Safer places and small bars

November 2016

Prepared by Adelaide West End Association and Adelaide City Council

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The Foundation for Alcohol Research and Education (FARE) is an independent, not-for-profit organisation working to stop the harm caused by alcohol. Alcohol harm in Australia is significant. More than 5,500 lives are lost every year and more than 157,000 people are hospitalised making alcohol one of our nation's greatest preventive health challenges.

For over a decade, FARE has been working with communities, governments, health professionals and police across the country to stop alcohol harms by supporting world-leading research, raising public awareness and advocating for changes to alcohol policy. In that time FARE has helped more than 750 communities and organisations, and backed over 1,400 projects around Australia.

FARE is guided by the World Health Organization's (2010) *Global Strategy to Reduce the Harmful Use of Alcohol* for stopping alcohol harms through population-based strategies, problem directed policies, and direct interventions.

If you would like to contribute to FARE's important work, call us on (02) 6122 8600 or email info@fare.org.au.

About Adelaide West End Association

The Adelaide West End Association Incorporated is a not for profit association, which was established in the 1980s as the West End Traders' Association, merging with the Hindley Street traders in the early 1990s. The Adelaide West End Association is managed by a volunteer executive, elected annually from its members and administered by a coordinator employed by the association.

Membership represents the diverse range of businesses, individuals and institutions that form the West End. The Adelaide West End Association advocates to state and local government on behalf of members on issues such as precinct presentation, safety and cleanliness, social inclusion, arts and community funding, planning matters and is an active voice on behalf of our community in shaping the future of our city.

The West End is a unique precinct in Adelaide, historically the centre for colonial commerce and post-war migration settlement. It is the entertainment precinct in the CBD with historic hotels, the highest concentration of live music and dance-club venues in the city and an emerging bar scene reflecting the diversity of Adelaide's entertainment options

About Adelaide City Council

Adelaide City Council is the local government body responsible for the governance and administration of the City of Adelaide and North Adelaide, bounded by the Adelaide City Park Lands. Founded in 1840, Adelaide was the first local government to be established in Australia and in 2015 has a population of 22,000 people.

Adelaide City Council strives to make Adelaide a safe, vibrant and accessible city for all residents, visitors and city users. Councils fulfils a number of roles to achieve this including planning and regulation, implementation of major projects, asset and infrastructure management and service provision. Council also works with a range of stakeholders and partners including the community, private business, other levels of government, and non-government agencies to achieve great outcomes for the city.

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Contents

Summary

This study aimed to test the hypothesis that the type and size of a late night licensed premises can positively or negatively affect perceptions of safety in the public realm. The public realm was defined as being any publicly accessible area not under private ownership or control, such as footpaths and thoroughfares. This study compared observable variables that might affect perceptions of safety such as patron behaviour and amenity of the area. This study, which was an exploratory observational study, occurred in the late night entertainment district of Adelaide and compared a range of variables in areas with predominantly small venues to those areas with predominantly medium and large venues. Four sites were selected for the study:

- a 'small venue' site with small venues only
- a 'mixed venue' site with a mix of small, medium and large venues
- two sites with 'predominantly medium and large venues'.

Small venues were defined as venues with a capacity of under 120 patrons (as per state licensing restrictions). There is no upper limit of capacity defining a large venue and the average capacity of the medium and large venues in the predominantly medium and large venue sites was 459 people.

The sites consisted of the following venue types:

- Site 1 Peel Street: small venue site, with 100 per cent small venues.
- Site 2 Waymouth Street: mixed venue site, with 50 per cent small venues and 50 per cent medium and large venues.
- Site 3 Hindley/Morphett Street: predominantly medium and large venue site, with 33 per cent small venues and 67 per cent medium and large venues.
- Site 4 Hindley/Rosina Street: predominantly medium and large venue site, with 100 per cent medium and large venues.

There was also variation in the types of venues between sites. Within the 'mixed venue site' (Site 2 Waymouth Street); of the three medium to large venues, two traded as sit down restaurants and had capacities under 200 people and only one large venue within that site operated as a function venue and rooftop bar. The two 'medium and large venue sites' selected for comparison were both located on Hindley Street, which has the greatest density of nightclubs in Adelaide (Site 3 Hindley/Morphett Street and Site 4 Hindley/Rosina Street).

The method of this study draws on the work of Robert Grimshaw (Townsley & Grimshaw, 2013) which investigated the effects of crowding and queuing on aggression in entertainment precincts. Grimshaw (2010) used an observational instrument to capture information across a series of Likert scales that rated both physical and social characteristics of the environment, and concluded that crowd density can lead to aggression (Grimshaw, 2010). This study into small bars used a similar observational tool.

In this study, pairs of observers monitored the four sites on Saturday nights over a four-month period. Observation was conducted for an hour and a half on each session, with two sessions being undertaken each night (an early session between 11:15pm and 12:45am and a late session between 1am and 2:30am). Each site was observed eight times. On-site observers completed an electronic observational tool on their mobile phones; using Likert scales to rate a range of site characteristics (such as lighting, cleanliness, upkeep, noise), behaviour of people within the sites (such as intoxication, rowdiness, swearing), and their perceptions about the mood and safety of the sites. Estimates of characteristics

of people within the sites (age, gender, group size) and counts of low and high level aggressive incidents were also made.

The study generated 16 sets of data for each site which were reviewed in order for comparisons between sites to be made. Simple statistical analysis using Cronbach's alpha[1] and Pearsons r^2 was also conducted on observers' rating of perceptions of safety and a number of factors to identify any relationships.

The study found that Site 2 (mixed venue site on Waymouth Street) ranked as the safest of the four sites observed in this analysis. Site 2 received the best rating most frequently on both physical and behavioural variables, including site cleanliness, upkeep, crowding and mood. Site 2 (mixed venue site) also received the highest score (2.3) for its positive perceptions of safety, and had the lowest levels of perceived hostility, male roughness and bumping, male rowdiness, swearing, female intoxication and public urination and vomiting. This was closely followed by Site 1 (small venue site on Peel Street) ranked as the second safest, receiving a better rating than Sites 3 and 4 (medium and large venue sites) on all variables. Site 1 also had the second most positive perceptions of safety rating (2.9). Finally, Site 3 (medium and large venue site on Hindley/Morphett Street) ranked just ahead of Site 4 (medium and large venue site on Hindley/Rosina Street). Both Sites 3 and 4 (medium and large venue sites) received the poorest rating for an equal number of behavioural variables. However, Site 3 rated more positively than Site 4 on most physical variables, and also received a slightly better perception of safety rating than Site 4 (5.0 compared to 5.1).

In terms of the characteristics of people, Sites 1 and 2 (small and mixed venue sites) had a greater spread of people across the age groups than Sites 3 and 4 (medium and large venue sites). Sites 1 and 2 had a lower percentage in the 18-25 age group, but higher percentages in the 26-30 years, 31-39 years and 40+ years age groups. The proportion of males and females observed was approximately the same across all sites (60 per cent male and 40 per cent female).

In terms of site characteristics, Sites 1 and 2 (small and mixed venue sites) rated more positively compared to Sites 3 and 4 (medium and large venue sites) on perceptions of: cleanliness, upkeep, site attractiveness, lines of sight into venues, music and voice noise, number of people in the site and crowding, and mood.

In terms of behaviour of people within the sites, Sites 3 and 4 (medium and large venue sites) were perceived to have higher levels compared to Sites 1 and 2 (small and mixed venue sites) of both male and female hostility, roughness and bumping, rowdiness, swearing, intoxication, and sexual activity.

Other behaviours documented in this study included the incidence and severity of urination, vomiting, and aggressive incidents. Site 1 (small venue site) and Site 3 (medium and large venue site) were rated as having the highest levels of public urination and vomiting, however this was rated relatively low across all sites. A higher number of low level aggressive incidents were observed in Sites 3 and 4 (medium and large venue sites) compared to Sites 1 and 2 (small and mixed venue sites). A notably higher number of high level aggressive incidents were observed in Site 4 (medium and large venue site) than in any of the three other sites.

[1] Cronbach's alpha is a statistical term that indicates internal consistency between a closely related a set of items. It is considered to be a measure of scale reliability.

[2] Pearsons r is a statistical test that measures the strength of a linear relationship between two variables. Pearson's r can range from -1 to 1. An r of -1 indicates a perfect negative linear relationship between variables, an r of 0 indicates no linear relationship between variables, and an r of 1 indicates a perfect positive linear relationship between variables.

The results of this study suggest that perceptions of safety are greater in areas with a greater proportion of small venues. However, the results also indicate that it is not the behaviour of people within sites that may have the greatest impact on perceptions of safety in that site, but rather physical characteristics of the site such as cleanliness, upkeep, attractiveness and the mood of the site.

Observers frequently rated their perceptions of safety more positively in Sites 1 and 2 (small venue and mixed venue sites) than the sites with larger venues. Observers gave Site 1 (small venue site) an average safety rating of 2.9 (where 1 = very safe and 7 = very unsafe), and Site 2 (mixed venue site) a rating of 2.3, compared to 5.0 and 5.1 respectively for Sites 3 and 4 (medium and large venue sites). It should be noted that each of the four sites had very different capacities, and this could be a factor in the improved amenity and perceptions of safety within these areas.

The mood of the site was found to be strongly correlated with people's perceptions of safety ($r = .83$). A strong relationship was also found between the density of people within the site and perceptions of safety ($r = .77$). The attractiveness, upkeep and cleanliness of the site showed moderate correlations with perceptions of safety ($r = .76$, $r = .72$, $r = .72$), however when these site characteristics were grouped together, they were found to have a strong relationship to perceptions of safety ($r = .80$). This is consistent with Wilson and Kelling's (1982) 'broken window theory' and a related theory known as 'incivilities thesis' (Roberts & Indermaur, 2012), both of which attempt to explain the relationship between the physical appearance of an area and perceptions of safety, risk and crime. No correlations of any strength were found between perceptions of safety and the behavioural variables measured in this study.

The importance of physical site factors in relation to perceptions of safety in late night entertainment areas is useful information for Local Governments and State Government including those involved with urban design and liquor licensing decisions. Local Government acts in a spatial planning role to guide the desired character of an area and set guidelines for licensing operating hours, as well as direct involvement in licensing negotiations and approvals. Local Governments also have some influence over the number of alcohol outlets in an area, as well as land use and management, and the attractiveness, cleanliness and upkeep of the area.

Those involved in liquor licensing and spatial planning may also draw on the relationship that was observed between the density of people and perceived crowding in an area and the perceptions of safety. In addition, the combined capacity of venues within an area also appears to be relevant to perceptions of safety. This information may be of use when considering the impact of additional licensed venues in an area that already has a number of venues that have large patron capacity.

Although not the focus of this study; the entertainment offering and venue type appeared to have observable differences in factors that affect both the physical space and behaviour of people in the sites. This is a potential avenue for future research. There appeared to be observable differences in areas with predominantly smaller venues as compared to areas outside larger venues. In addition, places with a mix of venue types and entertainment offerings also showed more positive perceptions of safety. This study is of interest to Local Government and its partners in terms of place management and to provide direction in shaping city spaces that may attract a more diverse mix of people and offer different options for late night entertainment.

The results of this study appear to indicate that the areas with a higher number of smaller venues do attract a broader age range of patrons and lower levels of some of the negative alcohol-related behaviours seen in the public realm. This study also indicated that one or two small venues in an area with predominantly large or very large venues did not positively impact on perceptions of safety in the public realm, but groupings of small to medium capacity venues appear to create spaces with more positive perceptions of safety.

1. Introduction

The City of Adelaide is the capital city of South Australia, with a residential population of 22,000 and a day time population of 228,673. The north-western corner of the city is the primary late night entertainment area, with eastern Hindley Street having the greatest concentration of pubs, bars and clubs. Also located in the area are numerous cafes and restaurants as well as many takeaway outlets, several of which trade until after 2am on a Sunday morning. Several of the laneways leading off Hindley Street, including Leigh Street, Bank Street and Peel Street, have benefited from State Government investment over the last five years leading to improved amenity and atmosphere in those streets.

