hardening (e.g. screens) are more effective in protecting operators from spontaneous attacks (Queensland School Transport Safety Task Force, 2001; Nakanishi & Fleming, 2011). Emergency communications, duress alarms and vehicle location technology focus on improving incident response (Mayhew, 2000b; Smith, 2005). Visibility of officers through on-board and vehicle patrols to increase guardianship has been deemed the most effective strategy, although due to staffing and budgetary restraints there has been a reduction in this method internationally (Chappell, 1998; Nakanishi & Fleming, 2011; Lincoln & Gregory, 2014b; TRACS, 2015). Video surveillance and DNA kits are useful for deterrence and subsequent identification and prosecution of assailants (Easteal & Wilson, 1991; Morgan & Smith, 2006; TRACS, 2015). Agencies have introduced policies such as suspension of service for those who violate policy rules and facilitated the enactment of legislation for increased penalties for operator assaults (TRACS, 2015; ABC, 2016). It is conceded that this brief section constitutes only a limited discussion of the possible

prevention measures that have been recommended or implemented to protect drivers. However, its aim is to acknowledge that there is a raft of techniques proffered, and to foreshadow further discussion around these later in this thesis.

Critical Appraisal of the Extant Literature

While some Australian studies have explored the incidence and prevention of passenger aggression against public transport workers, the focus has been on taxi drivers (Mayhew, 2000a, 2000b), rail staff (van Barneveld & Jowett, 2005) and flight attendants (Williams, 2000; Goldsmid et al., 2016). Although parallels can be drawn between these occupational groups and the settings in which bus drivers work, each mode of public transport contains unique environmental features, and hence the nature of passenger abuse on each system differs and requires a discrete set of solutions (Easteal & Wilson, 1991). Thus, there is a need for research specifically focused on aggression between passengers and bus drivers.

Some empirical works have been conducted on buses, although they usually centre on occupational health and crime prevention. Very few have considered on-board violence as a psychosocial stressor impacting on working conditions, safety and well-being of drivers while carrying out their role until the RiB study in Queensland (Lincoln & Gregory, 2015). Clearly, this has significant implications for the design and implementation of prevention strategies aimed at reducing the problem (Easteal & Wilson, 1991). Without localised data on the scope and features of the problem, it is difficult to tailor appropriate responses and evaluate the effectiveness of implemented schemes (Chappell, 1998; Lincoln & Gregory, 2015). Transit agencies have different sets of institutional and budgetary constraints, and some measures are more appropriate for preventing certain problems than others. Therefore, a detailed understanding of the local problem in its natural setting is critical when seeking to reduce its incidence and prevalence (Chappell, 1998; Cornish & Clarke, 2003; Felson & Eckert, 2015).

There are international studies that have elicited data on the nature of driver-passenger aggression on buses, although a number of limitations remain. Some studies have taken a composite approach, where the units of analysis encompass taxi drivers and conductors, ticket collectors, as well as bus and train drivers (Couto et al., 2009;

Echeverri et al., 2012; Felleson et al., 2013). As a result, the findings regarding types and triggers for passenger aggression are not context-specific. Others are of less relevance to an Australian setting because of socioeconomic and cultural variations, geographic differences, or a lack of comparability because of the nature of the bus systems (e.g. structure, policies and procedures). For example, the research conducted in Mozambique is limited to other low GDP countries with similar transport conditions (Couto et al., 2009). Similarly with regard to US research, the transport systems examined had exact-fare policies and automated fare-collection systems where drivers are not required to engage in cash-handling procedures (Nakanishi & Fleming, 2011). This criticism can be applied to the bulk of literature on the transport industry and bus networks especially with reference to crime prevention as the field is dominated by studies from the UK and US where there are many dissimilarities. In Australia, for example, bus drivers are often required to engage in cash transactions with passengers, and this characteristic alone may result in more diverse manifestations of and contributors to driver abuse.

In addition, the research has been overwhelmingly quantitative, focused on surveys establishing extent, or identifying broad statistical patterns on forms or factors contributing factors to abuse. A problem with this quantitative focus is that it reveals little about how the broad range of potential factors implicated in aggression operate and play out during specific encounters. Consequently, little is known about the dynamic, interactive aspects of aggression and the underlying processes of escalation, volatility and audience features. Furthermore, the survey methodologies have mainly been conducted from the driver's perspective. As noted in Chapter 1, such an approach is inherently biased and fails to acknowledge the reciprocal nature of aggression. Additionally, underreporting has been identified as a significant barrier impacting research on bus drivers. One study found that less than 10 percent of assaults and threats are reported by bus drivers in any official capacity (Bishop, Cassell, & Hoel, 2009). Similarly, the RiB Project revealed that over half of drivers surveyed did not officially report an abusive incident encountered over the last 12 months (Lincoln & Gregory, 2014a). The primary reasons for non-reporting were that nothing would be done, they solved it on their own, the abuse was not perceived as serious enough, and that there would be no consequences for the perpetrator (Lincoln & Gregory, 2014a). While the issue of underreporting is particularly pertinent to research establishing the extent and

prevalence of aggression, it can still limit our understanding of the nature and scope of violence as fewer incidents are reported to consider.

Summary

While there has been some attention to workplace violence in Australia specifically on the transit sector, very little has focused on violence against bus drivers on-board until the RiB Project in Queensland. Nevertheless, there is now sufficient research as presented in this chapter to conclude that the occupation of bus driving includes an elevated risk of being involved in workplace violence incidents from passengers or the general public. It would seem that it is usually in the form of verbal abuse and general rudeness and there are feelings of vulnerability expressed by drivers. The health data certainly indicate the stressful and physical nature of driving as well as the potential for aggression to impact on a range of health measures from cardiovascular disease to depression. This chapter also briefly examined the research on factors contributing to the risk of passenger aggression on public transport and buses. It outlined what the sub-field of crime prevention can offer to a study on workplace violence and showed the various crime prevention measures applied in this specific workplace environment.

The chapter ended by summarising some of the shortcomings of the already limited knowledge base on the nature of violent incidents involving bus drivers. Sometimes these relate to the composite nature of sampling or cross-cultural variation in system design and functioning. Other problems include focusing on driver perspectives of the nature of abuse which are hampered by problems of bias and underreporting, and the quantitative nature of research which reveals little about the dynamics of specific encounters. A more objective method is needed that takes into account the perspectives of both drivers and passengers. The method needs to focus on specific encounters rather than broad statistical patterns to capture the dynamic and fluid nature of violence. It should firmly take into account the context within which aggression occurs given multiple factors at play in the bus environment that can culminate in aggression (refer to Table 2). Harnessing the output of the ubiquitous installation of CCTV on bus networks is one way to achieve this, and this unique methodological approach is the subject of the next chapter.

CHAPTER 3

OVERVIEW OF THE RESEARCH FRAMEWORK

Introduction

This chapter provides an overview of the research design of the present study. It begins with a short discussion of the use of video technology as an emerging research tool in the social sciences, focusing specifically on the re-purposing of CCTV material normally used for surveillance purposes. It then describes the research approach, which essentially comprises a qualitative case study framework given that it is of a single privately-owned bus company operating the region of southeast Queensland and treats each aggressive incident as a single case. This is consistent with a crime prevention perspective which encourages examination of specific crime events in-situ and how the various elements interact in time and space. The chapter canvasses the methods and procedures used to gather and then organise the sample of digital AV material, including the exclusion criteria applied. It then provides a step-wise account of how the qualitative data were extracted and analysed, where the focus was on the thick, detailed qualitative narratives constructed for each of the 20 events that comprised the final sample. The chapter concludes by presenting a descriptive overview of the dataset, including the numbers, types and quality of the CCTV files.

Using CCTV as a Research Tool

Video technology has emerged as a powerful new research tool within the social sciences and has been used in diverse ways (Haw & Hadfield, 2011; Heath, Hindmarsh & Luff, 2010; Jewitt, 2012). In participatory video, the “subjects” of research are given access to recording equipment and asked to document certain aspects of their lives; whereas video elicitation techniques have been used to enhance focus groups or interviews to prompt discussion, provide a basis for further reflection, or stimulate recall (Jewitt, 2012). In fieldwork settings, videography is harnessed to capture social phenomena or conversation sequences to permit analysis of behaviour and interaction (vom Lehn & Heath, 2006). Using existing video data involves re-purposing audio-visual material from institutional or public archives to analyse naturally occurring

phenomena or, more commonly, media practices and online communication (Jewitt, 2012). It is this form of video technology that serves as the data source for the current research project in the form of secondary CCTV material obtained from a private bus company.

It is increasingly recognised that video technology holds a number of advantages over conventional methods of naturalistic observation, such as manual note taking and in-situ coding. Video technology is not only cheap, reliable and accessible, but also provides a permanent re-visable or re-viewable record of the phenomena under examination (Heath & Luff, 2008; Knoblauch & Tuma, 2011). These records can be subject to repeated and detailed analysis, in conjunction with features like slowing, pausing, rewinding and zooming to uncover elements and patterns easily overlooked by the field researcher (Heath & Hindmarsh, 2002). The records can also be revisited over a longer period of time once an understanding of and familiarity with the data have been developed to refine the research questions and data extraction process. In addition, audio-visual material can be scrutinised independently so that co-researchers can verify the reliability of coded observations, or consider the material from different analytic perspectives (Heath et al., 2010).

In these ways, video technology has afforded social scientists an unprecedented opportunity to analyse, in real-time, the minutiae of situated conduct and interaction across a variety of social settings (Heath & Hindmarsh, 2002). For example, video technology has been employed to understand the ways in which talk, gesture and technology inform the practical and collaborative accomplishment of workplace activities such as in control centres, trading rooms, newsrooms, surgical operating theatres and medical consultations (Heath & Luff, 2008). Other studies have used video technology to understand behaviour in informal learning environments, including children's play in kindergartens and schools, as well as the experiences of visitors in museums, galleries and science centres (vom Lehn & Heath, 2006). These developments clearly demonstrate the potential of video technology to shed a new and distinctive light on a range of long-studied topics in the social sciences. This is particularly pertinent for the study of aggression, where analysis of audio-visual recordings can overcome the usual practical and ethical constraints associated with capturing independent data about interpersonal conflict (Levine, Taylor, & Best, 2008).

Using existing video data, specifically CCTV, has a number of benefits for the study of aggression in public space. Due to its utility for investigative and evidentiary purposes, CCTV technology is typically set up to cover wide and multiple angles, with the aim of recording events in their entirety. This serves to minimise selectivity in video data by ensuring that all contextual elements relevant to the analysis are adequately captured. Additionally, CCTV technology is generally installed in a fixed and remote position, which promotes consistency in recordings and offers a less obtrusive means of observation. Despite controversy about its surveillance capabilities (Wilson & Sutton, 2003), given the now ubiquitous installation of electronic surveillance in both public and private space, it is argued that CCTV technology has become regarded as banal (Goold, Loader, & Thamala, 2013). The behaviours captured by these digital recordings are therefore less likely to be impacted by reactivity (cf. the Hawthorne Effect). Indeed, interview data suggest that offenders are rarely deterred by CCTV believing that it does not make crime commission more difficult or pose a serious threat of apprehension (Gill, Spriggs, Little, & Collins, 2006). This is particularly the case for expressive forms of crime (e.g. assault, murder) due to the often affective and spontaneous nature of such offences (Wells, Allard, & Wilson 2006). This finding is relevant to the use of CCTV in studying aggressive workplace encounters, since negative emotions play a key role in the development and escalation of incidents (Yi & Gong, 2008). However, there are also limitations involved in using recordings from established CCTV networks and these problems are critiqued in Chapter 5.

Despite the advantages of using existing CCTV data as an observational tool, few studies to date have harnessed its research potential within the social sciences. Only two studies have been located: one on visitor behaviour in museums (Beaumont, 2005), and another on human conflict in public drinking spaces (Levine, Taylor, & Best, 2011). In the latter study, which has most relevance to the present criminological project, the authors performed a systematic behavioural analysis of incidents of public aggression captured on the CCTV system of a local UK city centre to examine the role of third parties in conflict escalation. Their analysis revealed that the presence of third parties serves to inhibit rather than facilitate conflict escalation, with this effect becoming more pronounced as group size increased. These findings stand in direct contrast to long-standing and widely-held psychosocial theories about the role of third parties and group size in undermining the regulation of aggression. They do however

point to the important role played by “guardians” in crime events (Felson & Eckert, 2015). Thus, the use of CCTV data is unique as it has the potential to render contrary results to previously used methodologies or to expand our depth of understanding of workplace violence events.

Qualitative Case Study Approach

This thesis and the research upon which it is based is primarily a qualitative case study approach given that it focuses on incidents involving buses and drivers from a single company, rather than sampling across multiple sites. By way of background, it is instructive to provide further backdrop about the research setting. Surfside Buslines is privately-owned but publicly-contracted by the state government to provide all the urban bus services on the Gold Coast. There is a limited train service that links to metropolitan locations (mainly in Brisbane) and more recently a limited light-rail service has been added. The region has a permanent population of 500,000 but an annual tourist in-flow of 10.5 million (Gold Coast City Council, 2013). The region is characterised by having very low usage of the public transit network with almost 90 percent of trips per annum being taken by private car (Gold Coast City Council, 2013). The bus company competes for tender to provide local commuter and school run services as well as catering for the tourism needs of the region. Its network traverses a large geographical area abridging some 50 kilometres of Pacific coastline. Their driver employees number in excess of 650 (permanent, part-time, full-time and casual), of whom almost 90 percent are male. The the median age is in their 50s, with many choosing bus driving as a second career (Lincoln & Gregory, 2014a).

There is a second way in which this research adopted a case study design and that is because it treated each aggressive incident in the final sample as a single case. The research is informed by the sub-field of Situational Crime Prevention (Clarke, 1997) and specifically the theoretical framework offered by Routine Activity Theory (Cohen & Felson, 1979). One of the main premises of crime prevention is that each specific crime category ought to be examined in situ and therefore the context or situational features are paramount. Similarly, Routine Activity Theory raises the notion that targets, offenders and guardians are “ingredients” to crime and therefore the interactions and relations among them are fundamental. Given that both these frameworks encourage

the adoption of an event based perspective, the present study undertook this case study approach to examine the four-way intersection of drivers-passengers-guardians-settings in time and space. This contrasts to most previous workplace aggression research, which has generally ended at the individual level with a dual focus only on either targets or perpetrators and causes or outcomes. The adoption of this event based approach also accords with a trend in criminological research which is moving away from broad quantitative studies to assess the foreground or proximal elements of criminal events (Travers, 2013).

Thus, one of the first analytic steps was to create “thick” and “rich” descriptive qualitative narratives for each of the incidents of aggression included in the study (cf. Cornish, 1994 on Crime Scripts; Geertz, 1973; Denzin, 1989). These were constructed in order to capture the dynamics of driver-passenger aggression and focused on detailing the background, circumstances and context surrounding the observed action, especially “the complexities ... and the ways these interact” (Lincoln & Guba, 1985, p. 214). This highly detailed qualitative, observational approach is deemed essential to capture and tease out the interactive elements of aggression, such as volatility, escalation and audience features. It provides the essential framework for these elements for it is not just about the presence or absence of these features per se, but how they interact in time and space (Graham et al., 2006).