The South Australian Government and Adelaide City Council, through the Capital City Committee, share a number of strategic priorities for the city. A key strategy is to create a 'vibrant city'. The development of laneways and smaller, boutique venues is part of this strategy, as is improving perceptions of the city as a safe place to enjoy. Issues of amenity, safety and crime are "fundamental to city prosperity and vibrancy" (Capital City Committee, 2013).[3] The hypothesis for this study – that diversity in patron demographics and behaviour in the public area around smaller venues and mixed capacity venues leads to more positive perceptions of safety – had not been tested in 2013, although smaller venues were springing up rapidly. Adelaide is not alone in experiencing an increasing number of small licensed venues being established in recent years. As at August 2015, Adelaide had 50 venues with a Small Venue Licence (capacity up to 120 people), Perth had 30 venues with a capacity up to 120 people licensed under a Small Bars Licence. Queensland and New South Wales both have small bar liquor licences which allows a capacity up to 60 patrons. At the time of writing this report Brisbane had 50 venues with this licence type, and the City of Sydney had 24. Victoria does not have a separate licence type for venues with a low capacity. These venues are being approved across Australia without evidence of their impact upon community safety. Given this, the research is timely.

In 2014, Adelaide City Council (ACC) and the Adelaide West End Association (AWEA) were keen to explore how small bars impact upon the amenity of the western entertainment area of the city. Given the extensive research linking the distribution of alcohol with violence and other community harms, it seemed that the growth of new small bars should be explored from a community safety perspective, informed by related research on alcohol consumption in the public realm and observation of the environment late at night. There are a number of studies, cited in this report, indicating that the volume of alcohol sold, can predict the likelihood of violence. This *Safer places and small bars* study explores whether the physical and social environment in which the alcohol is consumed can help to improve perceptions of safety in the public realm. For this study the 'public realm' is defined as being any publicly accessible area not under private ownership or control, such as footpaths and thoroughfares. It should be noted that during 2014, concurrent to this study, the Capital City Committee also commissioned a study entitled *Small and niche venue research.*[4] The findings from this research generally indicated that people felt safer in small venues as opposed to large ones. This research sought community comment through survey and was more focused on city vibrancy than community safety, although as mentioned above the two objectives are intrinsically linked.

The landscape of late night alcohol trading is shifting in Adelaide in part due to amendments to the Liquor Licensing Act (1997) over the last five years. Two key amendments have been made: the

[3] Capital City Committee (2013). *West end safety trial*. Retrieved from http://capcity.adelaide.sa.gov.au/2013/09/west-end-safety-trial-west/
[4] Capital City Committee (2013). *Adelaide city trends*. Retrieved from http://capcity.adelaide.sa.gov.au/cities/adelaide-city-trends/

introduction of the Late Night Trading Code of Practice[5] effective from 1 October 2013, and the introduction of a new Small Venues Liquor Licence[6] effective from April 2013. The Code of Practice was introduced in response to concerns around increasing incidents of alcohol-related violence and social behavioural issues and applies to venues operating between 3am and 7am. The Late Night Trading Code of Practice covers aspects of licensed venue management including queue management, security measures including metal detectors and CCTV, restrictions on drink promotions after 4am, and restrictions on the use of glassware after 4am, among other requirements.

The Small Venues Licence restricts capacity to no more than 120 patrons. Licensees must close prior to 2am. At the time that this study commenced, 16 venues had been granted a Small Venue Licence. One of the public policy goals for the Small Venues Licence was to contribute to the Vibrant City agenda. As identified above, South Australia is not the only Australian state or territory to introduce a liquor licence aimed at small venues with Queensland introducing a small bar licence for venues with a capacity up to 60 people in January 2009. New South Wales introduced a similar licence in mid-2013, also for venues with capacity up to 60 people. This study goes some way to exploring the impact upon community safety of these legislative changes.

To our knowledge, no other study has focused specifically on the impact of small licensed venues on the public realm, although research has identified large venue capacity as a risk factor when predicting alcohol-related problems. Similar studies have not been undertaken in relation to small venues and this observation study therefore begins to address this research gap.

The purpose of this observational study was to test the hypothesis that: areas with predominantly small venues attract different patrons and different patron behaviour than areas with predominantly large venues, and that this would have a positive impact on perceptions of safety in the public realm (such as the footpath near licensed venues).

Specifically, this research aims to address the following questions:

- How do perceptions of safety in an area populated predominantly with smaller licensed venues differ from a location populated predominantly with larger licensed venues?
- Does the behaviour of patrons outside small licensed venues differ from that of patrons outside larger licensed premises?
- What, if anything, can the difference between perceptions of safety and patron behaviour around small licensed venues compared to large licensed venues tell us about managing the public realm to improve perceptions of public safety?

1.1. Overview of research evidence

There are a number of studies indicating that late night alcohol trading itself, regardless of venue type, has a direct impact on violence in the public realm. The work of researchers such as Kypri, Jones, McElduff and Barker (2010) and Kypri, McElduff and Miller (2013) have shown a reduction in violence associated with the reduction of late night trading hours. These two particular studies explored the effects of closing times on night time assaults in Newcastle, Australia. The 2013 study showed that the lower incidence of assaults recorded in the 2010 study have persisted for at least five years. These

[5] Government of South Australia. (2013). *Late night trading code of practice.* Retrieved from: http://www.cbs.sa.gov.au/assets/files/Late_Night_Trading_Code_of_Practice_1OCT.pdf
[6] Government of South Australia. (2013). *Small venue licence fact sheet*. Retrieved from: http://www.cbs.sa.gov.au/assets/files/Small_Venues_Licence-Fact_Sheet.pdf

findings have contributed to policy changes in Australian cities to curb late night drinking, most recently late night lockouts, occurring in most capital cities including Adelaide.

A large number of studies identify a broad range of factors that impact upon a licensed venue's risk of being associated with alcohol-related aggression and violence. These risk factors broadly fall into five categories: patron characteristics, venue characteristics, social environment, staffing characteristics and the wider environment (Australian Institute of Criminology, 2009). Although large venue capacity (crowd density) has been identified as a venue risk factor (Australian Institute of Criminology, 2009; Allen Consulting Group, 2009), limited literature has been found focusing specifically on the influence of small licensed venues, although there are studies that look at volume of sale which can be a proxy for venue size.[7]

Studies on liquor licence outlet density conclude there is a direct relationship between higher outlet density and alcohol-related harms, including violence (Burgess & Moffatt, 2011; Donnelly et al., 2006; National Drug Research Institute, 2007). Other researchers have highlighted the limitations of assuming the impact of all licensed outlets will be exactly the same without taking into consideration factors such as outlet type, capacity and trading hours (Livingston, Chikritzhs & Room, 2007).

There are a considerable number of studies that indicate a relationship between the density of liquor license outlets and alcohol-related violence, social problems and neighbourhood perceptions of crime and safety (Burgess & Moffatt, 2011; Donnelly et al., 2006; National Drug Research Institute, 2007; World Health Organization, 2009). The bulk of these studies conclude that increasing outlet density results in an increase in violence and other social problems. Some researchers, such as Stockwell and Gruenwald (2004, cited in National Drug Research Institute, 2007) conclude that studies in this area "strongly suggest that limits on outlet density may be an effective means of controlling alcohol problems and need to be taken more seriously as an effective policy tool for the reduction of alcohol-related harm" (p. 30).

The type of licensed premises is also important, as Livingston, Chikritzhs and Room (2007) identify. Livingston et al. advise that: "one of the major weaknesses of most outlet density studies is the underlying assumption that every outlet (within broad licence categories) is equivalent. Thus, in most published studies both a small bar and a sprawling multi-level nightclub would be counted as one on-premise licence" (2007, p. 562). Chikritzhs et al. (2007) also notes the 'shortcomings' of the outlet density literature that assumes all outlets are equivalent.

The findings of a study by Briscoe and Donnelly (2003) in Sydney, Newcastle and Wollongong showed a small number of licensed premises were involved in a disproportionately high number of assaults. The Victorian Department of Justice Alcohol Report (Allen Consulting Group, 2009) also cites a number of Australian and international studies with similar findings (Homel & Clark, 1994; Sherman, Rogan & Velke; 1991; Loxley et al., 2005).

An overview of the literature indicates that the relationship between outlet density and alcohol-related problems is not a simple linear one. Studies suggest there are a number of outlet (venue) factors including venue type, capacity, layout and staff practices, and patron characteristics such as age that have a bearing on the outlet's risk of increasing alcohol-related problems (Doherty & Roche, 2003; Green & Plant, 2007a; Hughes et al., 2011).

The Australian Institute of Criminology (2009) provides a useful table based on three studies outlining various patron, venue, social environment, staffing and wider environment characteristics identified as risk factors. This has been reproduced in Table 1.

[7] Volume of sale data is not available in South Australia.

Table 1. Risk factors for licensed premises

Table 1 Risk factors and licensed premises

Patron characteristics	Venue characteristics	Social environment	Staffing characteristics	Wider environment
Heavily intoxicated	Queues or line ups outside the building	Heavy drinking and high levels of intoxication	High proportion of male staff	High density of licensed premises
Greater proportion of males	Patrons hanging around outside venue at closing	Generally permissive environment with high levels of rowdy behaviour	Low staff-to-patron ratio	High levels of movement in and out of premises
Presence of males in groups, especially strangers to one another	Queues for public transport	Expectation that aggression will be tolerated	Lack of responsible serving practices	Entry and ejection practices for aggressive patrons
Heavy drinkers	Venues with larger capacity	Hostile atmosphere	Refusing service to already intoxicated patrons	Unfair or confrontational entry practices
Younger patrons, including those that are underage	Poorly maintained and unpleasant decor	Macho culture	Drinking by staff	Conflict between social groups emerging from or congregating around venues
Greater proportion of unkempt patrons and patrons from marginal groups	Unclean or messy	Patron boredom	Greater number of staff adopting confrontational approach to venue management	Poor management of cluster points such as bus stations, taxi ranks, food outlets
Patrons exhibiting signs of being less agreeable, more impulsive and angry	Poor or low levels of lighting	Underage drinking	Aggressive security staff	Congestion points as crowds leave venues (especially at closing time)
	Crowding that inhibits movement around the venue, including around the bar	Presence of competitive games	Poor coordination of staff	
	Frequent patron movement	Dancing	Poor monitoring and control of minor incidents	
	Higher noise level	Sexual activity, contact and competition	Limited ability to control or defuse situations	
	Poor ventilation and high temperature	Drink promotions	Lack of professionalism by security staff	
	Inadequate or uncomfortable seating	Limited availability of food	Serving several drinks to patrons at closing	
	Inconvenient access to the bar	Other illegal activities, such as drug dealing	Younger security staff	

Source: Graham et al 2006; Graham & Homel 2008; Quigley, Leonard & Colllins 2003

Reproduced from: Australian Institute of Criminology. (2009). *Key issues in alcohol-related violence*. Research in Practice No. 04.

Table 1 draws on findings from three studies (Graham et al., 2006; Graham & Homel, 2008; Quigley, Leonard & Collins, 2003) to highlight the multiple factors under each heading that may increase the risk a venue will be associated with alcohol-related aggression and violence. Premises that have more of these factors are more likely to be associated with alcohol-related violence than premises with fewer of these characteristics.

A literature review by Hughes et al. (2011) found that rowdiness, drinks promotions, and a focus on music and dancing in bars have been associated with higher levels of intoxication and was linked to increases in alcohol-related harm. A report to the Department of Justice on *Alcohol-related harm and the operation of licensed premises* (Allen Consulting Group, 2009) also advises venue size, noise, drinks promotions and operating hours are predictors of alcohol-related harm. Quigley, Leonard and Collins (2003) found the cost of drinks was reported to be lower in bars where more violent behaviour had been recorded. They also found noise to be a differentiating feature of those bars with higher levels of violence.