As noted in the Introduction, three broad research questions contextualise the present study:

- What are the key proximal factors contributing to abuse on-board buses between drivers and passengers?
- What are the reactions/responses to aggressive events on-board buses?
- What individual or environmental factors are related to the volatility and escalation of violence between drivers and passengers?

Sampling and Selection of CCTV Footage

The CCTV footage was gathered from the private bus company computer over several visits in 2014. The computer contained hundreds of files which were divided into their year of occurrence. Each file had been named by the bus company, which often included keywords about the nature or purpose of the footage and a date. Some titles were specific (e.g. “theft attempt May 16”), while others were more ambiguous (e.g. “unknown CCTV 20th”). Each file contained several digital AV clips deemed by the bus company to be relevant to the incident. Any file where the label contained keywords clearly pertaining to the risk or occurrence of violence, aggression or abuse on-board (e.g. “assault”, “brawl”, “fare dispute”) were copied onto an external hard-drive. Files labelled with more ambiguous terms (e.g. “pax complaint 7 Jun”) were briefly reviewed to see if they contained any element of aggression and if so were also transferred onto the hard-drive. Files containing terms such as “accident” or “pax fall” were ignored during this initial sampling process as they were clearly not relevant to the study of driver-passenger aggression. Thus, a non-probability purposive sampling method was adopted (Weerakkody, 2008), with the aim to copy every single incident of aggression captured during the specified period of 2012 to 2014.

There was a total of 234 files downloaded as part of this process. To facilitate further refining of this preliminary sample, all the CCTV footage was viewed and documented via a brief written description and a rating of the quality of the footage (see Figure 2). Given the large quantity of files, this sorting process was essential as some incidents involved, for example, a theft while the driver was off-board and thus fell outside the scope of this study. Additional files were excluded because they related to conflict between passengers (which again is outside the remit of this research), workplace health and safety issues (e.g. relating to back injury) or where the police were seeking evidence (e.g. footage of missing child getting onto the bus). Most incidents contained only verbal aggression, and while this is an important element of workplace violence, the audio was not always of sufficient quality to be analysed. Many files were excluded because of poor image quality, where there was significant chopping and lagging to the point where the footage could not be adequately analysed.

Figure 2: Examples of CCTV files excluded from the initial sample of incidents.

Year	Description	Quality
2012	Car speeds up to be next to driver window, verbal road rage directed to driver through his window, car speeds off.	Poor – B/W, lagging
2012	Theft of money while driver off-board.	Poor – Col, lagging
2012	Verbal abuse from four young men in group over not having money for fare, boys end up just walking on, driver uses two-way and keeps driving.	High – Col, 4 angles

Incidents or altercations that occurred exclusively off-board were also excluded in an attempt to obtain a more homogeneous sample where all actions were captured for all actors by the CCTV equipment. However, acts or behaviours that entered the bus even though the actor was off-board were deemed acts of on-board aggression (e.g. where a passenger previously on the bus spat at or punched the driver through the window). Incidents were still considered on-board even if they moved off the bus at some point during the altercation (e.g. a driver and passenger grappling and landing off the bus). Thus the final sample comprised 20 incidents of a physical nature occurring on or through the bus between bus drivers and passengers which were captured by CCTV of high visual quality. Given the focus on overt acts of physical aggression, the present research firmly adopts a harm-based approach to the study of customer aggression.

Data Extraction and Analysis Procedures

In order to facilitate the collection of observational data, an “analysis template” was developed (see Table 3) in accordance with the event based perspective and case study design adopted in this study. The analysis template isolated some quantitative variables that were “counted” to assist in developing an overall picture of the incidents represented in the dataset. This aided the understanding of broad patterns, as well as the similarities and differences across incidents (see Appendix 1). The final set of variables were grouped under five principal categories: description of the dataset (e.g. files per incident, time of day); characteristics of the bus and driver (e.g. presence of screen, gender of driver); characteristics of the perpetrators (e.g. number involved, age and gender); characteristics of the incident (e.g. highest level of aggression, audience

density); and characteristics of response (e.g. use of two-way radio, other passenger involvement). These variables were mostly assessed in terms of yes/no or presence/absence of features, or by assigning nominal labels or categories. Additionally, they served as standardised cues to prompt examination of key aspects of aggression on-board, as suggested by the RiB Project and crime prevention frameworks, in the qualitative descriptions that followed. Thus, they provided direct guidance for the qualitative analytical process.

Table 3: Analysis sheet used for extracting quantitative and qualitative data.

INCIDENT NO:	
DESCRIPTION OF THE DATASET	
Date:	Time:
Sound:	Colour:
Video quality:	No. of videos:
Total length:	No. of angles:
CHARACTERISTICS OF THE BUS & DRIVER	
No. of doors:	Clean:
Protective screen:	Driver door:
Seatbelt:	Driver gender:
CHARACTERISTICS OF THE PERPETRATOR(S)	
No. of offenders:	In group:
How many:	Youth/adult:
Age group:	Gender:
CHARACTERISTICS OF THE INCIDENT	
Bus still/in motion:	Pax density:
Trigger:	Level of aggression:
Escalation:	Volatility:
Other pax injured:	
CHARACTERISTICS OF RESPONSE	
Driver active/passive:	Driver remain seated:
Driver physical aggression:	Before/after pax physical abuse:
Any pax involved:	No. of pax involved:
How pax involved:	Driver use of two-way:
Before/during/after:	
QUALITATIVE DESCRIPTION	
<i>Keywords:</i>	

In addition to gathering these quantitative elements, highly detailed and extensive qualitative narratives were constructed for each incident so that the full extent of the event was empirically captured. They were derived by viewing the CCTV footage associated with each incident on multiple occasions either in their entirety or by seeking out and re-viewing areas that required further clarification. These detailed descriptions ranged from approximately 300 words to over 4,000 words dependent on the complexity and the length of the crime event being observed. The narratives served to capture the four-way intersection of drivers-passengers-guardians-settings and enabled assessment of key concepts such as escalation which cannot be achieved in a binary fashion. Each qualitative description was followed by a set of keywords as a means of extracting themes from the narratives including any regular issues or unique aspects that stood out (e.g. “fight moves off bus”, “retaliation”).

It is important to stress that the terminology adopted in the analysis template is not necessarily reflective of that used throughout the remainder of this thesis. For instance, the observations recorded about the aggressors in the analysis template labelled them as “perpetrators”. This was because the framework of this research followed a Routine Activities approach where it is usual to think of crime events in dichotomous terms of “targets” and “offenders”. However, about half way through the analysis it became apparent that such terminology was misleading given the reciprocal nature of most incidents. As has been canvassed above, this overlap might be “missed” by quantitative methods where the label target or perpetrator is dependent on the “cross-section” or “point in time” examined.

Data analysis in the present project was very much an iterative and reflexive process (Tracy, 2013). It alternated “between emic, or emergent, readings of the data and an etic use of existing models, explanations, and theories” (Tracy, 2013, p. 184). Indeed, one of the main benefits of using CCTV data is that they can be viewed and reviewed to clarify issues or apply new questions as necessary. For instance, some of the variables isolated in the analysis sheets were not originally included, however when writing the narrative descriptions, additional or more effective ways of coding or classifying incidents regularly emerged. Initially, there was a single descriptor about the driver’s use of the two-way (i.e. “yes/no”) but it emerged that it was also important to determine whether the driver used the two-way before, during or after the incident and the manner in which it was used (e.g. as a “threat”). In these instances, previously

analysed incidents were re-examined or coded accordingly and additional data were extracted where necessary “to flesh out an emerging code or explanation of what is happening in the scene” (Tracy, 2013, p. 195).

The first step in reducing the qualitative narratives was immersion in the data to gauge the entire breadth of the dataset. The second activity was to engage in first-cycle coding, where the data were re-examined and tentative words or phrases were manually assigned to “chunks” of data to summarise and capture the essence of certain concepts, actions, themes or relationships (Miles & Huberman, 1994). In addition to those five variable categories listed previously, the analytic process examined the contextual or environmental conditions, any intervening or influencing features, the actions and interactional/relational elements and the consequences of actions or interactions. This primary-cycle coding process was about uncovering “what” was present in the data, or the basic activities and processes involved, noting things that were typical or interesting in some way, to provide a “vivid, multi-textured picture of the data” (Tracy, 2013, p. 190). Figure 3 is an example of these primary or descriptive first-level codes applied in relation to driver response behaviours from the detailed observational narratives.

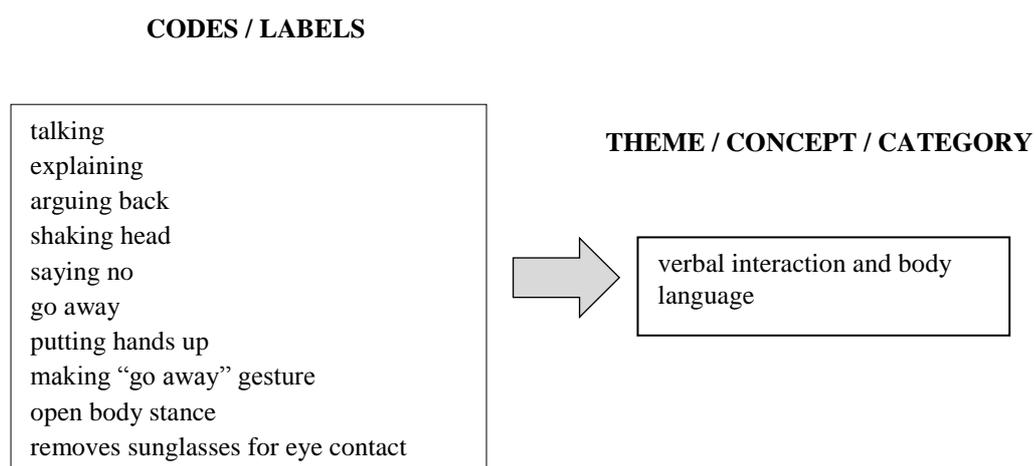
Figure 3: Primary-cycle coding of driver response behaviours.

<p>Driver pulls over to let passengers on, two get on. Male enters with two male friends behind him (one has skateboard), rests hand on wall behind and says something to the driver (“can I get a free ride?”), driver shakes head and points out the window. Male keeps talking, driver makes hand gesture as if to say “no, go away, move on”, male and his friends keep talking, driver grabs two-way and says something to males, then actually uses two-way, males keep talking and driver keeps refusing.</p>	<p>SAYING NO GO AWAY USES TWO-WAY ARGUING</p>
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Subsequent to this initial analysis, the coding process moved to second-cycle coding, where more focused and analytical codes were assigned to the data. This involved systematically “identifying patterns or groupings of codes within the data” and drawing out from these more abstract contextual categories or themes (Tracy, 2013, p. 195). Here, similar codes were clustered together to produce more general higher-order codes (King, 2004). In this way, the individual cases progressively developed into abstracted categories and concepts. Figure 4 contains an example of how second-level codes relating to driver response behaviours were grouped.

The constant comparative method was employed throughout the coding and analysis process in which the data applicable to each code were compared and the associated definitions were modified to fit new data where necessary (Tracy, 2013). For example, as in Figure 3 (that presents a first-level coding example), the analysis began with the code “using two-way”, but over time, through the constant comparative process, it became apparent that there was an important distinction between drivers taking out the two-way radio versus actually speaking into it. Thus this code was separated out to encapsulate these two dimensions (e.g. “takes out two-way” vs “speaks into two-way”). Similarly, deviant data or negative case examples that did not appear to fit the emerging classifications were also considered. In these instances, the classification systems were revised to better fit all of the emerging data.

Figure 4: Secondary-cycle code groupings applied driver response behaviours.



The coding schemes of physical aggression developed by Graham and colleagues (2005, 2006, 2011) were utilised in the present study. Their observational work centred on aggressive bar-room events involving patrons and staff, where they examined level of harm, intent and motive for physical aggression. The schema of coding for harm by Graham and colleagues (2006) includes three levels: minor, moderate and severe physical aggression. Minor physical aggression involves “acts where the harm was primarily psychological (such as making the person feel bad, unwanted, pestered, invaded) with physical harm being minimal (e.g. light pushing or pushing someone away, unwanted but non-forceful contact as part of a sexual overture,

grabbing someone in a non-forceful way)” (p. 285). Moderate physical aggression includes acts where there is “definite unwanted physical impact but harm does not reach the extent of causing pain (e.g. fairly forceful pushing, shoving, grabbing)” (p. 285). Severe physical aggression encompasses acts rendering “physical pain (e.g. punching, kicking)” or resulting in obvious injury (p. 285).

Moreover, the coding schemes of intent and motive developed by Graham and colleagues (2005, 2011) were also employed to analyse incidents where the driver made the first physical move. Initially, incidents were categorised as “driver-initiated aggression” (as opposed to passenger-initiated), however it became apparent that labelling the incidents in this fashion was unsustainable when the content and context of the incidents were further analysed. For example, some of the incidents appeared to involve an element of provocation, necessity or self-defence. Therefore, in order to place this finding into a more meaningful context, the research further drew on the coding schemes developed by Graham et al. (2005, 2011) regarding intent and motive for staff aggression against patrons. Although these are deemed internal processes, they can be behaviourally assessed because “social interactions are determined by perceived motives of others, judged by their words, actions, facial expressions, and body language” (Graham et al., 2011, p. 3). Assessing these constructs is important as they give the act meaning and recognise that harm, intent and motive are intersectional. For example, “grabbing someone by the arm to prevent him or her from fighting is qualitatively different from grabbing someone by the neck in anger or intimidation” (Graham et al., 2006, p. 292). The typologies for intent and motive were only applied to instances of driver-initiated aggression, not passenger aggression given that theirs were directly related to the proximal factors, for example frustration around fares or service or rules.

Graham and her co-authors (2005) distinguished between three levels of intent for staff: defensive, probable and definite intent. Defensive intent includes intervening to prevent greater harm, such as pushing people in a fight apart, or self-defensive acts such as pushing a threat away, where pushing uses no more force than necessary. Probable intent is defined by “rule enforcement or interventions with patrons where the force used appeared to be excessive but where it was possible that the staff member believed that the level of force was necessary” (p. 757). Finally, definite intent involves rule enforcement or interventions where the force used was clearly excessive.

In terms of motive, Graham and colleagues (2011) identified four types: compliance, grievance, identity and fun. A series of behavioural indicators for each motive was proposed and these were used when coding the present data. Compliance motive is exemplified by aggression enacted to make a patron comply with the aggressor's goals, including making someone do something or stopping someone from doing something. The grievance motive refers to aggression used in response to unfair or offensive treatment, to punish a wrongdoing, or defend rights, whether such behaviour is directed toward the aggressor or someone they are motivated to defend. Identity motive involves using aggression to assert or defend identity (e.g. bullying, save face). Identity motive is distinguished from grievance motive in that the aggressive response must be disproportionate to the perceived wrong. Finally, the fun motive included aggression purely for pleasure or excitement. It is important to note that the categories are not mutually exclusive in that different motives can occur concurrently or sequentially as the altercation unfolds. For instance, an aggressor may initially have a grievance motive but shift to an identity motive.

Table 4: Coding highest level of aggression in ID05 utilising the Graham et al., 2006 schema.

severe	primary passenger spits at driver's head
moderate	driver grabs primary passenger, pulls him in
severe	driver hits primary passenger in the face
moderate	primary passenger grabs driver's arms
severe	driver kicks primary passenger's legs
severe	primary passenger spits at driver twice

As a consequence of the iterative and reflexive process in extracting and “making sense” of the data, it is imperative to acknowledge the complexities and subjectivities involved in such coding. It is a procedure that is fraught with difficulties and, in this case, there was only a single researcher undertaking these analytical steps. One example of its subjectivity is that spitting could be deemed a moderate level of aggression because this act does not involve direct physical contact. However, it is in fact an “assault” offence in the criminal code of the study setting of Queensland and so this act was labelled as severe in the present analysis. Another example that reveals how the context is paramount is where a driver tells a passenger to “get off” the bus. In most instances this was judged as a relatively passive action but there were occasions when this was more stridently delivered or occurred very early on in the incident and thus could be construed as proactive conflict resolution behaviour (see also Chapter 4).

There were also multiple actors and actions in every incident which underscores the difficulties encountered in assigning a nominal label to the highest level of aggression (see Table 4 for an example).

Description of the Dataset

A total of 20 incidents were analysed, spanning the years 2012, 2013 and 2014. Some recordings contained an official date stamp displaying information about the day, month and year. The date of other incidents was extracted from the way the data were organised when downloaded from the bus company computer, which was according to month and year. In some incident files there was an official time stamp displayed (e.g. 2:11am) so that an exact time could be extracted. In others, time of day could be interpreted (e.g. around 3:00pm due to teacher ushering school kids on bus, late night due to rowdy groups of seemingly intoxicated passengers), however this was not always possible. Therefore time of incident was ultimately coded as either day or night depending on whether it was light or dark outside, where it was discerned that over half the incidents occurred at night.

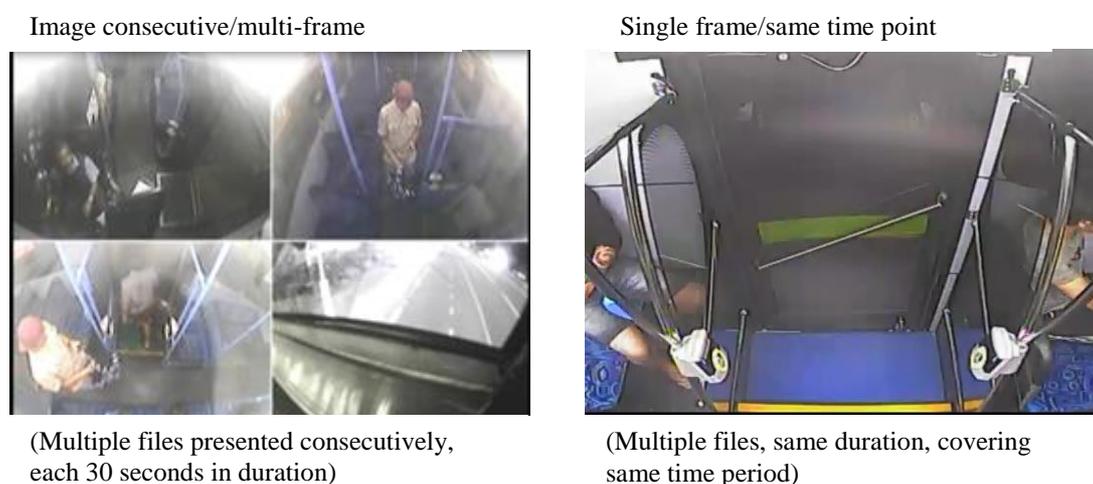
The recordings generally had no sound and of those which did, the quality varied. It should be noted that sound was only available from the front section of the bus near the front door and driver's seating area. In some cases, sound could be heard from the back of the bus (e.g. someone sitting at the back yelling something down to the front), however the specific verbal content was not of sufficient quality to form part of the analysis, but noted in the qualitative descriptions where necessary (e.g. "female passenger says something as the primary passenger is about to walk off the bus"). In terms of the quality of the video material, they all comprised superior visual clarity, given that this was a strong criterion for inclusion in the sample.

The number of files for each event ranged from one to 26, with an average of seven videos per incident. The total length of footage for all events was 7 hours, 31 minutes and 5 seconds. The average was approximately 22 minutes, with a range of 30 seconds to 1 hour, 30 minutes and 24 seconds. However, it should be noted that the total length of footage for each incident did not necessarily reflect the duration of the aggressive event. For example, while there may have been three minutes of footage, the

conflict between driver and passenger may have only comprised a third of that duration. The majority of files were in both colour and black and white, and the rest were in full colour. The fact that some angles or videos were in black and white did not limit analysis as the behavioural dynamics were still clear.

There were two different video formats (see Figure 5). The first format, called “image consecutive/multi-frame”, involved multiple consecutive snippets or files each lasting 30 seconds in duration and containing three or four simultaneous camera angles. The second format, termed “single frame/same time point”, involved longer snippets covering only one angle, but each snippet covered the same time interval. Thus for both video formats, multiple areas of the bus were able to be examined during the event. In terms of number of angles, most events of the first video format (image consecutive/multi-frame) contained four simultaneous angles, while remaining incidents involved three angles. The number of angles for the second video format (single frame/same time point) ranged from two to six, with a mode of four.

Figure 5: Screenshots depicting the two main video formats in the dataset.



Summary

This chapter presented a broad sketch of the case study approach used in this study and the reasons why using CCTV footage provides a novel observational tool. It described the processes involved in gathering and selecting the sample used for analysis, detailing the types of incidents that were excluded to arrive at the final sample of 20 aggressive

on-board encounters. These were of a physical nature occurring on or through the bus between bus drivers and passengers displayed in high visual quality digital imagery. Details of how the CCTV footage was analysed were canvassed in the subsequent section, including the fact that some guidance was taken from the work of Graham and her co-researchers (2005, 2006, 2011) specifically for levels of aggression, inferred motives and intent. The chapter concluded with a summary of the recordings that comprise the dataset. Key features include that the digital video was generally displayed as both colour and black and white images or in colour exclusively. Most of the data did not include sound, and when audio was available the quality varied and was not audible for the entire duration. There were multiple video clips for each incident ranging from one to 26, with an average of seven. Length of footage ranged from 30 seconds to 1 hour and 30 minutes, with an average of approximately 22 minutes. The CCTV images also presented multiple angles from the cameras installed on the buses with a mode of four angles.

CHAPTER 4

FINDINGS FROM AN EVENT PERSPECTIVE

Introduction

This chapter first presents a descriptive overview of the buses, drivers, passengers and the aggressive incidents. It should be noted that while the research underpinning this thesis is primarily qualitative in nature, it was essential to engage in some “counting” in order to derive an understanding of the broad patterns, as well as the similarities and differences across incidents. This analytic component provided some generic descriptions of the context, the people and the incidents. In this chapter, these patterns are presented including some descriptive statistics to capture the event and the four-way intersection of drivers-passengers-guardians-settings. It also addresses how these elements interact in time and space by looking at characteristics of the incidents, such as the acts involved and dynamic factors of escalation and volatility. Then the chapter canvasses the proximal factors which were found to precipitate the emergence of conflict between drivers and passengers. It ends by presenting the reactions or responses by both drivers and passengers to the violent crime episodes.

Characteristics of the Buses, Drivers and Passengers

Because of the crime prevention approach that underpins this thesis (drawing on Situational Crime Prevention and Routine Activity Theory), it was essential to examine the environment in which the incidents took place. Therefore, estimates or evaluations were made of the bus settings in terms of their built features (e.g. number of doors), the state of the vehicle (e.g. cleanliness) and how the space was utilised (e.g. passenger density). Specific attention was paid as well to crime prevention measures such as the installation and use of protective screens and two-way radios. It was observed that most of the buses were of the two-door design where there is one at the front adjacent to the driver and one in the middle on the kerb-side used for egress of passengers. The observational analysis suggested that two-thirds of the buses were in a very clean condition. The remainder were deemed to be fairly clean, such as when there were tickets seen on the floor of the bus or the floor was wet, but overall these were few in

number. Passenger density was deemed low or empty in thirteen of the incidents where the category of “low” meant only one to four people on-board.

With respect to key crime prevention techniques, the bus network has installed a stable-type half-door which extends to roughly hip-height that the drivers can close to protect the lower half of their bodies and personal belongings stored on the floor. These were present in just over half of the incidents. The other main crime reduction measure is a Perspex protective half-screen and these were present in just over one-third of the buses involved in videoed incidents. All buses are fitted with seatbelts for the drivers as a requirement of traffic regulations. Generally the drivers were wearing their seatbelts, and of note is that there are no seatbelts for passengers on this bus network. Clearly communication systems play a role in crime reduction processes and so it was noted that the majority of drivers used the two-way radio before, during or following an aggressive incident with five of them also using mobile phones, generally their own but in one case a passenger appeared to hand one over to the driver.

In terms of the drivers who were involved in the captured incidents, there were 18 male drivers and two females, which is reflective of the gender make-up of the bus company employees with almost 90 percent being male (see Lincoln & Gregory, 2014a). Generally the drivers appeared to be middle-aged to older but this is clearly impressionistic and measured against whether they appeared to have “greying” of hair or not. Again this roughly accords with the profile of the bus company’s driver workforce where the average age is 53 years (Lincoln & Gregory, 2014a). There was a tendency for a small number to wear a hat, generally a baseball cap style, and a few were noted to be wearing glasses. Almost all were wearing full company uniforms, which comprises a blue collared shirt with company logo and shorts.

One focus of the analysis was to tease out how the drivers behaved during aggressive events, and one such descriptor was whether they remained seated or not. Just over half of them left their seats at some point during the incident, albeit for different reasons (e.g. to see which direction the passenger left in, to approach the abusive passenger at the back of the bus, to run after a passenger following an incident). Coding of their general approach as “passive” or “active” yielded similar mixed results with nine of them being both and another eight characterised as being directly active. Examples of passive behaviours included ignoring, saying no, telling the passenger to

go away or get off or move on and attempts to try to explain (e.g. rules about ticketing or fares). These were behaviours that for the most part endeavoured to defuse or avoid the conflict. Examples of active behaviours included getting out of the driver seat to approach problematic passengers, arguing, using the two-way as a deterrent or threat, along with verbal or physical aggression. That is, these were behaviours that proactively attempted to deal with the conflict. However, these characterisations were highly dependent of context and style in the sense that telling a passenger to “get off” the bus was passive and coded as such in most instances, but there were occasions when this was more stridently delivered or occurred very early on in the incident and thus could be construed as proactive conflict resolution behaviour.

Drivers were observed resorting to physical aggression themselves in 12 incidents, although it should be stressed that for half of these the drivers only reacted physically after the aggressive incident commenced. However, there were a further six drivers whose aggression occurred prior to the violent incident so that their behaviours were part of its initiation. More information about driver-initiated aggression and retaliation is discussed at the end of this chapter. Suffice to note here that in two incidents the driver explicitly made the first move toward a passenger (ID10, 17), in that the force appeared excessive or there was minimal build-up. In another two the driver did this but it was the result of direct verbal provocation (ID12, 19), and in other cases it was more complex but even so the driver did in essence “make the first move” (ID08, 09).

It has been noted elsewhere, but bears repeating here, that initially the data observations recorded about the aggressors labelled them as “perpetrators” or “offenders”. However, it was immediately apparent that a binary characterisation did not fit with the data because targets would often become offenders and vice versa. Therefore, more neutral terminology had to be adopted especially to accord with the “event” perspective that is fundamental to the current study. Thus, those passengers directly involved in incidents as aggressors were called “primary” passengers; “secondary” passengers were those accompanying the aggressive person; while “tertiary” passengers were part of the audience. Again, this underscores the dynamic and interactive nature of aggressive incidents and aligns with the analysis undertaken here.

Primary passengers were generally male and in their late teens or young adults. They usually acted alone with the exception of one incident where two males acted together as co-offenders (ID04). Regarding secondary passengers, almost two-thirds of incidents involved a pair or larger group of up to nine others. Tertiary passengers generally comprised members of the public who were on-board at the time, some of whom became involved in the conflict, were affected by the violence or directly intervened. Almost half were witnesses only and did not become directly or actively involved during the incidents. In 17 of the incidents no other passengers or group members were injured in any manner during the altercation. It was observed in some cases that the broad make-up of other passengers was school children or patrons from the night-time economy however such an assessment could not be made consistently with it being a “mix” in most cases. Indeed, this element was generally not relevant due to the proportion of incidents involving empty or near-empty buses. Audience involvement is discussed in more detail towards the end of this chapter.

Given the crime prevention perspective adopted in this analysis, it was imperative to address issues of the temporal and spatial nature of the incidents. Of note is that some of the video material contained an official “time stamp” but most did not. Therefore, evaluating the timing of incidents was based on observation of the exterior environment and also the make-up of the passengers on-board (i.e. whether they appeared to be from the night-time economy or if the bulk of the passengers appeared to be school children). It was discerned that just over half the incidents occurred at night. One of the spatial features captured in the analysis was whether the bus was in motion or stationary during the conflict. In 14 events the bus was fully stationary. In these cases, the driver had generally pulled over to let passengers on or off and the conflict broke out as the primary passengers were entering or exiting the bus. In the remaining incidents, some parts of the conflict took place while the bus was in motion, but generally the violence only occurred once the bus came to a standstill, usually when the driver pulled over to “deal” with the conflict (see Table 5). As well, there were incidents where the physical encounter moved from being on-board to off-board.

Table 5: Descriptions of conflict occurring while the bus was in motion.

ID	Description
03	Female argues with driver while bus in motion, pacing up and down the aisle waving her arms around, driver pulls over twice in attempt to resolve the conflict, then she slaps him and her male acquaintance.
04	Driver shuts door on primary passenger's two friends and resumes driving, during which the driver and primary male continue arguing. The driver swerves to a stop up the road, and the physical altercation ensues.
09	Driver departs shopping centre, young male runs alongside banging on the door wanting to get on, driver brings bus to a halt to deal with persistent male.
12	Male arguing with driver attempts to force the doors open while the bus was moving along a main road.
18	Woman verbally abuses driver who then pulls over in a deserted hinterland area in order to deal with the conflict.