Briscoe and Donnelly (2003) and Green and Plant (2007a) both found a relationship between venue type and alcohol-related problems. Briscoe and Donnelly (2003) found hotels and nightclubs to be the most problematic for violence. An earlier study by Stockwell et al. (1992, cited in National Drug Research Institute, 2007) also found that “drink for drink, the patrons of hotels, taverns and nightclubs were more likely to become involved in alcohol-related problems” (p. 32). Some of the difference in risk of alcohol-related problems between different types of venues may be accounted for by variations in characteristics which are themselves identified as risk factors. For example, nightclubs generally have larger capacities and longer trading hours than restaurants, both of which have been identified as risk factors. Green and Plant (2007b) therefore suggest that venue type may represent a cluster of

risk factors such as patron characteristics, late trading, heat, noise, lack of free water and provision of food.

A number of studies have identified venue cleanliness and upkeep as important factors in predicting the likelihood of alcohol-related violence and anti-social behaviour (Briscoe & Donnelly, 2003; Doherty & Roche, 2003; Green & Plant, 2007; Hughes et al., 2011). Graham et al (2006) suggest that a lack of venue cleanliness and upkeep may suggest an "ambience of permissiveness" (p. 1577) and Quigley et al. (2003) also advise that poor upkeep gives the impression to patrons that "anti-normative behaviour is acceptable" (p. 765). This suggestion that low levels of venue cleanliness and upkeep may give patrons the impression of tacit approval for anti-social behaviour has some links to Wilson and Kelling's 'broken windows theory' (cited in Homel, 1998). In essence the theory suggests that minor incivilities such as low levels of cleanliness and poor maintenance and upkeep give people a sense that there is a lack of order and control, and promotes an environment where low level anti-social behaviour can develop, eventually leading to higher level crime (Homel, 1998). While Wilson and Kelling's theory was focused on neighbourhoods, the literature indicates that it may have application at a more micro level – that of individual licensed venues.

However, some venue characteristics however have been shown to decrease the risk of alcohol-related problems. Doherty and Roche (2003) suggest that venues offering food are associated with reduced risk of aggression, mostly because food slows down the body's absorption of alcohol but potentially also because the sorts of venues that offer food attract patrons whose purpose for going out is different to patrons of venues where drinking is the primary focus.

Young intoxicated males are repeatedly identified in the literature as being at most risk of alcohol-related harm and aggression (Allen Consulting Group, 2009; Australian Institute of Criminology, 2009; Doherty & Roche, 2003; Graham et al., 2006; National Drug Law Enforcement Research Fund, 2013; Quigley, Leonard & Collins, 2003).

An abundance of literature exists regarding the strong relationship between alcohol consumption, licensed venues and a range of harms (see for example Green & Plant, 2007a for a list of studies). There are studies that indicate a link between violence occurring in the immediate vicinity of a licensed venue. A 2011 study of the Sydney Central Business District (CBD) Entertainment precinct (Burgess & Moffatt, 2011) found that assaults were highly concentrated around licensed premises and more than half the assaults recorded by police in the Sydney CBD occurred within 50 metres of a liquor outlet. The results suggested that each additional alcohol outlet per hectare in the Sydney CBD would result on average of around four additional assaults a year.

Local Governments and State and Territory Government policymakers have dual responsibilities that require awareness and balance. They want to activate their cities, making them interesting and lively places which attract visitors, and must acknowledge the important role licensed venues play in the night time economy. Licensed premises are popular venues for entertainment, the consumption of alcohol, and are an important location for socialising, particularly among young people (McIlwain & Homel, 2009, cited in Australian Institute of Criminology, 2009). There are a variety of types of licensed venues including theatres, restaurants, cafes, cinemas and outdoor events as well as nightclubs, pubs and bars. Concentrations of licensed venues can create night time entertainment areas in cities which "contribute to a dynamic, vibrant night-time economy" (Bradley, 2014, p. 71). As discussed earlier, some characteristics of licensed venues attract more alcohol-related harms than others. With this in mind, governments also have a responsibility to support and influence the development of environments where people can go out and enjoy themselves without fear of aggression and violence. As noted in the report to the Victorian Department of Justice *Alcohol–related harm and the operation of licensed premises* (Allen Consulting Group, 2009, citing Wiggers et al., 2004); "The links between

harm and licensed premises is significant for policymakers, as licensed premises are intended, through legislation, to provide a safe and controlled environment for alcohol consumption" (p. 17). The Australian Institute of Criminology (2009) note: "there is strong evidence for adopting strategies to create a positive physical and social environment to attract patrons that are more likely to be well behaved" (p. 5).

2. Method

This is an exploratory observational study to begin to address the lack of existing research on the impact of small bars, which are being established in some Australian cities.

The method for this study is based on the work undertaken by Robert Grimshaw (Townsley & Grimshaw, 2013). Similar to Grimshaw's research, this was an observational study of a late night entertainment area. While the focus of Grimshaw's study was aggression, this study focused on observing physical and social behavioural variables in sites, with mostly small licensed venues compared to sites with mostly larger licensed venues, and investigating the relationship of these variables with perceptions of safety.

Grimshaw's study included 12 researchers working in pairs to collect observational data of six sites over a series of eight nights in Fortitude Valley, Queensland. Grimshaw developed an observational tool that captured physical and social environment information about the area through a series of questions with ten-point Likert scales. Grimshaw's study made observations for four two-hour time periods, with two hours spent at each site location before moving on to the next (in total the hours between 10pm and 6am). However, this study made observations for two one-and-a-half hour periods, spending 90 minutes at each site location (in total the hours between 11:15pm and 2:30am). Grimshaw's study also undertook observations on Friday and Saturday nights while this study only undertook observations on Saturday nights.

In line with Grimshaw's method, a number of sites were observed by pairs of observers over a number of Saturday nights; rating a number of variables on a Likert scale (see details of observation tool in Appendix A). Observers worked in pairs for both safety reasons and to allow for crosschecking consistency between observer ratings.

2.1. Selection of sites

The primary late night area of Adelaide bounded by North Terrace, King William Road, Waymouth Street and Morphett Street is contained over approximately one quarter of a square kilometre. This late night area has a high level of activity, such as dining, nightclubs, music venues, relative to other parts of the city. It also had a suitable number of venues with differing patron capacities and these venues were grouped together to allow for comparison. Within the resources available for the study it was determined that four sites would be observed. These four sites were chosen for proximity to one another, for ease of observation. The four sites were also of similar length (between 72 and 78 metres long), with different proportions of small and medium to large licensed venues to allow for comparison. As the study was supported by the Adelaide West End Association (AWEA) the sites were all located in the West End of Adelaide and were identified through the combined knowledge of the study area from representatives from the Adelaide City Council.

Peel Street was chosen as the 'small venue site' (Site 1) as this street has experienced the greatest concentration of new small venues (under the Small Venue Licence) in the city. Peel Street has been upgraded, both the street and frontages, with the support of the Adelaide City Council and State

Government since 2010, and small venues in the street have been case managed to streamline the application and approval processes from 2013.

Waymouth Street was chosen as the 'mixed venue site' (Site 2) as it is an emerging entertainment area, and has a mix of venue sizes.

For comparison, Hindley Street (east) was chosen as the location for the two sites with 'medium and large venues', with the two locations categorised as Hindley/Morphett Street (Site 3) and Hindley/Rosina Street (Site 4). Hindley Street east is Adelaide's key nightclub and entertainment strip, with the greatest venue density of clubs and pubs in Adelaide.

The sites were tested by Adelaide City Council staff who undertook a mock observation of all four sites over one Saturday night into the early hours of Sunday morning.

The location of sites within the primary late night entertainment area of Adelaide is shown in Figure 1, and the characteristics of each outlined in Table 2.