Characteristics of the Incidents

There was observed an array of aggressive behaviours during the violent encounters. They ranged from verbal abuse, threats and other non-physical acts (e.g. jerking movements or bodily agitation) through to overt and severe physical aggression (e.g. punching, spitting). In addition, some acts were not necessarily directed at the driver but at the bus instead (i.e. property damage) yet were nevertheless hostile. One example of this is a group member hitting the door with his skateboard as the driver took off with the primary passenger still on the bus (ID04), and another where the aggressor punched the front door causing it to smash (ID16). There were also instances where the driver's personal belongings (e.g. a hat, watch or glasses) were stolen or broken during the altercation.

Incidents could be categorised according to the highest level of physical aggression displayed by either drivers or primary passengers directly involved in the incident. This was achieved by unpacking each violent event into the component parts of aggression (cf. Cornish, 1994 on Crime Scripts) and assigning a severity level to each act (see Appendix 1). The observational coding scheme of physical aggression developed by Graham et al. (2006) was adopted here, where acts involving physical contact are divided into three main levels of harm: minor, moderate or severe (see Chapter 3). Examples of behaviour coded as minor physical aggression included snatching or pulling, light touching or tapping with a body part or object (e.g. skateboard) and raising an arm against the other person's body in self-defence. As

would be expected given the derivation of the dataset, no events involved minor physical acts as the highest level of aggression.

In half the incidents the highest level of aggression was deemed “severe”. This included acts such as spitting, hitting, slapping, punching, kicking, grappling on the floor, putting someone in a choke hold, body slamming and hitting the head with an object (e.g. backpack). In the remainder, the highest level of aggression was “moderate”. Examples in this category included grabbing, shoving, pulling, grappling and pushing. Of course, this is not to suggest that the experience or consequence was not significantly harmful, and thus there is a danger in designating an act such as “grappling” as minor or moderate or severe. It is also the case that an act such as “grappling” can potentially be coded in any of those categories because it is highly dependent on the context and the manner in which it took place. A substantial proportion of incidents involved behaviours at the highest level of aggression, especially spitting that was evidenced in six of the incidents, and eight involved direct punching. Of note is that spitting was most often used against female drivers so there was a possible gender pattern observable in the data. There was a limited number of incidents that involved kicking and these appeared to occur exclusively when there was no mini-door protecting the driver.

In almost all incidents drivers and other passengers appeared to be subjected to verbal conflict before, during and at the conclusion of the violent event. Indeed there were only three episodes where there appeared to be an absence of “prior verbal conflict” ahead of the physical altercation. For example, after attempting to evade a fare, one primary passenger demanded the driver “stop the fucking bus” or he was “gonna fuckin hit you” or “spit on your face”, because he claimed that “now I’ve gotta walk a mile in the rain ya fuckwit” (ID12). He proceeded to call the driver an “old low life fuck” and that “I hope you die of fucking cancer”. Another passenger asked the driver, “who do you think you are” and called him a “fuckin lunatic” (ID19). Although this is canvassed in more detail in Chapter 5, it can be said that for the most part there was an absence of “volatility” in the incidents; that is, there was usually a build-up or some level of verbal interaction prior to violence breaking out.

Reducing incidents to behavioural sequences and assigning severity levels proved useful in assessing not only the seriousness of the aggression but also whether

or not the physical altercations involved escalation. In the data examined here there was a single physical act by either the driver or the primary passenger in almost half of the events, where the other party did not retaliate physically. The remaining incidents involved two or more actions. In seven of these there was an immediate or progressive increase in the severity of physical acts of aggression throughout the incident (i.e. an escalatory pattern), while in three it was deemed that there was no change in the level of aggression despite there being multiple behaviours involved. So it is suggested by these data that there is an escalation process in some workplace violence events where the severity of aggression gradually increases and clearly some escalated more quickly than others both in the verbal and physical sense. Escalation is discussed in more detail in Chapter 5 when exploring the “crime wave” concept.

It is also important to examine who was primarily the aggressor in each incident. This is not an endeavour to allocate blame but rather to assess further the dynamic characteristics of these workplace violence events. To undertake this analysis, the component parts of the aggression were counted based on who the actor was. This exercise yielded the fact that in 44 of these acts it was the primary passenger who was the aggressor versus 38 for the drivers which also means that there was an average of four component acts of aggression within each violent incident, with a range from one to the maximum of 12. Another related indicator was identifying who initiated the first physical act of aggression in the incident and in fourteen of these it was the primary passenger.

Characteristics of Proximal Factors Contributing to Aggressive Events

A range of proximal factors precipitated the emergence of conflict between drivers and passengers. The principal dispute categories stemmed over fares, refusal of service, rule enforcement and quality of service (see Table 6). In very few cases it was difficult to discern a reason for the conflict because the violence appeared spontaneous. In one of these cases it was deemed “for fun” where a school child spat at the driver as he was exiting the bus with a female friend (ID11). Another resulted because the passenger was deemed to be suffering a mental illness where he broke out in violence at the front of the bus for seemingly no reason, hitting himself and threatening the driver (ID16). It is acknowledged that this typology of proximal contributing factors is not mutually

exclusive and there is potential for overlap. For example, disputes over fares could be related to enforcing rules surrounding ticketing prices or concession card validity. However, the aim when coding each case was to capture the main factor contributing to aggression as assessed by the research observer.

Fare disputes stemmed from three issues: validity of concession cards, dissatisfaction with fare costs and fare evasion. One example of an incident arising from a disputed concession card involved a female driver who asked a primary male passenger to show his card again after he briskly flashed it at her (ID05). She examined it in detail and returned the card but a heated conversation ensued, with the male passenger trying to explain something by pointing at the card. Both parties became increasingly frustrated but the driver then opted to ignore the male. He attempted to offer her cash a final time but was met with refusal and then spat on the driver's head, turned and exited the bus. A similar scenario ensued over a dispute about the cost of a fare (ID07). The driver tried to explain but the two males became increasingly frustrated. The driver tried to hand back the money and signalled for the males to leave but they continued arguing. After being asked to leave a second time, the males proceeded to sit in the front seats. The driver deliberately faced away from the passengers and used her two-way radio, and after the primary male nudged his friend off the bus he spat on the driver as he exited.

Disputes over rule enforcement encompassed accusations of property damage, breaking up inter-passenger disputes and passenger refusal to disembark at the end of the route. An example of a driver breaking up a dispute between passengers (ID10) occurred when a primary passenger and her friend (females 1 and 2) seated at the back of the bus started speaking to a pair of females seated towards the middle (females 3 and 4). On her way out, female 2 whacked female 3 in the chest, and a violent physical altercation ensued involving all four young women for a few minutes. The driver remained seated at the front looking in his rear view mirror and occasionally turning around to see what was happening. Two unrelated male passengers intervened, trying to de-escalate the situation, however the altercation continued. A female audience member approached the driver at which point he started using the two-way radio. The driver got out of his seat, approached female 2, and demanded she get off the bus. After not receiving a response, he tried to push her out the middle door.

Table 6: Proximal factors contributing to aggressive events.

ID	Description	ID	Description
01	Dispute over service, poor driving, heavy breaking.	11	None apparent, for fun.
02	Rule enforcement, accused damage to property.	12	Dispute over fare, evasion.
03	Dispute over service, refusal to turn down lights at pax request, driver does not control lighting.	13	Dispute over fare.
04	Dispute over fare, refused to give free ride.	14	Refusal of service, no entry to friends.
05	Dispute over fare, validity of concession card.	15	Dispute over fare, refused to pay.
06	Dispute over service, rear door not opening properly.	16	None apparent, mental illness.
07	Dispute over fare, cost of fare.	17	Rule enforcement, refusal to disembark at end of route.
08	Dispute over fare.	18	Dispute over service, refusal to pull over for pax toilet request .
09	Refusal of service, running after bus.	19	Rule enforcement, refusal to disembark at end of route.
10	Rule enforcement, passengers in violent brawl.	20	Road rage with car driver, road law violation.

Disputes over refused service stemmed from driver denial of passenger or friend entry due to unreasonable requests or inappropriately trying to board the bus. An example of a dispute that arose over a passenger inappropriately trying to enter the bus occurred when a driver was leaving a busy shopping centre terminal and a young male appeared running next to the bus, banging on the front doors (ID09). The driver put his hand out to indicate he would not pull over, however the male continued banging on the door. The bus came to an abrupt halt as a car was breaking in front of it, and the driver opened the doors and got out of his seat to approach the male. The driver stood in the doorway, looking down on the male, and they got into a heated argument, where the driver was making gestures for the male to move on. As the driver moved to return to his seat and resume driving, the male tried to walk on the bus. The driver pushed the male off the bus, and a physical altercation broke out.

Disputes over service mostly related to quality issues, such as mechanical problems, driver refusal of special requests and driving quality. In one incident, a large group of youths stood at the back of the bus in preparation to get off (ID06). As the driver was pulling over, some of them lost their balance and fell into one another due to heavy breaking. A male and female at the lead of the group attempted to exit out of the middle door however the doors became jammed, and the male got stuck between them. The driver looked in the rear view mirror, however the doors were still not opening and

so a group member pressed a button above the doors to open them. The female appeared to say something to the driver on her way out, but the driver ignored her and closed all the doors. The group approached the front door from outside, however the driver kept them closed so they started to force the doors open. The female stormed in jerking her head, leaning in close to the driver and yelling at him. The driver responded, trying to explain. The female raised her arm, at which point the driver covered his face, and the passenger then proceeded to punch him in the face.

Characteristics of the Responses by Other Passengers

Each incident was assessed to ascertain how other passengers (i.e. secondary and tertiary passengers) reacted to the on-board conflict, in particular whether or not any of them became involved and how. There were a range of ways in which group members and third parties became involved in the filmed conflict, including inflaming, verbally or physically intervening, expressing disapproval and helping behaviours. The range of parties involved and range of behaviours highlights the possibility for “ripple effects” of the encounters — a notion which is returned to in Chapter 5.

Some secondary passengers (i.e. group members) encouraged the aggressive behaviours by “egging-on” or in a sense “inflaming” the conflict. Behaviours included tapping the primary passenger on the buttocks while interacting with the driver, joining in on the argument, laughing with the passenger while arguing with the driver and standing around watching while the primary passenger repeatedly punched the driver on the ground. There was also the sheer fact of them crowding around the driver or doorway or near the ticketing machine which had an impact because it meant that the violence was not isolated to a one-on-one scenario. Conversely, there were instances where group members intervened, including trying to persuade the passenger to refrain from the conflict. Examples here included walking towards the door or off the bus to initiate leaving, making “come on” or “let’s go” gestures towards the primary passenger arguing with the driver, or a group member who removed himself from the conflict and tried to take the primary passenger with him. There were also cases where individual group members seemingly did nothing, were neutral, walked away or neither encouraged the conflict nor tried to persuade for peace.

Some group members also attempted to restrain their aggressive friend or physically intervened in the altercation in order to defend the driver (see Figure 6). In Incident 13, the primary passenger's male acquaintance tried to usher her away from the driver as she was yelling at him. She turned and slapped the driver in the face, and then her male acquaintance, and tried to run off the bus but the doors were closed. The male restrained her on the floor as the driver resumed the route. The driver then pulled over, where the pair kept grappling, landing off the bus. The female tried to re-enter the bus but the male pushed her away. The driver closed the doors on her and kept driving. Another example was Incident 08, in which the primary passenger's two friends attempted to restrain him from approaching the driver in an aggressive manner, trying to calm the situation. The primary passenger got past them, pushing one of them off the bus. The altercation ensued, where the group members jointly intervened again, one getting between the driver and primary male, and the other trying to pull him off the bus.

Figure 6: Screenshots of direct physical intervention by group members.



Male acquaintance restrains primary female pax on floor, audience member uses mobile phone, driver resumes driving (ID13).



One friend intervenes between driver and primary pax, other friend tries to pull pax off the bus from behind, hit in process (ID08).

In terms of audience involvement (i.e. third parties, members of the public off-board), non-physical responses included expressing disapproval and helping behaviours such as alerting authorities and verbally intervening to try and defuse the situation (see Table 7). Other passengers however would remain seated or move to watch the fight from afar, sometimes appearing worried and other times seemingly enjoying the entertainment. There were also cases where audience members rushed to physically intervene and break up the fight. For example, in Incident 09 a male passenger tried to

break up an altercation that broke out after the driver tried to push the primary passenger off the bus. The male ran to the front of the bus, put his arms around the driver from behind and intervened by placing his hands under the driver's chin and pushing his head back. He managed to hold the pair apart, and started talking to the driver, but the fight broke out again. The male hit himself across the face in the process. Once the pair let go of one another, the male passenger lightly pushed the driver away, then walked back towards his seat, followed by the primary passenger. In this particular case, the audience member appeared to be defending the primary passenger rather than the driver. Intervention also occurred post-incident where some audience members were observed to engage in a range of helping behaviours such as assisting an injured driver back onto the bus (ID02), handing the driver a jacket to wipe spit off her face (ID05) and answering police questions (ID13).

Table 7: Examples of non-physical involvement by audience members.

Type	Description
Expressing disapproval	Female passenger yells out to primary passenger something to the effect of "get off the bus", to which the male response "fuck up you (inaudible)" (ID12).
Alerting authorities	A second physical altercation breaks out between the primary passenger and driver, and they move off the bus. Two male audience members rush off the bus, while a female goes to the driver's area, gets out the two-way radio and speaks into it (ID02).
Verbally defusing the situation	Male passenger stands between driver and female arguing, waving his arms around and putting his hands up as if saying "that's enough, stop fighting, move on" (ID10).

In other cases the person(s) intervening were members of the public or "non-passengers". Examples included someone in a uniform approaching the bus to talk to the driver and passenger during the conflict situation (ID17), and a person waiting at the bus stop approaching the door to help decipher which direction the primary passenger left (ID05). In another case, the driver-passenger altercation had moved off the bus when two men ran across the road to verbally de-escalate the conflict and keep the pair apart until the driver got back on the bus (ID12). In one case, a police vehicle pulled over as they were driving past and saw the driver and passenger fighting on the footpath (ID13).

A final point to make about third party audience involvement, is whether or not any members were affected by, but not directly involved in, the driver-passenger

conflict. In this regard, issues of note were an elderly woman near the altercation becoming afraid and cowering away (ID16); a woman cradling a young child to which a group member actually commented “look at that baby girl ... you’re screaming right next to her” (ID18); and a man falling in his seat after the driver slammed on the brakes and swerved to a halt while dealing with a troublesome passenger (ID04). In another case, a female audience member simply left the bus after being held up waiting several minutes for the conflict to resolve and route to continue (ID13).

Characteristics of the Reactions by Drivers

Drivers engaged in a range of response behaviours prior to, during and post the physical aggression. These were based around five principal categories, namely verbal interaction and body language, disengaging from conflict, using the physical environment, resorting to security measures and asserting authority. In some cases, these seemed to be effective. For instance, in response to the driver speaking into the two-way radio, one female tried to get the group to leave, and in another incident the passenger’s friends started walking away from the conflict. In other incidents, however, the driver behaviour appeared to escalate or reignite the aggression such as when drivers seemed to encourage the passenger’s behaviour.