Figure 1. Map of observation sites in late night entertainment area of Adelaide

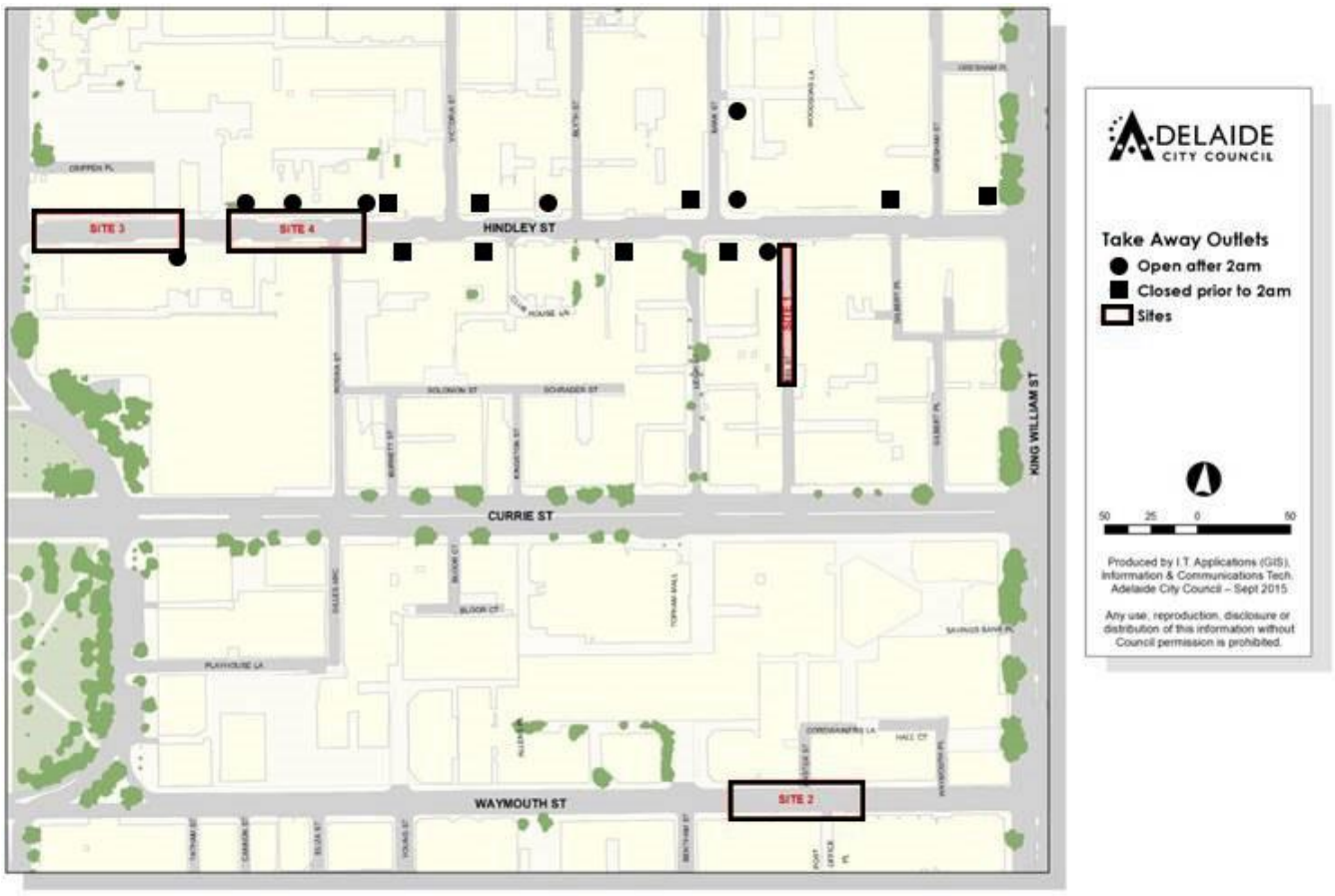

Table 2. Sites and site characteristics

Site	Site characteristics
Site 1 Peel Street **Small venue site** **100 per cent small venues**	Six venues, total capacity 481 people: 1. Small venue (capacity 53), lounge/wine bar, seating, light meals.* 2. Small venue (capacity 70), lounge/wine bar, seating, no food prepared on premises. 3. Small venue (capacity 78), lounge/wine bar, seating, light meals. 4. Small venue (capacity 90), lounge/wine bar, seating, light meals and main meals.** 5. Small venue (capacity 90), lounge/wine bar, seating, light meals. 6. Small venue (capacity 100), lounge/wine bar, seating, light meals and main meals.
Site 2 Waymouth Street **Mixed venue site** **50 per cent small capacity venues and 50 per cent medium to large venues**	Six venues, total capacity 1,050 people: 1. Small venue (capacity 45), restaurant, seating, main meals. 2. Small venue (capacity 100), wine bar, seating, light meals. 3. Small venue (capacity 104), lounge bar, seating, light meals. 4. Medium venue (capacity 182), restaurant, seating, main meals. 5. Medium venue (capacity 189), restaurant, seating, main meals. 6. Large venue (capacity 430), function venue/rooftop bar, seating, light meals and main meals.
Site 3 Hindley/Morphett Street **Medium and large venue site** **33 per cent small capacity venues and 67 per cent medium to large venues**	Six venues, total capacity 1,936 people: 1. Small venue (capacity 100), gallery, seating, no food prepared on premises. 2. Small venue (capacity 112), lounge bar, seating, light meals. 3. Medium venue (capacity 229), nightclub, limited seating, no food prepared on the premises. 4. Medium venue (capacity 300), adult entertainment, some seating, no food prepared on premises. 5. Medium venue (capacity 373), pub, some seating, light meals and main meals available in bistro area. 6. Large venue (capacity 822), nightclub, some seating, no food prepared on premises.
Site 4 Hindley/Rosina Street **Medium and large venue site** **100 per cent medium to large venues**	Six venues, total capacity 3,141 people: 1. Medium venue (capacity 250), adult entertainment, some seating, no food prepared on premises. 2. Medium venue (capacity 345), bar/restaurant, seating, light meals and main meals. 3. Medium venue (capacity 362), entertainment, some seating, no food prepared on premises. 4. Large venue (capacity 458), pub, some seating, main meals available in some parts of the venue. 5. Large venue (capacity 528), adult entertainment, some seating, no food prepared on premises. 6. Large venue (capacity 928), nightclub, limited seating, no food prepared on premises.

* Light meals refer to food (such as tapas style bar snacks), cooked or prepared on the premises.

**Main meals refer to larger meals (such as meat and vegetables or burgers) cooked or prepared on the premises.

Site venue density was assessed by the length of the street (by metre) and by the total capacity of venues (by person). As Table 3 below indicates, Sites 1 and 2 (small and mixed venue sites) have the lowest outlet density compared to Sites 3 and 4 (medium and large venue sites).

Table 3. Site venue density

Site	Site Venue Density
Site 1 Peel Street **Small venue site**	Site length: 75m long. 481 total venue capacity / 75m. 6.4 people per linear street metre.
Site 2 Waymouth Street **Mixed venue site**	Site length: 72m long. 1,050 total venue capacity / 72m. 14.6 people per linear street metre.
Site 3 Hindley/Morphett Street **Medium and large venue site**	Site length: 78m long. 1,936 total venue capacity / 78m. 24.8 people per linear street metre.
Site 4 Hindley/Rosina Street **Medium and large venue site**	Site length: 72m long. 3,141 total venue capacity / 72m. 43.6 people per street metre.

2.2. Observation schedule

Eight observations of each site were undertaken. These were undertaken fortnightly to prevent any lack of continuity that may have arisen from extending the observation phase of the project over a longer period. Observations were undertaken between March and June 2014 and two sessions were held each observation night: from 11:15pm to 12:45am (early session) and from 1am to 2:30am (late session).

An observation schedule was developed to ensure that each site was observed eight times in total; four times in the early session and four times in the late session. The schedule also ensured that each observer viewed each site twice in the early session and twice in the late session, and helped to ensure that, as much as possible, the same observers were not consistently paired together.

A lead observer was recruited based on her experience leading a team of volunteers in the late night entertainment area. The remaining four observers (three regular observers and a backup to cover unexpected absences) were recruited based on the lead observer's knowledge regarding their level of maturity, reliability and ability to complete the observation and recording task. Three of the four observers had experience volunteering in the late night entertainment area through the 'Green Team'

program,[8] assisting young people late at night and modelling responsible behaviour. In total, three females and two males were recruited to undertake the observations.

2.3. Procedure on observation nights

On observation nights, the lead observer and the three other observers met at an agreed location near the late night entertainment area and pairs and sites for each session were allocated by the lead observer. Observers worked in the same pairs for both sessions of the night. Observer pairs walked to their early session site and undertook the hour and a half observation and completed the observation tool. The pairs then had a short time (15 minutes) to have a break and to walk to the next observation site for the late session. Once the second hour and a half observation had been completed, the observers met for a half hour debrief to discuss their impressions, anything of significance they had observed, and any issues with the observation tool.

Observers were asked to dress and behave as if they were visiting the area for entertainment purposes. Observers were also asked to keep interaction with others in the site to a minimum and, if specifically asked what they were doing, to advise they were undertaking some observations of the area on behalf of Adelaide City Council. Due to the length of time and the number of occasions observers were in the sites it became necessary to identify themselves to some of the venue security staff in three of the four sites. Other people within the sites did not appear to be aware of the observers' role in the site.

2.4. Observation tool

The observation tool was based on Grimshaw's (2010) and adapted to suit the focus of this study. For a full copy of the observation tool used please see Appendix A.

The observation tool was developed using Survey Monkey (www.surveymonkey.net). This internet-based tool was used because the response options to questions could be configured to meet the needs of this study. This tool was also user friendly and had a clear user interface on both Apple and Android mobile phones. During observations, observers used their mobile phones to complete the tool. The observation was conducted according to the following system:

- The observation tool was divided into three sections, with observers required to complete one of the sections at different points in the observation session.
- In the first and last 15 minutes of the observation session observers were required to complete the 'early observations' and 'late observations'.
- Observation questions included:
    - > perceptions of density of people in the site
    - > crowding
    - > pedestrian flow
    - > number of low level aggressive incidents
    - > weather conditions

[8] The 'Green Team' Hindley Street program is a body of volunteers under Encounter Youth who attend Hindley Street on Saturday nights to positively engage young people and provide a direct hands-on service (such as first aid and referrals) to young people at risk through excessive alcohol consumption.

> details of queues operating within the site (including numbers, behaviour of people queuing, how the queue affects pedestrian flow, potential conflict between people moving and people queuing).

- Around 20-25 minutes before the end of the session, observers were asked to complete the main body of the observation tool. This section asked observers to rate on a Likert scale a range of physical and social behavioural variables such as: lighting, cleanliness of the site, attractiveness of the site, noise level, level of roughness, swearing, and intoxication.
- The line of sight into venues from the footpath was also rated on a Likert scale. To our knowledge, this has not been assessed in other research. It was hypothesised that the level of visibility into a venue may impact on people's perceptions of safety as it allows potential patrons to gauge its patronage, decor and atmosphere before committing to enter the venue.

Within the main section of the observation tool, observers were also asked to:

- Make estimates of the demographics of the people within the site including age groups, gender and size of groups.
- Note their perception of the mood of the site and how safe they believe they would feel alone in the site at night.
- Count the number of low level aggressive incidents in all three sections of the observation tool and one count of high level aggression in the main body of the tool.

Opportunities for observers to write free text narratives were also incorporated throughout the tool to allow observers to note any incidents of significance, or to explain reasons for their ratings or make comment on something not covered elsewhere in the survey. This free text was also completed 25 minutes before the end of the observation session.

2.5. Observer training and manual

Prior to observation nights, the four observers undertook three hours of training provided by the lead observer and Adelaide City Council's Safety Strategy Officer. The full training manual and definitions of variables being observed used during the training session and supplied to observers are provided as Appendix B. The training manual was adapted from that used in Grimshaw's (2010) study, which was in turn adapted from several chapters in Kathryn Graham's *Safer bars training manual* (2000).

The training session and manual covered observer safety and procedures, an overview of the study and an in-depth review of the observation tool and definitions. Observers were deliberately given only a brief overview of the study to avoid biasing their ratings when they undertook observations in the field. The group's collective experience of the late night entertainment area meant they were very aware of the potential safety issues and the importance of maintaining their personal safety at all times. Observers were given a paper copy of the observation tool and familiarised themselves with the electronic tool.

Each observation question and its definition was covered and discussed in detail and observers were given the opportunity to ask questions about the tool. This process was intended to encourage consistency between observers so that they all had the same understanding of what the question meant and what constituted a high or low rating. It was also stressed to observers during the training that on observation nights they were to complete the observation tool independently and not confer with their observer partner. This would allow for observer pair ratings to be compared and rating consistency determined when analysing the data. Observers were also strongly encouraged to use the

narrative sections of the observation tool to provide a greater depth of information about what was observed and what influenced their ratings.

2.6. Data analysis

The results of the analysis from this study should be considered with some caution due to the small amount of data gathered and the difficulty in conducting meaningful statistical analysis. However, some simple statistical analysis using Cronbach's alpha and Pearsons *r* was conducted on the data. Given this was an exploratory study, the results are still of value in providing indicative information and pointing to areas for potential future research.

The two sets of data from observers working together each observation night were reviewed to determine the level of consistency between observer ratings. For the variables comprising of a Likert scale (mostly five-point) a difference between observers' ratings of greater than one point on the scale was considered unacceptable. The level of inter-observer consistency is discussed in more detail in the section for each variable. The table in Appendix C provides the number and percentage of observation pairs with a discrepancy of greater than one point on the scale for each variable.

2.7. Observers' focus group

An observers' focus group session was held with the lead observer and report writer in October 2014. Observers were provided with more information about the study and were asked some specific questions that needed clarification following analysis of the data.

3. Results

This study aimed to answer the following three questions:

- How do perceptions of safety in an area populated with smaller licensed venues differ from a location populated predominantly with larger licensed venues?
- Does the behaviour of patrons outside small licensed venues differ from that of patrons outside larger licensed premises?
- What, if anything, can the difference between perceptions of safety and patron behaviour around small licensed venues compared to large licensed venues tell us about managing the public realm to improve perceptions of safety?

This study generated 64 individual sets of observational data derived from 32 (x2) site observations.

The results of the data analysis are reported in this section of the report. Caution should be applied to this data, noting its subjective nature. The consistency of ratings between observers working together on each night has been analysed. Considering the subjective nature of the study, the inter-observer consistency was adequate with only two variables having more than 20 per cent of data with a discrepancy of greater than one point on the rating scale. Unfortunately, one of these variables – the response to '*How safe do you think you would feel alone at night?*' – was critical to the study. Please see section below on perceptions of safety for details on how the data was adapted to overcome this issue. The inter-observer consistency scores are presented in Appendix C.

In addition, where it served to illustrate the data, verbatim comments recorded on the observation tools are presented throughout this section.

3.1. Overall rating of the sites

The results of the observations found similarities in the overall ratings for Site 1 (small venue site) and Site 2 (mixed venue site), and for Sites 3 and 4 (both medium and large venue sites). Also, Sites 1 and 2 (small venue and mixed venue sites) rated better than Sites 3 and 4 (medium and large venue sites) on all site characteristics and social behavioural factors.

The study found that Site 2 (mixed venue site on Waymouth Street) ranked as the safest of the four sites observed in this analysis. Site 2 received the best rating most frequently on both physical and behavioural variables, including site cleanliness, upkeep, crowding and mood. Site 2 (mixed venue site) also received the highest score (2.3) for its positive perceptions of safety, and had the lowest levels of perceived hostility, male roughness and bumping, male rowdiness, swearing, female intoxication and public urination and vomiting.

This was closely followed by Site 1 (small venue site on Peel Street) ranked as the second safest, receiving a better rating than Sites 3 and 4 (medium and large venue sites) on all variables. Site 1 also had the second most positive perceptions of safety rating (2.9).