In terms of verbal interaction and body language, drivers routinely responded verbally by talking, explaining or arguing back (e.g. “I’m taking ya for a ride ... to the police”, “yeah that’s right, bitch”). Other common behaviours included drivers shaking their heads and saying no, putting their hands up, or making gestures for the passenger to go away or get off the bus. Conversely, some drivers appeared to use body language in a more positive way. One driver, for example, adopted an open body stance and raised his sunglasses to permit eye contact when communicating with the disgruntled passenger. Sometimes, displays of driver frustration (e.g. arguing) had a spill over effect onto other passengers. For example, after arguing with a male and telling him to get off the bus, one driver began dealing with subsequent passengers in an impatient manner (ID14). A different response by another driver was waiting until all other passengers were served before approaching the group in question (ID02).

Another response category was disengaging from the conflict or the potential for further aggression. This included ignoring passengers, such as by looking out the window or appearing disinterested. For instance, one driver started ignoring the males trying to argue with her by fiddling around with the ticketing machine (ID05), while another began wiping over the steering wheel, got a lolly out of his bag and proceeded to read a book (ID04). Another way drivers disengaged from the conflict was by walking away. In one case, a male was refusing to disembark at the end of the route, so the driver took out a cigarette and walked off the bus, providing the male an opportunity to exit as instructed (ID17). In addition to these deflecting behaviours, drivers disengaged by resuming their driving (ID03, 04).

Drivers also appeared to give consideration to the physical environment when responding to conflict situations. An example in this context was where the driver made use of other passengers as an audience or guardians. This was demonstrated by one who repeatedly asserted to the primary passenger that he had “witnesses” (ID18). In another instance, the driver pulled over further up the road in a well-lit area to wait for assistance and thereby used external lighting as an aid. There were other occasions when the drivers utilised the doors as a protective mechanism against problem passengers who were a potential threat. In Incident 04 for example, the driver closed the doors on the primary passenger’s friends after they started moving away from the door and resumed driving. Similarly the driver shut the door on an aggressive female as soon her acquaintance pushed her off the bus, then resumed driving (ID03). However, as noted earlier, this sometimes led to property damage of the bus door.

Drivers were also observed to make recourse to various security measures, such as CCTV and two-way radios or mobile phones. Specifically there were drivers who would look up to the CCTV camera to check it was present or in operation, and some pointed it out to primary passengers. One passenger responded by putting his finger up at the camera (ID13), while another said “I don’t care” (ID18). It should be noted that in a similar vein, one passenger proactively pointed out CCTV to the driver (ID17). Drivers were also found to alert authorities over the two-way radio or mobile phone. There was a distinction noted here between drivers first getting out the device and then actually speaking into it, as it appeared some drivers would take out the radio as a warning that authorities would be alerted if the negative behaviour continued. For example, after arguing with a female, one driver took out his mobile phone and

threatened to “call the police”. There were occasions when the driver’s use of the two-way seemed to have a deterrent effect in that as soon as driver got it out a group member would say “let’s go”. In other incidents, use of the two-way radio had an obverse effect, where passengers became aggressive after hearing the driver describe what was happening to operations staff. Some drivers resorted to alerting the authorities or operations staff fairly quickly, while others attempted other strategies before calling the incident in. There were also drivers who only alerted operations staff once the aggressive incident had ceased.

A final response category to emerge was labelled as “asserting authority”, such as drivers getting out of their seat to approach or deal with the primary passenger. In some instances, the driver getting out of their seat was correlated with them initiating violence against the primary passengers. In other cases, the drivers would leave their seats to approach or speak to the primary passengers, but no physical violence resulted at that point. Another example was egging-on or inflaming the problematic customer. During some of the incidents, drivers were seen suggesting passengers “do it again” and were heard saying things such as “let’s go” (ID19). Another driver signaled the passenger to “come back here” as he was exiting the bus and was goading the male to do something (e.g. touch or hit him), after indicating that he was being captured on CCTV.

Another factor noted under the “asserting authority” category was seatbelts, in that drivers were observed to place their hand on their seatbelt buckle when threatened, or take the seatbelt off in preparation to defend themselves (e.g. ID16). Thus, this was a pre-emptive or threatening or challenging element and appeared to be deliberately used as for self-defence or for purposes of asserting authority over the situation. Indeed in one case, the driver was actually prevented from successfully retaliating against the passenger as the seatbelt confined him to the seat and he had difficulty in getting it undone in the heat of the conflict. Further, it seemed that in some instances the passengers realised the limiting nature of the seatbelts. One young male returned to annoy the driver once the driver had returned to his seat and had put his seatbelt back on (e.g. ID13).

One specific driver response behaviour examined was the enactment of physical aggression. As alluded to above, in almost one-third of incidents, the driver enacted

physical aggression first. This analysis suggested that drivers are sometimes inclined to enact physical aggression when dealing with problematic passengers, although this does not always involve malicious intent (see Table 8). For example, drivers were observed to enact aggression in order to defend themselves from threatening behaviour, prevent greater harm to others and to get passengers to stop doing something wrong (ID08, 10). There were cases where the force used by the driver could be considered excessive (ID17, 19), although these still involved an element of non-compliance or provocation. For example, in Incident 17, the male continued refusing to disembark after the driver had tried a number of different strategies, and in Incident 19, the passenger was being offensive and goading the driver into a fight.

Table 8: Examples of driver-initiated incidents showing acts, harm, intent and motive.

ID	DESCRIPTION	Form	Harm	Intent	Motive
ID08	Primary passenger approaches male driver puts arm up in defensive position, male verbally abuses/taunts driver, moving closer to his face, driver pushes male back with forearm.	Pushing/shoving	Moderate	Defensive	Compliance (trying to stop pax from doing something)
ID19	Driver tells primary male pax they have reached the final stop, pax approaches driver in a frustrated manner, making verbal insults, jerking his head. Driver starts opening door/screen and yells at pax to get off the bus. Male steps off bus, preparing to fight, driver follows and grabs male.	Grabbing	Moderate	Definite (excessive because chose to engage with pax even after he was off bus)	Grievance (punish wrongdoing, defend rights, verbal egging on/taunting)

Summary

This chapter dealt with basic findings drawn from the observations of the crime event footage. It provided an overview of the characteristics of the buses, drivers, passengers and the incidents. Drivers were predominantly male and middle aged. Many buses had stable-type doors, Perspex screens or both as safety measures. Most incidents occurred at night and the buses were primarily empty or had low passenger density. A range of minor, moderate and severe acts were perpetrated, as well as damage to property and drivers' personal belongings. There was an absence of volatility, where incidents were often preceded by verbal disputes and involved a multiplicity of acts. While there was evidence of escalation in the altercations, it did not necessarily follow a one-directional linear sequence.

The chapter then briefly examined the proximal factors contributing to events, and the responses inherent in the crime incidents among audience members and the drivers themselves. Proximal factors were subsumed under four principal categories, namely disputes over fares, service quality, rule enforcement and refused service. The range of parties involved led to a three-fold categorisation of passengers and audience members, including primary, secondary and tertiary passengers. There were a number of ways in which secondary (i.e. group members) and tertiary (i.e. third parties, members of the public) responded, including inflaming, expressing disapproval, verbally or physically intervening and offering or delivering helping behaviours. Drivers engaged in a range of active and passive behaviours when dealing with the threat of aggression, such as using verbal interaction and body language, disengaging from conflict, using the physical environment, resorting to security measures and asserting authority. This highlights the multiplicity of factors, parties and acts involved in violent events on buses.

CHAPTER 5

MAIN THEMES IN CONTEXT OF THE LITERATURE

Introduction

This chapter contextualises those specific findings relayed in the previous chapter to show how they fit with the known patterns from the literature on workplace violence. It covers findings that are not unusual and that accord with those from the RiB Project and general customer aggression literature, including the proximal factors contributing to events, the low status nature of service work and lack of guardianship. The chapter also describes findings that are unexpected or simply complicate these familiar frames relating to elements such as cleanliness and overcrowding. Clearly, such nuanced findings are borne of the rich detail that the digital video provided of the crime event and indeed this was the basis for undertaking the current study because it had the potential to distil or add to our knowledge in a deep and detailed way.

The chapter then details some of the broader, more abstract findings to emerge from the research and makes reference to the qualitative case narratives to help elucidate the research results. This includes a discussion of the three main dynamic concepts that underscore the thesis, namely the volatility, escalation and audience features involved in the encounters. Here, the key findings to emerge from this research are elaborated on, including the way in which incidents culminate from a rational and logical “build-up” of factors operating in the immediate environment. The second key finding is that incidents seem to contain exit or termination points and then cool down and start up again, where there is no sense of one-way linear escalation. In addition, the violence has ripple or spill over effects where other people become involved and affected, leading to the notion of the “wave of crime”. It is noted that while this notion of a “crime wave” is already well used in criminology to refer to an increase in aggregate statistics for a specific offence category, it is being co-opted for a different use here at the event or incident level. Clearly the propositions presented are not conclusive in any absolute way given the qualitative nature of the analysis undertaken, but they do point to novel understandings of violent crime events in workplaces.

The chapter ends with reference to some of the practical implications of the present findings in terms of preventing aggressive driver-passenger interactions in the

urban bus setting. This section includes a discussion of stable-doors and screens, removal of cash-handling, de-escalation training and public awareness strategies. It also canvasses the potential for crime prevention measures to be contra-indicated in aggressive events. The utility of CCTV as a research tool is then critically discussed, including the benefits it poses over more traditional methodologies. This is, of course alongside the limitations involved in the present research, including the ethical considerations that may arise. There were, for example, issues with using a secondary data source not necessarily collected for research purposes, and problems with sound availability and quality.

Specific Findings from the Crime Event Analysis

This research sought to examine how aggressive driver-passenger events emerge, unfold and evolve in time and space, paying attention to proximal contributing factors, types of violence, who is involved and how. Subsidiary issues included the dynamic and fluid nature of violence, paying attention to processes such as volatility and escalation and how these play out during aggressive encounters. Attention was also paid to the role of the audience, including group members or other passengers and members of the public off-board. These broad research questions are reflected in the below to contextualise the present study:

- What are the key proximal factors contributing to abuse on-board buses between drivers and passengers?
- What are the reactions/responses to aggressive events on-board buses?
- What individual or environmental factors are related to the volatility and escalation of violence between drivers and passengers?

The present research reinforced several key ideas or familiar frames embedded throughout the customer aggression and bus driver literatures. Fare disputes stemming from a range of specific issues (e.g. concession, fare cost, evasion) were a common proximal factor contributing to the violent events. Disputes over refused service, quality and rule enforcement were other main factors. These findings are consistent with research on cash-handling as a key risk factor for customer violence (Mayhew & Chappell, 2007). It also aligns with works on the so called customer justice perception

where frustration and dissatisfaction are seen as key precipitators for customer violence and aggression (Yi & Gong, 2008), and studies on staff rule intervention with patrons where staff who enforce rules are more likely to be victimised (Boyd, 2002; Graham et al., 2005; Morgan & Smith, 2006). There was also evidence of the perceived low status nature of bus drivers among passengers, where primary passengers would direct offensive or demeaning verbal remarks toward the driver, for instance “no wonder everybody’s bashing you cunts”.

Moreover, the CCTV footage portrayed in real-time the isolation that drivers experience internally and externally on a daily basis. The buses were empty or had low passenger density when the incidents occurred and there was an absence of back-up support for the driver. This relates to a “lack of guardianship” which is one of the key ingredients in Felson’s triangle of crime (Felson & Eckert, 2015) and is fundamental to many of the 25 opportunity reducing crime prevention techniques (Cornish & Clarke, 2003). For example, one driver had to pull over near isolated farmland while traversing through a hinterland region to deal with an intoxicated woman becoming verbally aggressive. The driver communicated with operations staff through the two-way radio for over 30 minutes. The female persisted for the duration, noting to the driver that “no one is going to answer you”. This corresponds to the risks faced by mobile workers who are removed from standard protections available to other workers (e.g. colleagues, security) for extended periods (Yagil, 2008; Cohen, 2010). Part of the dynamic of mobile workplaces is the anonymity of customer encounters. The service interactions between drivers and passengers were observed to be “one-off”, anonymous encounters, where the problematic passenger could run off the bus while the driver remained in shock watching them leave.

Given the absence of back-up, bus drivers are required to deal with incidents on their own. Consistent with previous research, the present study found that drivers are not simply passive to acts of customer aggression. They are active in their approach and in some cases display a level of tact and engaged in a range of practical strategies (Reynolds & Harris, 2006; Echeverri et al., 2012; Salomonson & Felleson, 2014). Drivers were, however, observed to use increasingly harsh tactics to deal with problematic customers, including enactment of physical aggression, which is perhaps a consequence of the isolated nature of the occupational role and the competing demands involved. Incidents can last extended periods while drivers are trying to deal with

conflict and adhere to schedules and offer service and this inevitably increases frustration and intolerance when dealing with problematic passengers. However, not all aggressive behaviour by drivers can be characterised or justified in this way. There were times when drivers may have treated passengers poorly or responded in an inappropriate way (e.g. when arguing back, goading the passenger), which could be due to their general levels of customer orientation or personal disposition. In the main though, they are endeavouring to defuse incidents and when they respond in a physical manner it is not always with malicious intent. Nevertheless, this finding raises critical questions about whether labels of target and perpetrator in workplace violence research are practically and theoretically meaningful.

Some of the findings to emerge from the present research offer nuance to the familiar frames. In taking a crime event perspective, low passenger density can be a proxy or indicator of a lack of guardianship in Routine Activity terms but could also potentially be interpreted as an absence of overcrowding. Overcrowding is a familiar trigger commonly implicated in violent public transport encounters and increasing stress for all parties involved (Essenberg, 2003; Morgan & Smith, 2006). For example, drivers in the RiB Project viewed overcrowding, tight schedules and having to deal with many passengers in quick succession as likely to inflame frustrations for drivers and passengers alike (Lincoln & Gregory, 2014a). Similarly, in studies on violence in and around pubs and clubs, overcrowding is implicated in providing anonymity for violence and also elevating aggression levels (e.g. elbows knocking drinks, large groups standing around at taxi bays) and encouraging or enticing altercations (Homel & Clark, 1995; Graham & Homel, 2008; Macintyre & Homel 1997; Felson & Eckert, 2015). Incidents on buses are thought to cluster during the afternoon or night time when the service is busy due to peak hour travel (commuters, school children) or linked to the night-time economy (Nakanishi & Fleming, 2011; Lincoln & Gregory, 2014a). However, due to overall low audience density, overcrowding did not appear to be significant in this sample of violent incidents on bus networks.