Finally, Site 3 (medium and large venue site on Hindley/Morphett Street) ranked just ahead of Site 4 (medium and large venue site on Hindley/Rosina Street). Both Sites 3 and 4 (medium and large venue sites) received the poorest rating for an equal number of behavioural variables. However, Site 3 rated more positively than Site 4 on most physical variables, and also received a slightly better perception of safety rating than Site 4 (5.0 compared to 5.1).

3.2. Characteristics of people within sites

Observers were asked to note the age and gender, group size and characteristics of people within the sites they were observing towards the end of each observation session. The results of estimated group size and age of people indicated a high level of inconsistency among observers. For example, observers were collectively required to make 128 pairs of estimates of the percentage of people within each site that fell into each age group (under 18, 18-25, 26-30, 31-39, 40+). Of these 128 pairs of estimates, 32 pairs (25 per cent) had a discrepancy in estimate of 20 percentage points or greater (for instance one observer estimated 20 per cent of people were in the 18-25 age group and the second observer estimated 40 per cent of people were in this category). Observations regarding group size and age should therefore be viewed with caution.

The key findings regarding the characteristics of people within sites were:

- Sites 3 and 4 (medium and large venue sites) had the greatest number of people estimated to be in the 18-25 years old age group compared to other sites.
- Sites 1 and 2 (small and mixed venue sites) had a greater spread of people across the age groups than Sites 3 and 4 (medium and large venue sites).
- The proportion of males and females was approximately the same across all sites (60 per cent male and 40 per cent female).

3.2.1. Age of people within sites

Observers were asked during each observation session to estimate the percentage of people within the site across five age groups (under 18, 18-25, 26-30, 31-39, 40+ years).

The percentage of people in each age group was averaged for each of the four sites, and these averages compared across sites. As stated, caution should be used when reviewing these results due to a relatively high level of discrepancy between observer pair ratings.

Table 4. Average percentage and range of estimates of people in each age group by site

Age group	Rating/range	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Under 18	Average	3%	1%	5%	5%
	Range	0-10%	0-5%	0-10%	0-10%
18-25	Average	33%	24%	53%	51%
	Range	5-66%	5-40%	35-70%	30-85%
26-30	Average	33%	38%	25%	26%
	Range	15-50%	25-60%	10-40%	10-40%
31-39	Average	20%	27%	11%	13%
	Range	10-40%	10-45%	5-20%	5-25%
40+	Average	11%	10%	6%	5%
	Range	0-30%	5-20%	0-10%	0-10%

Each of the sites had very low average percentage of people considered by the observers to be under 18 years of age (average range between one per cent and five per cent across sites).

People in the 18-25 years old age group were more likely to be observed in Sites 3 and 4 (medium and large venue sites) while people in the other age groups were more likely to be observed in Sites 1 and 2 (small and mixed venue sites).

3.2.2. Gender of people within sites

Observers were asked to estimate the ratio of men and women within each site during each observation session, these were expressed as percentages.

The percentage of people of each gender estimated by the observers was averaged for each of the four sites, and these averages compared across sites. Eight of the 64 pairs of estimates (12.5 per cent) had a discrepancy of 20 per cent or greater in the estimated percentage of people who were male or female.

The percentage of males and females was very similar across all sites. However, more males were observed across all sites. All sites recorded around 60 per cent of people in the site being male (range 40 to 80 per cent) and 40 per cent female (range 20 to 60 per cent).

3.2.3. Group size

Observers were asked to estimate the group size of people within each site during each observation session, with three options provided: small 1-3 people, medium 4-6 people and large over 7 people. These group sizes were expressed as a percentage.

The size of groups within the sites was the variable that had the greatest discrepancy between observer estimates (47 per cent). There are many potential reasons for this, including the difficulty in determining who is part of a ‘group’ and who simply happens to be walking or standing in the same

vicinity. As almost half of the observer pairs had a discrepancy of greater than 20 percentage points in their estimates (the difference in estimates was as high as 50 or 60 percentage points in several cases) it was decided not to report on this characteristic.

3.2.4. Description of people in sites (social characteristics)

In each session, observers were provided with 17 adjectives and asked to choose all the words they felt applied to the social characteristics of the majority of people in the site for that observation session. Observers were asked "what words would you use to describe the people in the site?". A snapshot of the observations is below:

Table 5. Social characteristics most frequently chosen by site

Characteristics	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Most frequently cited	Cheerful (10) Sociable (10)	Sociable (13)	Intoxicated (15) Immature (7)	Intoxicated (16) Rude (7)

Below are some examples of observer comments regarding the characteristics of people within the sites. These are fairly representative of the comments made about people in the sites.

> *"Near [Site 1 venue] it was well behaved and mature but down near Hindley Street it was rude… and some hostility."* – Site 1 (small venue site).

> *"Definite difference in people groups and rowdiness from those near the Hindley Street corner compare with near the venues."* – Site 1 (small venue site).

> *"We could see there was a wedding on Level 2 of [Site 2 venue]. This would have effected age ratios of those on the street as they left the event."* – Site 2 (mixed venue site).

> *"People were fairly well behaved (besides one incident), an older crowd."* – Site 2 (mixed venue site).

> *"People seemed rowdy, intoxicated…"* – Site 3 (medium and large venue site).

> *"…most people appeared cheerful waiting in ques (sic)"* – Site 4 (medium and large venue site).

3.3. Characteristics of sites

Observers were asked to rate on a Likert scale a number of site characteristics. This included lighting in the area, cleanliness of the site, upkeep of the area, the visibility into venues (line of sight), their impression of the attractiveness of the site, the levels of noise from music or other sounds, the number of people (density of people) in the site, how crowded the site was and the overall mood of the site. The site characteristics had relatively low levels of inconsistency between observer pair ratings (between three and 15.6 per cent).

The key findings relating to the characteristics of sites were:

- Sites 1 and 2 (small and mixed venue sites) rated more positively compared to Sites 3 and 4 (medium and large venue sites) on perceptions of: cleanliness, upkeep, site attractiveness, line of sight into venue, number of people in the site and crowding, and mood.

- Both music and voice noise were rated as most intrusive in Sites 3 and 4 (medium and large venue sites).

Tables showing the percentage of times each site characteristic was rated in a particular way have been included under individual site characteristic headings. Due to rounding of the percentages, the total for some sites for some factors may be 0.5 per cent fewer or more than 100 per cent.

3.3.1. Overview of site characteristic ratings

The average rating for each characteristic in each site is represented in the table below. Although averages are not necessarily an accurate depiction of the spread of scores across the scale, they have been included in this case because they are fairly representative of the differences in scores between sites.

Table 6. Average ratings and range of ratings for site characteristics by site

Site characteristic	Rating/range	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Lighting 1 very good – 5 very bad	Average rating	1.7	1.6	2.3	2
	Range	1-3	1-2	1-3	1-3
Cleanliness 1 very clean – 5 very dirty	Average rating	2.8	1.9	3.7	3.6
	Range	1-4	1-3	2-5	3-4
Upkeep 1 very good – 5 very rundown	Average rating	2.2	1.8	3.4	3.2
	Range	1-4	1-3	2-5	2-4
Lines of sight 1 clear visibility – no visibility	Average rating	1.4	2.4	3.1	3.4
	Range	1-2	1-4	1-4	1-5
Site attractiveness 1 very attractive – 5 very unattractive	Average rating	1.9	1.9	3.8	3.5
	Range	1-3	1-4	2-5	3-4
Music noise 1 not at all intrusive – 5 highly intrusive	Average rating	1.3	1.8	4.1	4.6
	Range	1-2	1-4	2-5	4-5
Voice noise 1 not at all intrusive – 5 highly intrusive	Average rating	1.8	1.8	3.8	4.0
	Range	1-3	1-3	1-5	2-5
Density of people 1 very low – 5 very high	Average rating	1.2	1.2	3.0	3.8
	Range	1-2	1-3	2-5	2-5
Crowding 1 none – 5 very high	Average rating	1.2	1.1	2.9	3.5
	Range	1-2	1-2	2-5	2-5
Mood 1 friendly – 5 unfriendly	Average rating	1.9	1.7	3.5	3.5
	Range	1-4	1-3	2-5	3-4

Table 6 shows that characteristics in Sites 1 and 2 (small and mixed venue sites) more often rated at the lower, more positive end of the scale (between 1.0 and 2.5). However, Sites 3 and 4 (medium and large venue sites) rated mostly towards the middle of the scale (between 2.6 and 3.5, generally representing 'moderate') or towards the higher, less positive end of the scale (between 3.6 and 5).

3.3.2. Lighting

During each observation session, observers were asked to rate their overall impression of the lighting within the site on a five-point scale from very good to very bad. Lighting was an average of the whole site, very good (one) was given if the observer could clearly see the facial expressions of people in the site and very bad (five) was taken to mean that the site was not well lit and that observers struggled to see the site or people within it.

Lighting was rated as very good, good or average for all sites. No observers ever rated the level of lighting as bad or very bad in any observation session.

Table 7. Lighting: Observer rating summary by site

Lighting	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Very good or good	87.5% of the time	100% of the time	56% of the time	69% of the time
Average	12.5% of the time	-	44% of the time	31% of the time
Very bad or bad	-	-	-	-

> *"Street lighting is fine but underneath the verandas are darker, less lit."* – Site 3 (medium and large venue site).
>
> *"Lighting is good, but one dark pocket in parking space about half way down street."* – Site 1 (small venue site).

3.3.3. Cleanliness

During each observation session observers were asked to rate their overall impression of the cleanliness within the site on a five-point scale from very clean to very dirty. Cleanliness was defined as being very good (one) if there was no rubbish left on the ground and bins were not overflowing, and very bad (five) if rubbish was strewn all over the site and bins overflowing.

Sites 1 and 2 (small and mixed venue sites) were more likely to be rated clean or very clean. See Table 8.

Table 8. Cleanliness: Observer rating summary by site

Cleanliness	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Very clean or clean	44 % of the time	87.5% of the time	6% of the time	-
Moderate	31% of the time	12.5% of the time	37.5% of the time	37.5% of the time
Very dirty or dirty	25% of the time	-	56% of the time	62.5% of the time

"It's a bit filthy. A bit of empty cups and trash on the ground. People littering." – Site 4 (medium and large venue site).

"Well light (sic), clean and fairly well kept." – Site 2 (mixed venue site).

3.3.4. Upkeep

During each observation session observers were asked to rate their overall impression of the upkeep within the site on a five-point scale from very good to very rundown. Very good upkeep (one) was defined as there being no damage to buildings, the footpath or street furniture, and very rundown (five) was given if the buildings were determined to be badly maintained, have damage to windows, doors and wall and/or the presence of broken furniture or other debris.

Sites 1 and 2 (small and mixed venue sites) were more likely to be considered to be well maintained. See Table 9 for further detail.

Table 9. Upkeep: Observer rating summary by site

Upkeep	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Very good to good	81% of the time	94% of the time	12.5% of the time	12.5% of the time
Moderate	12.5% of the time	6% of the time	44% of the time	56% of the time
Very rundown to rundown	6% of the time	-	44% of the time	31% of the time

"Noticed tonight how run down most of the frontages are. Especially those that aren't open at night." – Site 3 (medium and large venue site).

3.3.5. Line of sight/visibility into venues

During each observation session, observers were asked to rate their overall impression of the lines of sight/visibility into venues within the site on a five-point scale from clear visibility to no visibility. Clear visibility (one) was the ability to see into the venue including being able to see patrons and furnishings,

and no visability (five) was described as not being able to see into venues at all, for example with windows being painted over.

Visibility into venues within sites was rated highest in Site 1 (small venue site).

Table 10. Line of sight/visibility into venues: Observer rating summary by site

Line of sight	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Clear visibility	56% of the time	6% of the time	6% of the time	19% of the time
Some visibility	44% of the time	81% of the time	50% of the time	6% of the time
Limited visibility	-	12.5% of the time	44% of the time	62.5% of the time
No visibility	-	-	-	12.5% of the time

"Lots going on, visibility into the sight (sic) is lacking, windows blacked out." – Site 3 (medium and large venue site).

3.3.6. Site attractiveness (front of venues)

During each observation session, observers were asked to rate their overall impression of the attractiveness of the front of venues within the site on a five-point scale from very attractive to very unattractive. Observers were asked "Looking at the front of venues; how attractive do you rate the site overall?" The scale ranged from very attractive (one) to very unattractive (5). Very attractive was defined as well maintained, well designed frontages, and very unattractive was defined as sites with venues that have dull, poorly designed or maintained frontages.

Sites 1 and 2 (small venue and mixed venue sites) rated highly in terms of front of venue attractiveness.

Table 11. Site attractiveness (front of venues): Observer rating summary by site

Site attractiveness	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Very or somewhat attractive	81% of the time	94% of the time	-	-
Neutral	19% of the time	-	25% of the time	50% of the time
Very or somewhat unattractive	-	6% of the time	75% of the time	50% of the time

"Open street. Feels safe. Attractiveness helps this." – Site 1 (small venue site).

3.3.7. Music and voice noise

Two types of noise were rated during the observations, music and voice, both of which were measured in terms of their perceived intrusiveness. Not intrusive (one) was defined as being able to hold a conversation at normal volume, and highly intrusive (five) was defined as the need to shout to be heard or having to strain to hear a partner talk.

Both music and voice noise were rated as most intrusive in Sites 3 and 4 (medium and large venue sites).

Table 12. Music noise: Observer rating summary by site

Music noise	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Highly or somewhat intrusive	-	6% of the time	81% of the time	100% of the time
Neutral	-	12.5% of the time	12.5% of the time	-
Not intrusive	100% of the time	81% of the time	6% of the time	-

It is worth noting that examination of the narrative section of the observation tool revealed that music noise from buskers in Site 3 (medium and large venue site) was identified as impacting on the mood of the site and comfort levels of observers, rather than noise emanating from venues.

> *"Music and voice noise levels were mild, enough to create atmosphere but not in a negative way. It made me want to go inside the venues."* – Site 2 (mixed venue site).

> *"Vibe was unfriendly, it was loud and there was lots of swearing and noise."* – Site 3 (medium and large venue site).

> *"Loud busker in area that would normally be a quiet area, where people could settle down. Instead they are being hyped up by busker."* – Site 3 (medium and large venue site).

> *"We were right near a busker which drew in a lot of rowdy drunken sing-alongs."* – Site 3 (medium and large venue site).

> *"There is a busker between [venue] and [venue]. His presence highly effects the mood of the general public. Most people seem to be in higher spirits when he is singing but it is more obvious how intoxicated they are."* – Site 3 (medium and large venue site).

> *"Most of the noise obstructions is from the busker playing his electric guitar."* – Site 3 (medium and large venue site).

However, in Site 1 (small venue site) the busker was attributed with improving the mood of the area.

> *"There is a busker just on the corner of Peel and Hindley and the music tends to make the area seem much friendlier and more approachable then I normally would."* – Site 1 (small venue site).

Voice noise followed a similar pattern to music noise with the hypothesis being that as music noise rose, people had to speak louder to be heard. Voice noise was considered by observers to be somewhat

or highly intrusive more often in Sites 3 and 4 (medium and large venue sites). Voice noise was never rated as highly intrusive in Sites 1 and 2 (small and mixed venue sites).

Table 13. Voice noise: Observer rating summary by site

Voice noise	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Highly or somewhat intrusive	6% of the time	-	69% of the time	81% of the time
Neutral	12.5% of the time	19% of the time	25% of the time	12.5% of the time
Not intrusive	81% of the time	81% of the time	6% of the time	6% of the time

> *"People are shouting at each other because of the loud music."* – Site 4 (medium and large venue site).

3.3.8. Number of people within the site

Observers were asked to rate the number or density of people within the site on a five-point rating scale from very low to very high. Very low (one) was defined as there being a low number of people in the site with lots of space to move around, and very high (five) was defined by high numbers of people in the site and limited ability to move around freely.

Density of people was perceived to be highest in Sites 3 and 4 (medium and large venue sites). This is consistent with the Site Venue Density formula[9] for each site, based on venue capacity and the length of the site (see Table 3).

Table 14. Number of people in the site: Observer rating summary by site

Number of people in the site (density)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Very low to low	100% of the time	94% of the time	19% of the time	12.5% of the time
Moderate	-	6% of the time	44% of the time	6% of the time
Very high to high	-	-	37.5% of the time	81% of the time

3.3.9. Crowding

Crowding was measured as a separate variable as it was felt by the researchers that crowding and density were not necessarily the same thing; it is possible for a site to have a high density of people, but not feel crowded. It was also believed that density would be a more objective measure of how many people were in the site, while crowding is a more subjective measure.

[9] Site venue density was assessed by the length of the street (by metre) and by the total capacity of venues (by person).

Observers were asked to rate their perception of the crowding of people in the site on a five-point scale from none (one) to very high (five). Observers were asked to consider the number of low-level contacts such as brushing past, unintended contact or where there is contact without intention to cause harm or act aggressively.

In this study the ratings of density and crowding followed a very similar pattern; lower in Sites 1 and 2 (small and mixed venue sites) and higher in Sites 3 and 4 (medium and large venue sites).

Table 15. Crowding: Observer rating summary by site

Crowding	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Very low to low	100% of the time	100% of the time	44% of the time	12.5% of the time
Moderate	-	-	25% of the time	19% of the time
Very high to high	-	-	31% of the time	69% of the time

"It's pretty crowded. Having to say excuse me every 5 steps. Pretty much shoulder to shoulder." – Site 4 (medium and large venue site).

3.3.10. Mood

As well as the physical characteristics of sites observers were asked to rate their perception of the mood of each site on a five-point scale from friendly (one) to unfriendly (five).

The mood of Sites 1 and 2 (small and mixed venue sites) were most frequently rated on the friendly end of the scale.

Table 16. Mood: Observer rating summary by site

Mood	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Friendly	81% of the time	81% of the time	6% of the time	-
Neutral	12.5% of the time	19% of the time	56% of the time	50% of the time
Unfriendly	6% of the time	-	37.5% of the time	50% of the time

"Fairly quiet space, no loud music, chilled out, mood seemed fairly positive." Site 1 (small venue site).

"Overall, the space did not feel very friendly." – Site 3 (medium and large venue site).

3.4. Behaviour of people within sites

The behaviour of people within the sites was measured through the rating of a number of negative characteristics: hostility, roughness and bumping, rowdiness and swearing, sexual activity and public

urination/vomiting. The perceived level of intoxication of people within the sites was also recorded. Counts of low level and high level aggressive incidents were also made.

Key findings of the behaviour of people within sites were:

- Hostility, rowdiness and swearing for both males and females was perceived to be higher in Sites 3 and 4 (medium and large venue sites) sites compared to Sites 1 and 2 (small and mixed venue sites).
- Male roughness and bumping was perceived to be higher in Sites 3 and 4 (medium and large venue sites). Roughness and bumping by females was perceived as moderate in Sites 3 and 4 (medium and large venue sites) and as low or none in Site 1 (small venue site).
- Perceived sexual activity was higher in Sites 3 and 4 (medium and large venue sites).
- Levels of urination and vomiting was observed to be similar across all sites.
- Clear differences were seen in results of levels of intoxication at the sites. Male and female intoxication was notably higher in Sites 3 and 4 (medium and large venue sites) compared to Sites 1 and 2 (small and mixed venue sites). Male intoxication was rated as high to very high 94 per cent of the time in both Sites 3 and 4 (medium and large venue sites) and was never rated as none or low in these sites. Female intoxication in Sites 3 and 4 (medium and large venue sites) was rated as high to very high 87.5 and 81 per cent of the time respectively in these sites. Female intoxication was rated high to very high in Sites 1 and 2 (small and mixed venue sites) 19 and 12.5 per of the time respectively.
- A higher number of low level aggressive incidents were observed in Sites 3 and 4 (medium and large venue sites) compared to Sites 1 and 2 (small and mixed venues site).
- A notably higher number of high level aggressive incidents were observed in Site 4 (medium and large venue site) than in any of the other sites.

Tables showing the percentage of times each behavioural factor was rated in a particular way have been included under the individual behaviour headings. Due to rounding of the percentages the total for some sites for some factors may be 0.5 per cent under or over 100 per cent.

3.4.1. Overview of behaviour of people within sites

The average rating for each variable in each site is represented in the following tables as a quick reference comparison. As with site characteristics, these averages have been included because they are representative of the differences in scores between sites. These observations were recorded in terms of male and female behaviours and are reported accordingly.

Table 17. Average ratings of male behaviour within sites by each site

Behaviour	Rating/range	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Hostility male 1 none – 5 very high	Average rating	2.4	1.8	3.1	3.2
	Range	1 – 4	1 - 3	2 - 4	2 - 5
Roughness and bumping male 1 none – 5 very high	Average rating	1.6	1.5	2.8	3.1
	Range	1 - 4	1 - 4	1 - 4	1 - 4
Rowdiness male 1 none – 5 very high	Average rating	2.2	1.9	3.6	3.7
	Range	1 - 4	1 - 4	3 - 5	3 - 4
Swearing male 1 none – 5 very high	Average rating	2.4	2.1	3.6	3.4
	Range	1 - 5	1 - 4	3 - 5	2 - 5
Intoxication male 1 none – 5 very high	Average rating	3.0	3.1	4.1	4.1
	Range	2 - 4	2 - 5	3 - 5	3 - 5

Table 18. Average ratings female behaviour within sites by each site

Behaviour	Rating/range	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Hostility female 1 none – 5 very high	Average rating	1.6	1.4	2.6	2.6
	Range	1 - 3	1 - 3	2 - 3	1 - 4
Roughness and bumping female 1 none – 5 very high	Average rating	1.3	1.3	1.7	2.3
	Range	1 - 2	1 - 3	1 - 3	1 - 3
Rowdiness female 1 none – 5 very high	Average rating	1.4	1.6	3.0	2.6
	Range	1 - 2	1 - 3	2 - 4	2 - 4
Swearing female 1 none – 5 very high	Average rating	2.2	1.9	3.4	3.1
	Range	1 - 4	1 - 4	2 - 5	2 - 5
Intoxication female 1 none – 5 very high	Average rating	2.8	2.7	4.1	3.9
	Range	2 - 4	1 - 4	3 - 5	2 - 5

Table 19. Average ratings behaviour of people within sites by site

Behaviour	Rating/range	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Sexual activity 1 none – 5 very high	Average rating	1.6	1.4	2.4	2.5
	Range	1 - 2	1 - 2	2 - 3	2 - 4
Public urination/vomiting 1 none – 5 very high	Average rating	1.8	1.0	2.1	1.5
	Range	1 - 3	1	1 - 5	1 - 3

Tables 17, 18 and 19 show that variables in Sites 1 and 2 (small and mixed venue sites) more often rated at the lower, more positive end of the scale (between 1.0 and 2.5). Sites 3 and 4 (medium and large venue sites) most frequently rated towards the middle of the scale (between 2.6 and 3.5, representing 'moderate').

3.4.2. Hostility

Observers were asked to rate the hostility of males and females (separately) in the site on a five-point scale from none (one) to very high (five). Hostility was defined as how unfriendly, tense and seemingly aggressive people appeared.

Male hostility was rated higher more frequently in Sites 3 and 4 (medium and large venue sites) and lower in Sites 1 and 2 (small and mixed venue sites).

Table 20. Male hostility: Observer rating summary by site

Hostility (male)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	56% of the time	75% of the time	12.5% of the time	19% of the time
Moderate	31% of the time	25% of the time	62.5% of the time	50% of the time
High	12.5% of the time	-	25% of the time	25% of the time
Very high	-	-	-	6% of the time

Female hostility was rated lower across all the sites. Female hostility was never rated very high for any of the sites, and was rated as high on one occasion only for Site 4 (medium and large venue site).