Another unexpected finding is that the buses were generally clean and in good order with no obvious mechanical problems. This contrasts to the view of drivers in the RiB Project focus groups who strongly perceived that faulty buses played a role in assault incidents when for example the go-card machine was broken, the doors would not work or the brakes would get stuck or were noisy (Lincoln & Gregory, 2014a). This

would cause frustration in the passenger who would literally “take it out” on the driver for these frontline employees are easy targets of blame for any faults in the service system. This also contrasts with studies in and around pubs and nightclubs where there were higher levels of violence when, for example, toilets were dirty and uncared for (Homel & Clark, 1995). In these observations, the buses were for the most part clean and there were not any obvious mechanical difficulties that might have frustrated passengers and drivers alike.

Generalised Findings from the Crime Event Analysis: The Wave of Crime

The study sought to examine the main themes of volatility, escalation and audience involvement through the qualitative analysis of the CCTV data. In the present research, volatility was characterised by instant retaliation, seemingly random violence that comes out of nowhere, and an absence of extended interaction or build-up. This is what has previously been termed a “flashpoint” (Lincoln & Huntingdon, 2013) where there is, for example, an issue around fares and ticketing or refused service which immediately leads to confrontation. This was borne of the perceptions of drivers in the RiB Project about the way in which incidents can escalate quickly “from seemingly nothing”, going from “zero to one hundred in a nanosecond”. The drivers described the bus environment as highly charged and seemingly unpredictable in that people can “turn on you” in an instant, causing drivers to be in a constantly hypervigilant state (Lincoln & Gregory, 2014a).

In one such case the driver had pulled over to let an elderly woman on the bus. Meanwhile, a male passenger walked down to approach the driver’s area. The driver was aware he was approaching, raising his elbows in a defensive position. The male suddenly jumped and threw punches at the rear vision mirror and CCTV camera, causing glass to shatter. The passenger turned to threaten the driver, raising his first and punching the wall behind the driver. He yelled aggressively at the driver and proceeded to punch himself in the face. The driver appeared to try and verbally placate the agitated male, indicating that he did not want to fight and to calm down. The male continued yelling and pushed the driver’s hand away and tried to kick him. The male walked off the bus, at which point the driver immediately closed the doors on him. He

proceeded to damage the door as the bus was driving away. This highlights the potentially random, spontaneous and highly volatile nature of some violent encounters.

However, the overwhelming finding is that crime events do not “come out of nowhere” and were not as volatile as expected. Instead, this research found that there was often a rational and logical “build-up” of issues where multiple issues or incivilities took place before the physical conflict broke out (e.g. fare evasion, wet weather, alcohol use). Additionally, verbal disputes and aggression tended to precede most of the incidents of physical violence and so in that sense there was an elevation from the verbal to physical realm. There were cases where there was clearly more going on than, for example, a simple fare evasion as might first appear. In one such instance, two females carrying alcohol entered the bus and there was an initial issue surrounding fare evasion, however the driver ignored it and resumed driving. The females instigated a brawl with some other female passengers later in the route, and it was at this point that the conflict arose between the females and driver as he intervened. Clearly, there were multiple issues at play here, including alcohol use and potential intoxication, fare evasion and instigating passenger-on-passenger aggression, all of which can progressively increase the frustration of parties involved. Indeed, drivers in the RiB Project acknowledged the role various minor level frustrations can play in amplifying annoyances into more serious uncivil acts (Lincoln & Gregory, 2014a).

In another example, the driver had pulled over to allow a passenger to access an ATM to pay the fare. That male passenger did not exit to use the ATM and so the driver resumed driving. The passenger walked to the front and verbally abused the driver, attempting to open the doors while the bus was in motion. In part he said, “stop the fucking bus” or he would “bash your face in”, because now he has to “walk twice the distance in the rain you fuckwit”. The driver responded saying that he is not permitted to pull over but eventually does. An unrelated female passenger made a comment to the aggressive male as he was exiting, he responded offensively, and it is then that the driver got out of his seat and pushed the male, and the altercation ensued. In this incident there is clearly a logical “build-up” of conflict involving elements such as putting other passengers at risk while driving along a busy main road and making offensive comments to other passengers.

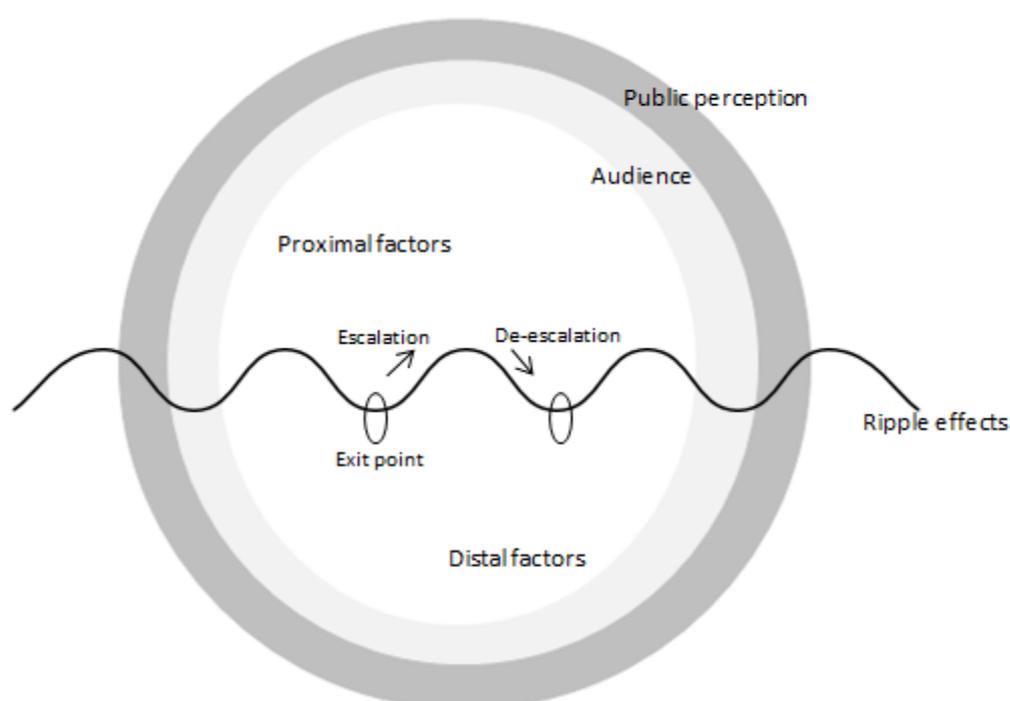
These two examples suggest that incidents do not always stem from “flashpoints”. They are firmly part of the routine activities of drivers and passengers (e.g. dealing with ticketing and fares). There is frustration by drivers and passengers alike, and so it is for the most part rational and logical and centred around grievances about fare or concessions or rule enforcement. Often in the workplace aggression field, especially in the public transport setting, it is acknowledged that there are specific precursors to violent events. However it appears here that there is more complexity involved in triggers as there are often multiple factors operating in the immediate environment which can culminate in aggression. It is more about the intersection of drivers-passengers-guardians-settings where it is often difficult to isolate a single factor that really was borne out in the present analysis. This multiplicity of elements could only be gleaned through this detailed event analysis. These findings regarding the absence of volatility and the logical “build-up” of issues have prevention implications which are discussed at the end of this chapter. Despite the fact that triggers for these events are multi-factorial, some have more potency than others and in this sense the crime event perspective can offer specific interventions. There are stand-out elements or ingredients that are replicated or implicated across events and are therefore more influential than others.

In terms of escalation throughout the physical altercations themselves, they were rarely encapsulated in a single act but rather played out as a series of multiple acts during the encounter. These multiple acts tended to occur in a waxing and waning or what has been labelled here as the “wave of crime” (see Figure 7). The aggression would increase then decrease in severity and potentially increase again following a wave of escalation and de-escalation. This underscores the dynamic, reciprocal and interactive nature of the encounters where some incidents progress from more to less severe and then decrease in severity (with or without external influence such as another passenger intervening) and then can spike again during the conflict session. Thus, there is not a one-directional linear escalation pattern that implies that the violence continues to get worse, remains static or decreases in severity.

Part of this “wave of crime” is the observation that the physical violence would cease then erupt again. That is, there were potential exit or termination points but the behaviour continued. For example, in one case the driver got into a verbal dispute with a male who refused to disembark at the end of the route. The driver alerted operations

staff over the two-way and stepped off-board to have a cigarette, providing the primary passenger with an opportunity to leave. He did not and so when the driver came back on-board he tried to push the male off the bus. The male retaliated, but the driver walked away. Another two physical altercations broke out between the pair over the next few minutes until an outsider approached the bus. Thus, there were four separate but interrelated physical encounters during the single incident. Similarly, a physical altercation broke out between a passenger and driver after the passenger spat on him. The driver prepared to put his seatbelt back on and resume driving, but the passenger approached him again, and so the driver let go of his seatbelt and stood up in an authoritative way. The male encouraged the driver to come off the bus, but the driver sat back down and closed the stable type door. The male approached the driver again, when a verbal dispute broke out and the driver lunged out of his seat onto the male and they landed off the bus. Thus, there were multiple separate but interrelated physical encounters during the single incident. However, the “wave of crime” encompasses more than the waxing and waning in severity of acts or the idea of mini-encounters during single incidents.

Figure 7: Visual representation of the “wave” of violent workplace events.



The “crime wave” notion is extended by the fact that aggressive events also go around in a ripple effect, involving or impacting others. The “crime wave” is dynamic and interactive in nature and as such, was observed to create such ripples throughout the bus environment in several ways. There are up to 50 people on the bus and so there is potentially an audience who are both visible and proximal to the conflict. Secondary and tertiary passengers were observed to engage in a range of physical and non-physical behaviours in response to driver-passenger aggression. In some instances their presence or involvement served to diffuse or dissuade the intensity of the encounters. Examples here included verbally trying to break up a fight, ushering the primary passenger off the bus, alerting authorities and assisting the driver post-incident. In other cases, secondary and tertiary passengers did not appear to “discourage crime” (Felson, 1995) but instead appeared to increase or inflame the severity of the outcome by encouraging escalating actions or becoming physically involved. For example, young people often bring their own audience along in the sense that many of the youth travel with their peers in pairs or a larger group and so there was an element of a built in audience whom they were “showing off” to or who were in turn “egging them on” (Felson & Eckert, 2015). There were also cases where an audience member would intervene and this resulted in an entirely new passenger-on-passenger altercation erupting, involving physical injury. These findings accord with Groth and Grandey’s (2012) assertion that the negative exchange spiral can spill over to other customers and generate additional spirals.

A subsidiary thread to the audience theme and open-loop nature of incidents was the fact that even if not directly involved, other passengers are affected or impacted in some way by the violent encounters. There were, for example, frightened elderly people and children, passengers who disembarked due to the delay caused and drivers who treated subsequent passengers in an impatient manner. Other times, passengers and indeed other road users were put at risk, for instance drivers slamming on the breaks, aggressors trying to force open the doors while the bus was in motion, or drivers becoming distracted while trying to deal with disruptive passengers and nearly getting into accidents. Indeed, drivers were observed to resume their shift following the aggressive encounters, where the psychological impact of the incident can influence subsequent customer service and driving quality. Similarly, the altercations moved off the bus and into the public domain where members of the public were witnesses to

fight that spilled onto the footpath. Clearly, these factors can have a negative impact on customer perceptions of service, safety and security in the bus environment, and could potentially impact fear of crime on public transport and future patronage. The danger and how others are put at risk inevitably contributes to the frustration for all parties. This is particularly true among drivers who especially because of their “place manager” function are motivated to protect other passengers (Eck & Weisburd, 1995). This enhances the complexity of the four-way intersection among drivers-passengers-guardians-settings in the transit environment.

Lessons for Prevention

One finding to emerge from this research was crime prevention measures being contradicted in the aggressive events. For example, drivers were observed to put their hands on their seatbelts or pick up the two-way radio even if they did not use it. In this sense, these objects were used as a threat and the drivers were summoning “guardians” given that the operation centre is the main back-up they have. However, this use of two-way radios was sometimes associated with deleterious consequences, in that passengers would become frustrated or irate having heard what the driver said to operations staff over the two-way or how they described what was happening. The drivers were aware of the presence of CCTV, where they would check that it was in operation when a passenger became disruptive or aggressive and pointed its presence out to the passengers. Knowing that they were being watched by the CCTV, drivers sometimes encouraged the passengers to act aggressively knowing the problematic passenger would be “caught on camera”. It was also the case that passengers knew the limiting factor of various design measures including seatbelts where the passenger would wait for the driver to put the seatbelt back on before instigating aggression again as the seatbelt would prevent the driver from effectively defending themselves or retaliating. This is an interesting crime prevention finding that is worth exploring in the future; in particular how crime prevention devices can be used in a variety of ways or used in a negative or unintended manner by both drivers and passengers (Grabosky, 1996).

A related finding was that the presence of human (i.e. audience) and technical (i.e. CCTV) guardians did not seem to “discourage crime” (Felson, 1995). Passengers claimed that they “don’t care” (ID 18) when drivers alerted them to the presence of

witnesses or put their finger up at the camera when drivers pointed out the CCTV (ID13). This underscores the banality of CCTV but also the fact that passenger aggression is highly emotion laden where aggression and frustration seems rational, logical, or justified among those involved (Goold et al., 2013). Thus, while drivers were observed to rely on the presence of CCTV technology as a method of dealing with problematic passengers by pointing it out, the risk of being “caught on camera” did not appear to serve to be a deterrent from the passenger perspective. This is consistent with the broader CCTV literature which suggests that CCTV is generally ineffective in preventing expressive crimes and that its main utility lies in investigatory purposes (Wells et al., 2006). Although, the reported technical difficulties involved in the present sample of CCTV footage would suggest that the widespread installation of CCTV technology on buses are unlikely to be of much assistance in providing data for any subsequent prosecution of violent offenders.

There were also observations that provided insight into the effectiveness of implemented prevention schemes. Firstly, it appeared that the mini stable-type doors protecting the lower half of drivers served to decrease the likelihood of kicking or attacks on the legs of drivers. Clearly the mini-doors are not a panacea for all incidents, especially because these are only effective insofar as the driver remains seated which is not always the case, however they can be effective in reducing opportunistic kicking. The focus group data from the RiB Project indicated that some drivers approve of the stable-type doors as they protect their personal belongings and offer a sense of privacy (Lincoln & Gregory, 2014a). They also have crime prevention benefits in terms of separating offenders and targets by creating a “barrier” or sense of “territoriality”, and are an alternative to Perspex screens which drivers have noted can interfere or limit their ability to communicate with friendly passengers (Lincoln & Gregory, 2014a). Furthermore, in cases where the conflict broke out as the passenger was disembarking, the one-door design emerged as problematic because it forces passengers to walk past the driver when exiting the bus which can raise the potential for provocations as the passenger is disembarking (Chappell, 1998). In this regard, the two-door bus design appears to be a beneficial prevention design technique.

Fares and ticketing were clearly a “hot spot” and remain a trigger or proximal contributing factor even with automated systems. This is because the drivers are still required to provide a top-up or one-off paper ticket service and so there are still issues

with concession validity and insufficient funds or change. Removal of cash-handling is worthy of consideration especially in the study location where the bus company is paid per kilometre rather than per passenger (Lincoln & Gregory, 2015). There is anecdotal evidence from France and other places that when fares were not collected, often because of a strike that violence went down (Moore, 2011). Although beyond the scope of this thesis, a subsidiary benefit to removal of cash-handling would be reducing the criminal intruder type robberies that occur on buses. However, removal of cash-handling would not address issues surrounding fare evasion, and increased “automisation” of fares and ticketing can facilitate increased anonymity (Goldsmid et al., 2016). There has been some discussion throughout the literature of complete removal of fares (Edwards et al., 2012; TRACS, 2015). Although unlikely due to increased privatisation of the bus industry in Australia and abroad, it could serve to eliminate the weighing up of monetary input versus service output (i.e. distributive justice), thereby reducing the notion of “customer as king” and removing possible provocations and “excuses for offending”.

There is a need to continue ongoing de-escalation training and using exit or termination points to defuse situations. While there were incidents where there was a one-off explosion of physical violence (e.g. punching, kicking or a parting spit), most were characterised by an absence of immediate volatility where there was a build-up of issues, and escalation from the verbal to the physical. In addition, there were drivers whose behaviour formed part of the initiation of violence, and some who retaliated or maintained the violence as in the “wave of crime”. While there was plenty of evidence that some drivers, even in this sample of relatively serious incidents, were endeavouring to execute techniques to defuse conflict situations, this analysis may help to tailor the intervention points. Indeed, there was a view among drivers in the RiB Project that more emphasis should be placed on education about the consequences that violence and abuse can have for both perpetrators and drivers (Lincoln & Gregory, 2015).

Moreover, given the apparent low status nature of service work and bus driving there is a need to promote respect and to elevate professionalism of the bus driver role. Public relations and media campaigns could be instigated to remove any such “excuses for offending” (TRACS, 2015). This is reflected by the very recent bus stop campaign witnessed on the Gold Coast of “Falling in Love with Public Transport”. Another

example is the significant advertising of the newly implemented maximum 25 year penalty for assaulting public transport workers, although this is more about “increasing the risks” of offending and “deterrence” rather than fostering tolerance and understanding (Lincoln & Gregory, 2015). Evidence from the UK suggests these large-scale public attitude campaigns are effective in targeting or shifting attitudes and perceptions regarding anti-social behaviour in the transit setting (Moore, 2011). Future research may benefit from utilising Ekblom’s (2011) 5Is approach to crime prevention as a potential way in which to minimise the risks of aggressive events on-board buses involving drivers and passengers.

Utility of CCTV as a Research Tool

The salience of CCTV data is that they provide one of the most robust and objective accounts of violent incidents occurring between bus drivers and passengers. It captures the actions and perspectives of both parties while firmly taking into account the whole context including audience features and the service setting, and locates the events in time and space. In this way, the use of existing CCTV data permitted the researcher to examine the minutiae of situated violence as it unfolded in a naturalistic setting. Features such as pausing and re-winding enabled highly detailed analysis where new and more advanced research questions could be applied to the data over time.

For example, in the present research, escalation was initially measured by assigning a simple dichotomous code of presence or absence. This is in part because finding an effective way to define, operationalise, or measure the concept of escalation has proven difficult throughout the extant literature. While the concept is often resorted to in an endeavour to capture the uncertainty and malleable nature of such incidents, it remains an elusive concept in the literature rarely empirically examined or elucidated. However, due to this unique data source, the incidents could be broken down into their component parts of aggression or detailed behavioural sequences. This led to nuanced findings about “exit or termination points” and the “wave” in severity of acts, which may not have been uncovered through cross-sectional examinations from the perspective of either “targets” or “offenders” or indeed in-situ observational methods such as manual note-taking. Uncovering and exploring such elements requires a dynamic, event based perspective that looks at the intersection of drivers-passengers-

audience-setting. The use of CCTV data in the present project has therefore demonstrated how nuanced and complex our understanding of violent workplace events and crime more generally can and should be.

Despite these advantages, few studies in the social sciences and especially criminology have availed themselves of this technology (for exceptions see Beaumont, 2005; Levine et al., 2008). This is perhaps unsurprising given that much of the current discourse surrounding the nature and impact of CCTV in everyday life has been dystopian in character, focusing on the negative, intrusive aspects of electronic surveillance. There is, for example, a tendency to talk of an “urban panopticon” (Koskella, 2003), “maximum security society” (Norris & Armstrong, 1999), Orwellian “big brother” (Wilson & Sutton, 2004) and a “widening and thinning of the net” of social control (cf. Cohen, 1985). It may be argued, however, that such a position has served to minimise the possibility that CCTV technology might also have positive aspects and its utility as a research tool is one such benefit. This thesis therefore extends current discourse surrounding the nature and impact of CCTV technology and highlights some potential beneficial consequences of “the new surveillance” particularly in the field of research.

However, it is important to acknowledge some of the ethical considerations that may arise when re-purposing CCTV archives for observational research. The first is whether the cameras are operating in public or private space. Here, the recorded behaviour occurred in the public sphere, but was being recorded by a private company operating the bus service. Therefore, the access, use and distribution of the CCTV material were governed by the company and their relevant policies and procedures for data protection and retention. Dilemmas also arise relating to anonymity and confidentiality. Protocols were in place in the present research to ensure anonymity. Incidents were allocated identification numbers so that the various participants or incidents could not be identified or linked in any way. Regarding confidentiality, factors arise such as the retention and destruction of the material post-research, including questions about whether the material is returned or kept for a period of time. This necessarily involves close consultation with the information providers. If the material is retained, the material shall not be used for collateral purposes without consent of the information provider who own the “property”. This is a pertinent consideration as one of the prime benefits of CCTV data is that they can be re-

examined or reviewed from different analytic perspectives. For example, the present material could be used to examine other transit crime issues, such as inter-passenger violence.

It is also difficult to obtain informed consent when using CCTV as a research tool. One option to overcome this that has been explored in gallery studies (Beaumont, 2005) is signage drawing attention to the fact that a study is taking place based on CCTV recordings. However, this technique does not cover situations, such as the present case, where the audio-visual material is used retrospectively. It may be argued, that the signage on most buses in the study location alerting passengers to the presence of CCTV could be sufficient. The data and its subsequent use are at the discretion of the company and their relevant policies and procedures. In this case, gatekeeper approval was sought and granted. Such approval facilitates the correct and ethical sourcing of the material. Also, the CCTV images in this case were being used for a highly specific purpose (i.e. monitoring violent incidents) and this is compatible with the original reason for the company obtaining the images. One of the company's priorities is ensuring the safety of employees and passengers alike and the research contributes to this end. The surveillance equipment was already constantly monitoring drivers and passengers and so additional interrogation related to this specific purpose is a legitimate use of CCTV footage. Given these issues about how CCTV data are collected and handled, further discussion and consultation is needed throughout the research community regarding the development of a code of ethics for video observation in public and private space. It is also essential for the company or institution releasing the material to have clear policies and procedures on data access, use and retention to ensure all parties are clear about the constraints impacting their research and how to handle them.

It is also important to note the potential shortcomings associated with the use of audio-visual recordings from established CCTV networks (Wilson & Sutton, 2003; Goold et al., 2013; Felson & Eckert, 2015). There were several files in the initial sample downloaded from the bus company that were of poor visual quality and contained significant chopping and lagging to the point that the files could not be adequately analysed. Similarly, sound was rarely available and when it was the quality varied and sometimes not all verbal content could be heard or deciphered. As a result, interpretation of the events was for the most part confined to behavioural observation

where the meaning and/or context of certain actions normally revealed through verbal content had to be inferred. Thus, the incidents containing audio content were always more insightful than those without this feature. A related problem was the limited sample size. Although appropriate for qualitative purposes, the study could be replicated with a larger sample of cases to permit further quantitative analysis and cross-tabulation of participant and environmental characteristics. Similarly, due to the qualitative nature of the research where there was only a single coder, the interpretation was highly subjective, although there were various systematic elements in place to promote consistency of observations, including the structured analysis template. Further, while the research covered several variables pertaining to the bus, drivers, passengers, incidents and the setting, there are several other features potentially related to these violent events which could have also been addressed. For example, it emerged from the RiB Project that advertising across windows could impact guardianship or sightlines (Lincoln & Gregory, 2014a). However, because of camera angles and lighting levels depending on whether it was day or night, consistently assessing such features was not always possible.

There are also problems in using secondary data in the form of CCTV gathered by the primary bus company. As would be expected, the total sample of electronic files collected may have reflected a “selection bias” towards reportable violent incidents and to those that were more “serious” or might have a litigious prospect as these are the main foci of operations staff at the bus company. A fruitful avenue for further inquiry would be to compare a sample of incidents involving actual violence with a sample involving only threats that did not escalate further. This would permit the researcher to better determine the causative factors leading to violent events and their escalation. It is also important to acknowledge that the bus company had engaged in some form of editing in the process of capturing the images that were of relevance for their purposes. For example, the footage did not always cover the totality of each passenger’s trip as the bus company was obviously most concerned with gathering digital detail of the violence per se and so the interstitial components were not always captured. This has implications for analysis at the general and specific variable levels. Generally though this was not of concern as it was abundantly clear, and indeed the contact person at the bus company provided similar guidelines, that there had been no surreptitious removal of any footage for in most cases it went from the start of the incident to its

denouncement. In some instances though the end-point of the incident was captured but it coincided with the end-point of the footage and this limited any post-incident analysis (e.g. whether the driver used their two-way or not, whether other passengers came to assist). Similarly, there were some cases where the footage did not cover the passenger entering the bus and this had potential implications for assessing proximal contributing factors where there could have been issues prior to the footage beginning. These types of problems are inherent to any research using secondary data sources that have been collected for purposes other than research.

Conclusions and Contributions

The key findings to emerge from this research are embedded within the “wave of crime” concept (see Figure 7). Firstly, incidents are precipitated by a multiplicity or “build-up” of proximal factors operating in the immediate environment that progressively increase the frustration for all parties involved. This frustration is logical and rational, relating for example to issues surrounding fares, service quality, refusal of service and rule enforcement. However, there are also distal factors at play, including isolation, mobility and the low status nature of bus drivers. Conflict escalates from the verbal to physical realm, although there is an absence of one-directional linear escalation. The violence increases and decreases in severity, and potentially increases again. This leads to the idea of exit or termination points where the aggression could end but instead continues. In addition, the violence has ripple or spill over effects where other people become involved and affected, and this extends to the public domain where the violence can have a negative impact on perceptions of service, safety and security in the bus environment.

Despite the limitations involved in the present research, it has contributed to existing knowledge by addressing three main lacunae of our current comprehension of workplace aggression. The first major thrust acknowledges that while there is a growing body of research on workplace violence and customer aggression especially for frontline service workers, this has largely been confined to on-site hospitality and call centre work. There has been some attention to those who work in the transport sector (taxi drivers, rail staff, flight attendants), but relatively little about aggression on-board buses. This is an important area where there has been considerable media

attention about violent attacks in Australia in the past four years. This thesis therefore contributes to our knowledge about public transport sector violence and also proffers some suggestions to deal with this particular form of workplace aggression.

The thesis also makes methodological contributions. This thesis takes a novel approach by harnessing the products of the ubiquitous installations of CCTV cameras that are used for crime reduction purposes. Few studies have availed themselves of this technological resource. Therefore, the design of this research yields new methodological contributions, particularly but not limited to the discipline of criminology, in the manner in which crime events can be studied. It explored the utility and viability of CCTV as an emerging data source and highlighted some of the ethical issues that arise through its use as a research tool. In the growing area of workplace aggression, the use of multiple methods is imperative for building knowledge base. For example, the present research highlighted how nuanced our understanding of crime events can and should be and offered several unique findings, such as the potential for prevention measures to be contra-indicated in violent events.

Finally, the thesis comprises a fresh perspective on some aspects of workplace violence because it draws on key theories and frameworks from the discipline of criminology. While there has been a considerable corpus of literature on workplace violence, it has often adopted an occupational health or psychology perspective and focused on personal and organisational causes and outcomes. By contrast, this thesis drew on the broader field of Situational Crime Prevention and the theoretical framework offered by Routine Activity Theory to foster a crime event sensibility that addresses the interactive aspects and dynamic nature of workplace violence. There is much that can be learned by examining the phenomenon of customer aggression from a specific incident or event based approach. It can facilitate examining whether behaviours have a pattern within an incident, such as an escalatory pattern. When aggregating across incidents, one loses information about the co-occurrence of behaviours within a particular incident. Therefore, the data presented in this thesis supplement, extend and illuminate existing research on workplace aggression.

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APPENDIX 1

CODEBOOK

FEATURES OF CCTV DATASET

Video Quality (high = 19)

ID	Quality level	ID	Quality level
01	High	11	High
02	High	12	High
03	High	13	High
04	High	14	High
05	High	15	High
06	High	16	High
07	High	17	High
08	High	18	High
09	High	19	Medium
10	High	20	High

Colour (both = 11)

ID	Colour/BW	ID	Colour/BW
01	Both	11	Both
02	Colour	12	Both
03	Both	13	Colour
04	Both	14	Colour
05	Colour	15	Colour
06	Both	16	Colour
07	Both	17	Both
08	Both	18	Colour
09	Colour	19	Both
10	Both	20	Colour

Sound (no sound = 16)

ID	Yes/No	ID	Yes/No
01	No	11	Yes but some inaudible
02	No	12	Yes
03	No	13	No
04	No	14	No
05	No	15	No
06	No	16	No
07	No	17	No
08	No	18	Yes
09	No	19	Yes
10	No	20	No

Number of Videos (total = 145; mean = 7.25)

ID	Number	ID	Number
01	1*	11	2
02	11*	12	2
03	15*	13	26*
04	2	14	7*
05	5*	15	7*
06	3*	16	3*
07	12*	17	15*
08	8*	18	4
09	5*	19	5
10	6	20	6*

Where * = image consecutive/multi-frame format (see Chapter 3)

Length of Footage (total = 7:34:05; mean = 0:22:08)

ID	Length (hr:min:sec)	ID	Length (hr:min:sec)
01	00:00:30	11	00:55:54
02	00:05:30	12	00:37:15
03	00:07:30	13	00:13:00
04	00:50:27	14	00:03:30
05	00:02:30	15	00:03:30
06	00:01:30	16	00:01:30
07	00:06:00	17	00:07:30
08	00:04:00	18	01:15:41
09	00:02:30	19	01:38:24
10	01:14:24	20	00:03:00

Number of Angles (mode = 4 in 12 incidents)

ID	Number	ID	Number
01	4*	11	2
02	4*	12	2
03	4*	13	4*
04	2	14	4*
05	3*	15	3*
06	3*	16	4*
07	4*	17	4*
08	4*	18	4
09	4*	19	5
10	6	20	4*

Where * = image consecutive/multi-frame format

Time stamp or Estimation (night = 11)