Table 21. Female hostility: Observer rating summary by site

Hostility (female)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	87.5% of the time	94% of the time	37.5% of the time	44% of the time
Moderate	12.5% of the time	6% of the time	62.5% of the time	50% of the time
High	-	-	-	6% of the time

3.4.3. Roughness and bumping

Observers were asked to rate the level of roughness and bumping among males and females (separately) in the site on a five-point scale from none (one) to very high (five). This was to include roughness and bumping that may be done 'in fun'.

Roughness and bumping showed similar trends to hostility across the sites. Males tended to show higher levels of roughness and bumping, and the levels were higher in Sites 3 and 4 (medium and large venue sites).

Table 22. Male roughness and bumping: Observer rating summary by site

Roughness and bumping (male)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	87.5% of the time	87.5% of the time	25% of the time	25% of the time
Moderate	6% of the time	6% of the time	56% of the time	31% of the time
High to very high	6% of the time	6% of the time	19% of the time	44% of the time

Table 23. Female roughness and bumping: Observer rating summary by site

Roughness and bumping (female)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	100% of the time	94% of the time	94% of the time	62.5% of the time
Moderate	-	6% of the time	6% of the time	37.5% of the time
High to very high	-	-	-	-

3.4.4. Rowdiness

Observers were asked to rate the rowdiness of males and females (separately) in the site on a five-point scale from none (one) to very high (five). Examples of rowdiness included yelling, shouting and loud cheering.

Observers' ratings of rowdiness showed some clear differences between the sites, with rowdiness higher in Sites 3 and 4 (medium and large venue sites).

Table 24. Male rowdiness: Observer rating summary by site

Rowdiness (male)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	69% of the time	81% of the time	-	-
Moderate	19% of the time	6% of the time	44% of the time	31% of the time
High to very high	12.5% of the time	12.5% of the time	56% of the time	69% of the time

Female rowdiness was also rated higher in Sites 3 and 4 (medium and large venue sites). Large behavioural differences were observed between men and women in Site 4 (medium and large venue sites), with male rowdiness rated high to very high 69 per cent of the time and female rowdiness only rated as high to very high six per cent of the time.

Table 25. Female rowdiness: Observer rating summary by site

Rowdiness (female)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	100% of the time	87.5% of the time	25% of the time	44% of the time
Moderate	-	12.5% of the time	50% of the time	50% of the time
High to very high	-	-	25% of the time	6% of the time

> *"Generally people were rowdy tonight. It's a bit warmer and much busier so that might have something to do with it."* – Site 4 (medium and large venue site).

3.4.5. Swearing

Observers were asked to rate the level of swearing for males and females (separately) in the site on a five-point scale from none (one) to very high (five). This was the amount that could be heard in conversation or shouted out.

The results for male swearing should be viewed with caution as this behaviour characteristic had a higher level of discrepancy between observer ratings than others. For this variable, observers recorded a difference of two or more points on the Likert scale on seven occasions.

Male swearing was rated high to very high more frequently in Sites 3 and 4 (medium and large venue sites).

Table 26. Male swearing: Observer rating summary by site

Swearing (male)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	69% of the time	75% of the time	-	12.5% of the time
Moderate	25% of the time	19% of the time	50% of the time	50% of the time
High to very high	6% of the time	6% of the time	50% of the time	37.5% of the time

Similarly, female swearing was rated high to very high more frequently in Sites 3 and 4 (medium and large venue sites).

Table 27. Female swearing: Observer rating summary by site

Swearing (female)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	81% of the time	94% of the time	12.5% of the time	19% of the time
Moderate	6% of the time	-	37.5% of the time	56% of the time
High to very high	12.5% of the time	6% of the time	50% of the time	25% of the time

3.4.6. Sexual activity

Observers were asked to rate the sexual activity, contact and competition for a partner in the site on a five-point scale from none (one) to very high (five). Examples of this included kissing, embracing and flirting.

Sexual activity was rated as moderate, at 44 per cent and 37.5 per cent of the time in Sites 3 and 4 respectively (medium and large venue sites), whereas it was rated as none to low 100 per cent of the time in Sites 1 and 2 (small and mixed venue sites).

Table 28. Sexual activity: Observer rating summary by site

Sexual activity	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	100% of the time	100% of the time	56% of the time	56% of the time
Moderate	-	-	44% of the time	37.5% of the time
High to very high	-	-	-	6% of the time

3.4.7. Public urination and/or vomiting

Observers were asked to rate the public urination and vomiting in the site on a five-point scale from none (one) to very high (five). This included seeing people urinate or vomit, as well as being able to smell evidence of it.

Public urination and vomiting was rated none to low the majority of the time across all sites. Site 3 (medium and large venue site) received the poorest rating, with this being the only site to receive a rating of high to very high (on two occasions).

Table 29. Public urination and/or vomiting: Observer rating summary by site

Public urination and/or vomiting	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	75% of the time	100% of the time	75% of the time	87.5% of the time
Moderate	25% of the time	-	12.5% of the time	12.5% of the time
High to very high	-	-	12.5% of the time	-

"Lots of vomiting people." – Site 3 (medium and large venue site).

3.4.8. Intoxication

Observers were asked to rate the level of male and female intoxication (separately) within the site on a five-point scale from none (one) to very high (five). Observers' ratings of the level of intoxication were based on the presence or absence of behaviour that suggests intoxication including: stumbling, swaying, difficulty walking or standing, lack of coordination, glassy eyes and lack of focus, excessively loud or overly exuberant, drowsy or sleepy, uninhibited.

Clear differences can be seen in the results for levels of intoxication ratings for Sites 1 and 2 (small and mixed venue sites); compared to Sites 3 and 4 (medium and large venue sites). Sites 3 and 4 (medium and large venue sites) never rated 'none to low' for male intoxication.

Table 30. Male intoxication: Observer rating summary by site

Intoxication (male)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	25% of the time	25% of the time	-	-
Moderate	50% of the time	44% of the time	6% of the time	6% of the time
High to very high	25% of the time	31% of the time	94% of the time	94% of the time

As with other variables, female intoxication showed similar trends across sites to male intoxication.

Table 31. Female intoxication: Observer rating summary by site

Intoxication (female)	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
None to low	44% of the time	31% of the time	-	6% of the time
Moderate	37.5% of the time	56% of the time	12.5% of the time	12.5% of the time
High to very high	19% of the time	12.5% of the time	87.5% of the time	81% of the time

"Not everyone was highly intoxicated but those who had clearly been drinking were in the majority and appeared to have done so to the extreme." – Site 3 (medium and large venue site).

"Lots of rowdy groups. Many drunk people." – Site 4 (medium and large venue site).

3.4.9. Low level and high level aggressive incidents

Low level aggression was defined as incidents where an intention to act aggressively was probably present at some point in the interaction. Examples of low level aggression include bumps, knocks, knocked handbags and arguments. Examples of high level aggression included someone bullying someone, a person being unwillingly touched or grabbed or fondled, someone challenging someone for a fight, being angry or threatening, people being involved in a heated argument, someone being slapped, punched or kicked.

Three counts of low level aggressive incidents were made; during the early observation period (first 15 minutes), during the late observation period (last 15 minutes) and the main part of the observation period (middle hour).

Two pairs of observer data for each of Sites 3 and 4 (medium and large venue sites) had considerable differences in the number of low level aggressive incidents recorded. For the purpose of this section of the report those four pairs of data were removed meaning total and average counts were calculated using eight pairs of observations (16 individual sets) for Sites 1 and 2 (small and mixed venue sites) and six pairs (12 individual sets) of data for Sites 3 and 4 (medium and large venue sites). The total average number of low level aggressive incidents for each site was calculated using the early, late and remainder counts. The average number of incidents per session, total number across all sessions and range of incidents per session across all sessions were calculated using the average of the observers' counts for each session.

The count of high level aggressive incidents was taken throughout the whole one-and-a-half-hour observation period by each observer in each observation session. High level aggression was defined as pushing, shoving, hitting, and fighting where an intention to act aggressively was definitely present during the contact. Counts between observer pairs were quite consistent and no data needed to be removed due to a high level of discrepancy between observer pair counts. As with low level aggression; averages and totals were calculated using the average of observers' counts for each session.

Table 32. Low level aggressive incidents

Low level aggressive incidents	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Average number of low level aggressive incidents per observation session	1.6	1.4	3.3	3.4
Total number of low level aggressive incidents across all observation sessions	13	11.5	19.5	20.5
Range of low level aggressive incidents over whole observation period	0-4	0-4	1-7.5	1-6.5

Table 33. High level aggressive incidents

High level aggressive incidents	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venue	Site 4 Medium and large venue
Average number of high level aggressive incidents per observation session	0.44	0.56	0.56	1.5
Total number of high level aggressive incidents across all observation sessions	3.5	4.5	4.5	12
Range of high level aggressive incidents over whole observation period	0-1.5	0-1.5	0-1.5	0 - 6

High level aggressive incidents were referred to in the narrative section of the observation tool by one or both of the observers on 13 of the 16 observation sessions. Two high level incidents are commented on for Site 1 (small venue site), three for Site 2 (mixed venue site), two for Site 3 (medium and large venue site) and six for Site 4 (medium and large venue site).

Seven of these high level incidents are noted in a late observation session (1am to 2:30am), and six are noted in the early session (11:15am to 12:45am). Police presence at an incident is noted on nine occasions, with observers themselves calling police on two of those occasions.

3.4.10. Movement of people between sites

The movement of people between sites was not captured in the observational tool. The observer's focus group noted however that there did appear to be some movement between Sites 1 and 2 (small and mixed venue sites) and Sites 3 and 4 (medium and large venue sites).

Anecdotally, observers stated that some movement of younger people was noted from the function venue located in Site 2 (mixed venue site) towards Hindley Street, where Sites 3 and 4 are located, and this generally took place during the early observation session. Some movement from Site 1 (small venue site) towards Hindley Street was also observed during the earlier sessions. Observers discussed the difficulty in determining the purpose of people's movement towards Hindley Street because their

intent was not clear. Hindley Street provides access to larger venues, taxi ranks and fast food options. It was also noted that people may choose to move towards Hindley Street due to the higher pedestrian numbers, which may make them feel safer.

The relative isolation of Site 2 (mixed venue site) from other sites led observers to assume that people visiting these venues were intending to visit a particular venue on that street. This was in contrast to Site 1 (small venue site), which received through traffic from Hindley Street, where there was a mix of what appeared to be people who intended to visit a particular venue and those who were passing by and decided to visit the venue. Small venues in Site 1 (small venue site) do not charge an entrance fee and so opportunistic patronage is more common. Observers stated that later in the night (during the late observation session) some younger people were moving through Site 1 (small venue site) and would try to visit venues, however they were generally turned away because the venues were closing.

3.5. Comparison between early and late observation sessions

Comparisons were made between the ratings in early and late observations for a sample of site characteristics and behaviours. A comparison of the early and late ratings of perceived mood of the space and perceptions of safety were also made. Two observation sessions took place each night, the early observation was from 11:15pm to 12:45am and the late observation from 1:00am to 2:30am.