ID	Day	ID	Day
01	Night	11	Day (04:00pm)
02	Night	12	Day
03	Night	13	Day
04	Night (02:11am)	14	Night
05	Day	15	Day
06	Night	16	Day
07	Night	17	Night
08	Night	18	Day
09	Day	19	Night
10	Night	20	Day

CHARACTERISTICS OF THE BUS**Number of Doors (two doors = 18)**

ID	Number	ID	Number
01	2	11	1
02	2	12	1
03	2	13	2
04	2	14	2
05	2	15	2
06	2	16	2
07	2	17	2
08	2	18	2
09	2	19	2
10	2	20	2

Cleanliness (clean = 14)

ID	Yes/No	ID	Yes/No
01	No (small piece of paper on floor)	11	No (two white things/paper on floor at front)
02	Yes	12	Yes
03	No (lots of small pieces of paper on floor in rear (possibly tickets))	13	Yes
04	Yes	14	Yes
05	Yes	15	Yes
06	No (something on floor/wet)	16	Yes
07	No	17	Yes
08	Yes	18	Yes
09	Yes	19	No (two pieces of paper in aisle towards rear, one small thing on floor in aisle in front, graffiti)
10	Yes	20	Yes

Protective Half-Door (present = 11)

ID	Yes/No	ID	Yes/No
01	Yes	11	No
02	Yes	12	No
03	Yes	13	No
04	Yes	14	No
05	No	15	No
06	Yes	16	No
07	No	17	Yes
08	Yes	18	Yes
09	No	19	Yes
10	Yes	20	Yes

Protective Screen (absent = 12)

ID	Yes/No	ID	Yes/No
01	Yes	11	No
02	No	12	No
03	Yes	13	No
04	Yes	14	No
05	No	15	No
06	Yes	16	No
07	No	17	No
08	No	18	Yes
09	No	19	Yes
10	Yes	20	Yes

Seatbelt (used = 17)

ID	Yes/No	ID	Yes/No
01	Yes	11	Yes
02	Yes	12	Yes
03	No	13	Yes
04	Yes	14	Yes
05	Yes	15	Yes
06	No	16	Yes
07	Yes	17	Yes
08	Yes	18	Yes
09	Yes	19	Yes
10	Yes	20	No

Passenger Density (low/empty = 13)

ID		ID	
01	Medium 12	11	Medium 5
02	Medium 8	12	Low 2
03	Low 1	13	Medium 6/7
04	Low 2	14	Medium 15+
05	Low 1	15	Low 3/4
06	Empty	16	Low 3
07	Empty	17	Empty
08	Low 1	18	Low 4
09	Low 2	19	Empty
10	Medium 7 (some left)	20	Medium

CHARACTERISTICS OF THE DRIVER

Driver Gender (male = 18)

ID	Male/Female	ID	Male/Female
01	Male	11	Male
02	Male	12	Male
03	Male	13	Male
04	Male	14	Male
05	Female	15	Male
06	Male	16	Male
07	Female	17	Male
08	Male	18	Male
09	Male	19	Male
10	Male	20	Male

Remains Seated (leave seat = 11)

ID	Yes/No	ID	Yes/No
01	No	11	Yes
02	No	12	No
03	Yes	13	No
04	No	14	Yes
05	No	15	Yes
06	Yes	16	Yes
07	Yes	17	No
08	Yes	18	No
09	No	19	No
10	No	20	Yes

Driver Active/Passive

ID		ID	
01	Active	11	Active
02	Active	12	Active
03	Passive	13	Passive & Active
04	Passive & Active	14	Passive & Active
05	Passive & Active	15	Passive & Active
06	Passive	16	Passive
07	Passive & Active	17	Active
08	Passive & Active	18	Active
09	Active	19	Passive & Active
10	Passive & Active	20	Active

Driver Use of Two-Way (yes = 17)

ID	Yes/No	ID	Yes/No
01	Yes	11	No
02	Yes	12	No
03	Yes + mobile phone	13	No
04	Yes	14	Yes
05	Yes	15	Yes
06	Yes	16	Yes
07	Yes + mobile phone	17	Yes
08	Yes	18	Yes + mobile phone
09	Yes + mobile phone	19	Yes + mobile phone
10	Yes	20	Yes

Driver Use of Physical Aggression (yes = 12)

ID	Yes/No	ID	Yes/No
01	Yes, after	11	Yes, after
02	Yes, after	12	Yes, before
03	No	13	Yes, after
04	No	14	No
05	Yes, after	15	No
06	No	16	No
07	No	17	Yes, before
08	Yes, before	18	Yes, after
09	Yes, before & after	19	Yes, before
10	Yes, no pax aggression	20	No

CHARACTERISTICS OF THE INCIDENT**Behavioural Sequence**

ID	Description	ID	Description
01	Increasing – multiple	11	Decreasing – two actions
02	No change – multiple	12	No change – two actions by driver
03	One action by pax	13	Increasing – multiple
04	One action by pax	14	One action by pax
05	No change – multiple	15	One action by pax
06	One action by pax	16	One action by pax
07	One action by pax	17	Increasing – multiple
08	Increasing – multiple	18	Increasing – multiple
09	Increasing – multiple	19	Increasing – multiple
10	One action by driver	20	One action off-board

Number of Aggressive Acts

ID	Number	ID	Number
01	3	11	2
02	6	12	3
03	1	13	5
04	1	14	1
05	6	15	1
06	1	16	1
07	1	17	11
08	4	18	7
09	11	19	12
10	1	20	1

Volatility (absent = 14)

ID	Present/Absent	ID	Present/Absent
01	Present	11	Absent
02	Absent	12	Absent
03	Present	13	Absent
04	Absent	14	Absent
05	Present	15	Absent
06	Present	16	Present
07	Absent	17	Absent
08	Absent	18	Absent
09	Present	19	Absent
10	Absent	20	Absent

Bus in Motion (stationary = 14)

ID	Stationary/Moving	ID	Stationary/Moving
01	Stationary, as pulled up	11	Stationary
02	Stationary	12	Moving
03	Moving, pulls over	13	Stationary
04	Moving, drives off	14	Stationary
05	Stationary	15	Stationary
06	Stationary	16	Stationary
07	Stationary	17	Stationary
08	Stationary	18	Moving, pulled over
09	Moving, bus halts	19	Stationary
10	Stationary	20	Both

Prior Verbal Conflict (yes = 17)

ID	Yes/No	ID	Yes/No
01	No	11	No
02	Yes	12	Yes
03	Yes	13	Yes
04	Yes	14	Yes
05	Yes	15	Yes
06	Yes (one sided)	16	No
07	Yes	17	Yes
08	Yes	18	Yes
09	Yes (but barely any)	19	Yes
10	Yes	20	Yes

Highest Level of Aggression (severe = 15)

ID		ID	
01	Severe	11	Severe
02	Severe	12	Moderate
03	Severe	13	Severe
04	Severe	14	Severe
05	Severe	15	Severe
06	Severe	16	Moderate
07	Severe	17	Severe
08	Moderate	18	Severe
09	Severe	19	Severe
10	Moderate	20	Severe

CHARACTERISTICS OF THE PASSENGER(S)**Number of offenders**

ID	Number	ID	Number
01	2	11	1
02	1	12	1
03	1	13	1
04	1	14	1
05	1	15	1
06	1	16	1
07	1	17	1
08	1	18	1
09	1	19	1
10	1	20	1

Group members

ID	Yes/No	ID	Yes/No
01	No (pair)	11	Yes 1 other
02	Yes 3 others	12	No
03	No	13	No
04	Yes 2 others	14	Yes 3 standing off
05	Yes 1 other	15	Yes 2 others
06	Yes 9 sitting 1 during	16	No
07	Yes 1 other	17	No
08	Yes 2 others	18	Yes 1 other
09	No	19	No
10	Yes 1 other	20	No

Passenger Involvement

ID	Yes/No	ID	Yes/No
01	No	11	No
02	Yes	12	Yes
03	Yes	13	Yes
04	No	14	No
05	Yes	15	No
06	No	16	Affected but not involved
07	No	17	Yes but outsider
08	Yes	18	Yes
09	Yes	19	No
10	Yes	20	Yes

Gender of Offending Passenger (male = 16)

ID	Male/Female	ID	Male/Female
01	Male	11	Male
02	Male	12	Male
03	Female	13	Male
04	Male	14	Male
05	Male	15	Male
06	Female	16	Male
07	Male	17	Male
08	Male	18	Female
09	Male	19	Male
10	Female	20	Male

Age of Offending Passenger (youth = 12)

ID	Youth/Adult	ID	Youth/Adult
01	Adult	11	Youth
02	Youth	12	Youth
03	Youth	13	Youth
04	Youth	14	Youth
05	Adult	15	Youth
06	Youth	16	Adult
07	Youth	17	Adult
08	Adult	18	Adult
09	Youth	19	Youth
10	Adult	20	Adult

Other Passengers Physically Injured (not harmed = 17)

ID	Yes/No	ID	Yes/No
01	No	11	No
02	No	12	No
03	Yes	13	No
04	No	14	No
05	No	15	No
06	No	16	No
07	No	17	No
08	Yes	18	No
09	Yes	19	No
10	No	20	No

Triggers/Proximal Contributing Factors

ID	Description	ID	Description
01	Dispute over service, poor driving, heavy breaking	11	None apparent, for fun
02	Rule enforcement, damage to property	12	Dispute over fare, evasion
03	Dispute over service, refusal to turn down lights at pax request	13	Dispute over fare
04	Dispute over fare, refused to give free ride	14	Refusal of service, no entry to friends
05	Dispute over fare, validity of concession card	15	Dispute over fare, refused to pay
06	Dispute over service, rear door not opening properly	16	None apparent
07	Dispute over fare, cost of fare	17	Rule enforcement, refusal to disembark at end of route
08	Dispute over fare	18	Dispute over service, refusal to pull over for pax toilet request
09	Refusal of service, running after bus	19	Rule enforcement, refusal to disembark at end of route
10	Rule enforcement, passengers in violent brawl	20	Road rage with car driver

Characteristics of Violence – Escalation/Reciprocal Dynamics

ID		ID	
01	P1 snatches D hat D grabs P1 arm P2 spits	11	P spits D taps P on shoulder
02	P spits D hits male on chest P punches D in face D hits away D lunges out of seat and pushes male off bus P repeatedly punches and kicks D	12	D pushes D pushing P pulls D onto floor
03	P slaps D in face	13	P taps D on legs with skateboard twice D grabs P by arm P kicks D D pushes P twice P taps D arm with skateboard
04	P slaps D in face	14	P spits
05	P spits at D head D grabs & pulls in D punches P in face P grabs arms D kicks legs P spits twice	15	P punches D in face
06	P punches D in face	16	P shoves D hand away
07	P spits at D head	17	D push D push three times D push D push D push D push P grabs D jacket D & P grapple, go for each other's faces D choke hold D grabs onto jumper D shoves P into wall
08	D puts arm under P neck D pushes P back with forearm P grabs hat off D head D grabs arm	18	P pokes D on cheek and chest D pushes hand away D grabs P shirt and tries to push P pushes D away D grabs hand & shoulder and tries to push away P punches D across head D pushes P arm away twice
09	D pushes P off bus P grabs D by shirt D & P grapple P punches D in face D grabs shirt then neck and pushes P punches D in face D grabs shirt P pulls on watch D snatches watch out of hand P shoves D arm away P pushes	19	D grabs P P does body slam D & P grapple on floor P punches P grabs D by collar P shoves into door D pushing P pulls up P hits D over side of head with bag P pins D down onto floor P grabs P pushes
10	D pushes P	20	P punches D through window

Summary 20 Cases of Physical Violence between Drivers and Passengers

ID	Pax gender and age	Driver gender	Proximal contributing factor	Forms aggression	Highest level of aggression	Driver physical aggression	Behavioural sequence	Volatility	Audience involvement (with examples)
01	Male, adult	Male	Dispute over service, poor driving, heavy breaking	Snatching, grabbing, spitting	Severe	Yes, after	Increasing – multiple	Present	No
02	Male, youth	Male	Rule enforcement, damage to property	Spitting, hitting, punching, pushing, kicking	Severe	Yes, after	No change – multiple	Absent	Yes, tries to break up fight, alerting authorities
03	Female, youth	Male	Dispute over service, refusal to turn down lights at pax request	Slapping	Severe	No	One action by pax	Present	Yes, restraining passenger, alerting authorities
04	Male, youth	Male	Dispute over fare, refused to give free ride	Slapping	Severe	No	One action by pax	Absent	No
05	Male, adult	Female	Dispute over fare, validity of concession card	Spitting, grabbing, pulling, punching, kicking	Severe	Yes, after	No change – multiple	Present	Yes, hands driver jacket to wipe off spit, looks which direction perpetrator left
06	Female, youth	Male	Dispute over service, rear door	Punching	Severe	No	One action by pax	Present	No

			not opening properly						
07	Male, youth	Female	Dispute over fare, cost of fare	Spitting	Severe	No	One action by pax	Absent	No
08	Male, adult	Male	Dispute over fare	Arm under neck, pushing, grabbing, taking personal items	Moderate	Yes, before	Increasing – multiple	Absent	Yes, restraining passenger
09	Male, youth	Male	Refusal of service, running after bus	Pushing, grabbing, grappling, punching, pulling, taking personal items, shoving	Severe	Yes, before & after	Increasing – multiple	Present	Yes, tries to break up fight
10	Female, adult	Male	Rule enforcement, passengers in violent brawl	Pushing	Moderate	Yes, no pax aggression	One action by driver	Absent	Yes, alerting driver, restraining passenger
11	Male, youth	Male	None apparent, for fun	Spitting, tapping	Severe	Yes, after	Decreasing – two actions	Absent	No
12	Male, youth	Male	Dispute over fare, evasion	Pushing, pulling	Moderate	Yes, before	No change – two actions by driver	Absent	Yes
13	Male, youth	Male	Dispute over fare	Tapping with skateboard, grabbing, pushing, kicking	Severe	Yes, after	Increasing – multiple	Absent	Yes

14	Male, youth	Male	Refusal of service, no entry to friends	Spitting	Severe	No	One action by pax	Absent	No
15	Male, youth	Male	Dispute over fare, refused to pay	Punching	Severe	No	One action by pax	Absent	No
16	Male, adult	Male	None apparent	Shoving	Moderate	No	One action by pax	Present	Affected but not involved
17	Male, adult	Male	Rule enforcement, refusal to disembark at end of route	Pushing, grabbing, grappling, choke hold, shoving	Severe	Yes, before	Increasing – multiple	Absent	Yes but outsider
18	Female, adult	Male	Dispute over service, refusal to pull over for pax toilet request	Poking, pushing, grabbing, punching	Severe	Yes, after	Increasing – multiple	Absent	Yes
19	Male, youth	Male	Rule enforcement, refusal to disembark at end of route	Grabbing, body slam, grappling, shoving, pushing, hit over head with bag, pinning onto floor	Severe	Yes, before	Increasing – multiple	Absent	No
20	Male, adult	Male	Road rage with car driver	Punching	Severe	No	One action off-board	Absent	Yes