Table 34: Comparison between average ratings for early and late observation sessions

Variable	Rating/range	Site 1 Small venues		Site 2 Mixed venues		Site 3 Medium and large venues		Site 4 Medium and large venues	
Session		**Early**	**Late**	**Early**	**Late**	**Early**	**Late**	**Early**	**Late**
Cleanliness	Average rating	**2.4**	**3.1**	1.8	2.0	3.6	3.8	3.5	3.8
	Range	*1 - 4*	*2 - 4*	*1 - 2*	*1 - 3*	*2 - 5*	*3 - 5*	*4 - 4*	*3 - 4*
Lighting	Average rating	**1.4**	**2.0**	1.6	1.9	2.4	2.0	1.9	2.1
	Range	*1 - 2*	*1 - 3*	*1 - 2*	*1 - 2*	*1 - 3*	*1- 3*	*1 - 3*	*1 - 3*
Hostility male	Average rating	2.4	2.4	**2.1**	**1.5**	3.1	3.1	3.1	3.3
	Range	*1 - 4*	*1 - 4*	*1 - 3*	*1 - 3*	*2 - 4*	*2 - 4*	*2 - 5*	*2 - 4*
Rowdiness male	Average rating	2.0	2.4	2.1	1.8	3.8	3.5	3.6	3.8
	Range	*1 - 4*	*1 - 4*	*1 - 4*	*1 - 3*	*3 - 5*	*3 - 4*	*3 - 4*	*3 - 4*
Intoxication male	Average rating	**2.8**	**3.3**	3.0	3.3	4.1	4.0	4.0	4.3
	Range	*2 - 4*	*2 - 4*	*2 - 5*	*2 - 4*	*4 - 5*	*3 - 5*	*3 - 5*	*4 - 5*
Mood	Average rating	**1.6**	**2.1**	1.6	1.9	**3.8**	**3.3**	3.5	3.5
	Range	*1 - 3*	*1 - 4*	*1 - 3*	*1 - 3*	*2 - 5*	*3 - 4*	*3 - 4*	*3 - 4*
Perception of Safety	Average rating	2.8	3.0	2.1	2.5	**4.6**	**5.4**	5.0	5.2
	Range	*2 - 4*	*2 - 5*	*1 - 4*	*1 - 4*	*3 - 7*	*4 - 6*	*5*	*5 - 6*
Low level aggressive incidents	Average rating	1.5	1.8	1.9	1.0	3.4	3.0	2.5	4.3
	Range	*0 - 5*	*0 - 4*	*0 - 6*	*0 - 5*	*0 - 7*	*0 - 8*	*0 - 6*	*0 - 8*

Note: Differences of 0.5 or greater in the average early and late ratings are in **bold**.

Differences in the early and late ratings can most frequently be seen in the ratings for Site 1 (small venue site) with a difference noted for the factors: cleanliness, lighting, male intoxication and mood. In all of these cases the late average ratings were less positive than the early average ratings. The average perception of safety rating in Site 3 (medium and large venue site) was notably worse in the late observation session compared to the other sites which had quite similar average ratings for the early and late sessions. A difference was seen in male hostility in Site 2 (mixed venue site) and in mood in Site 3 (medium and large venue site). Interestingly, in both these cases the average ratings were less positive in the early session.

3.6. Perceptions of safety

The primary measure of perceptions of safety was the observation tool question "How safe do you think you would feel here if you were alone at night?" Unlike the other questions, this question was rated on a seven-point Likert scale from very safe (one) to very unsafe (seven). This was done so that the data collected was comparable to data from the Adelaide City Council's annual late night safety audits.

As this variable was rated on a seven rather than five-point scale, an inter-observer discrepancy of two or less rating points on the scale was considered acceptable. Even with this greater allowance of discrepancy in ratings, there was a discrepancy of greater than two points on the scale in eight (25 per cent) of the 32 pairs of observation data. This is the highest level of discrepancy of all the questions and is most likely due to the subjective nature of this variable. Asking observers how safe they thought they would feel alone in the site at night brings into play many other variables specific to the individual that will impact on their rating such as their previous level of exposure to entertainment areas late at night and previous experiences (positive or negative) in such areas.

It was hypothesised that the observer pairs that gave different ratings for the 'how safe would you feel' question would involve one male and one female. When the data was more closely examined however, it was found that in six of the eight cases where the observer pairs gave notably different ratings, both observers were female.

Further examination of the data revealed that four of the eight cases where there was a discrepancy of more than two points on the scale involved the same observer pair (the same two female individuals observing together). One individual in this pair gave a rating higher than the other individual on all occasions. A third observer was involved in the remaining four cases of high observer discrepancy, and in three of the four cases gave a rating higher than her observer partner.

No consistent differences were found between male and female ratings for perceptions of safety. When male and female observers observed together their ratings were highly consistent; rating within two points of each other on 14 out of 16 occasions.

It was decided that simply taking the average of the two inconsistent ratings as others have (see for example Grimshaw, 2010) would render a large set of data misleading or meaningless. Therefore, the pairs of data that had an unacceptably large discrepancy between observer ratings were eliminated from the data set for all data analysis that involved this question. This means that the following analysis is based on 24 rather than 32 pairs of observations, and the pairs are not equally divided between the four sites.

Table 35. Distribution of feelings of safety ratings and average score

Feelings of safety rating	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues
Number of times rated safer (1-3)	6	11	2	0
Number of times rated neutral (4)	1	3	3	0
Number of times rated less safe (5-7)	1	0	11	10
Number of observation sessions included in analysis	8	14	16	10
Average safety score	2.9	2.3	5	5.1

Sites 1 and 2 (small and mixed venue sites) were rated at the safer end of the scale most frequently while Sites 3 and 4 (medium and large venue sites) were more frequently rated at the less safe end of the scale.

3.6.1. Site characteristics influencing perceptions of safety

During each observation session observers were asked to identify the site characteristic that they felt most influenced their feelings of safety in the site. The physical factors reported as most influencing perceptions of safety across all the sites on all observation occasions as per Table 36 were; site attractiveness/appeal (listed on 12 occasions), visibility into sites (ten occasions) and cleanliness (ten occasions).

Table 36. Number of times each site characteristic was chosen as most influencing perceptions of safety

Site characteristic	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues	Total
Lighting	2	2	0	0	4
Cleanliness	1	2	4	3	10
Upkeep	2	3	1	1	7
Lines of sight into venues	2	1	3	4	10
Site attractiveness	1	6	5	0	12
Music noise	1	1	2	2	6
Voice noise	1	2	2	1	6
Other	0	0	3	2	5

Site attractiveness was most frequently reported as the factor most influencing observer's perceptions of safety in Site 2 (mixed venue site) and Site 3 (medium and large venue site). It would appear that the attractiveness of the site had a positive impact on feelings of safety in Site 2 (mixed venue site), where the site was rated as somewhat or very attractive on 94 per cent of observation occasions (Table 11) and had an average perception of safety rating of 2.3 (on a scale of one to seven, where one is very safe and seven is very unsafe). However, in Site 3 (medium and large venue site) the level of attractiveness of the site appears to have had a negative impact, as its attractiveness was rated as somewhat or very unattractive on 75 per cent of occasions (Table 11) and had an average perception of safety rating of five (Table 35).

The visibility, or lines of sight, into venues had the greatest impact on observers' perceptions of safety in Sites 3 and 4 (medium and large venue sites), where visibility into venues was rated as being more limited. Site 3 (medium and large venue site), which received an average perception of safety rating of five, was reported as having limited visibility into venues on 44 per cent of observation occasions (as per Table 10). Site 4 (medium and large venue site), which received the most unsafe perception of safety rating of the sites (5.1) was reported as having limited visibility on 62.5 per cent of observation occasions and no visibility on a further 12.5 per cent of occasions (see Table 10).

Cleanliness was selected as influencing perceptions of safety across all the sites, but was listed most often in Sites 3 and 4 (medium and large venue sites). For example, Site 3 (medium and large venue site) was rated as moderately clean 38 per cent of the time and as dirty or very dirty on 56 per cent of observation occasions (see Table 8) and this was reflected in perceptions of safety for the site which received a less safe average rating of five (where one is very safe and seven is very unsafe, see Table 35). Similarly, Site 4 (medium and large venue site) was rated as moderately clean 37.5 per cent of the time and as dirty or very dirty the remaining 62 per cent of occasions (see Table 8), and received an average perceptions of safety rating of 5.1. Site 1 (small venue site) was rated as clean or very clean 44 per cent of the time (see Table 8) and had a perception of safety rating of 2.9 (Table 35). Site 2 (mixed venue site) was considered clean or very clean 87.5 per cent of the time and had the best perception of safety rating of 2.3. From looking at this data, it would suggest that the lack of cleanliness of Sites 3 and 4 (medium and large venue sites) negatively impacted on observers' perceptions of safety in those sites as they also recorded lower feelings of safety ratings compared to the two other sites.

3.6.2. Social behavioural factors influencing perceptions of safety

As with physical site factors, observers were asked to identify from a list the social behavioural factor that they felt most influenced their feelings of safety in each site. As can be seen in Table 37, the social behavioural factors reported as most influencing perceptions of safety were: mood of the space (listed on 13 occasions), rowdiness (nine occasions) and level of intoxication (eight occasions).

Table 37. Number of times each social behavioural factor was chosen as most influencing perceptions of safety

Social behavioural factor	Site 1 Small venues	Site 2 Mixed venues	Site 3 Medium and large venues	Site 4 Medium and large venues	Total
Hostility	0	0	1	0	1
Roughness and bumping	0	0	1	3	4
Rowdiness	3	1	3	2	9
Swearing	1	0	0	0	1
Level of intoxication	1	2	3	2	8
Mood	1	8	4	0	13

Although it was the factor listed most often, mood was not listed as an influencing factor in Site 4 (medium and large venue site), with less subtle factors such as roughness and bumping having more influence. Mood was listed as the factor most influencing perceptions of safety in Site 2 (mixed venue site) on eight occasions. The mood of Site 2 (mixed venue site) was rated positively (friendly) on 81 per cent of occasions (as per Table 16) and also received the most positive perception of safety rating of 2.3 (see Table 35). The mood of Site 3 (medium and large venue site) was never rated as 'friendly' but was rated as 'unfriendly' on six occasions (37.5 per cent) (as per Table 16). Site 3 (medium and large venue site) also rated as having a considerably less positive average perception of safety rating of five (as per Table 35).

Level of intoxication and rowdiness were listed as influencing factors across all the sites. Both of these variables were rated notably higher in Sites 3 and 4 (medium and large venue sites) than Sites 1 and 2 (small and mixed venue sites). Male rowdiness in particular was rated high to very high considerably more often in Sites 3 and 4 (medium and large venue sites); on 56 per cent and 69 per cent of occasions respectively (as per Table 24). In Sites 1 and 2 (small and mixed venue sites) male rowdiness was rated high on 12.5 per cent of occasions each. As outlined in Table 25, female rowdiness too was rated higher more frequently in Sites 3 and 4 (medium and large venue sites). Female rowdiness in Site 3 (medium and large venue site) was rated moderate or higher 75 per cent of the time and in Site 4 (medium and large venue site) it was rated moderate or higher 56 per cent of the time. By comparison, female rowdiness was only ever rated as low in Site 1 (small venue site) and as moderate or higher on 12.5 per cent of occasions in Site 2 (mixed venue site) (see Table 25).

Male intoxication too was rated higher in Sites 3 and 4 (medium and large venue sites) than Sites 1 and 2 (small and mixed venue sites). As per Table 30, in Sites 3 and 4 (medium and large venue sites) male intoxication was rated as high to very high on 94 per cent of occasions. By comparison, this rating was given only 25 per cent of the time for Site 1 and 2 (small and mixed venue sites). Similarly, female intoxication (as per Table 31) was rated as high to very high 87.5 per cent of the time and 81 per cent of the time for Sites 3 and 4 (medium and large venue sites) but only 19 per cent of the time and 12.5 per cent of the time for Site 1 and 2 (small and mixed venue sites).

These results indicate that when perceived levels of intoxication and rowdiness are higher, people's perceptions of safety are lower (when higher scores for intoxication and rowdiness are given, lower feelings of safety scores are recorded).

"The intoxication really effects the mood of the space." – Site 3 (medium and large venue site).

3.6.3. Correlations between perceptions of safety and physical and social behavioural variables

Correlations (Pearson's *r*) were run between observers' rating for perceptions of safety (responses to the question "How safe do you think you would feel here if you were alone at night?") and several physical and social behavioural factors. The Pearson's *r* correlation coefficient (expressed as *r* =) indicates the level of linear relationship between two variables where *r* = 1 signifies a total positive correlation (as one variable increases, the other variable increases in exactly the same way) and *r* = -1 signifies a total negative relationship (as one variable increase, the other decreases in exactly the same way).

In addition to the Pearson's *r* correlations between perceptions of safety and site and behaviour factors, Cronbach's alpha correlations were also run between site characteristics to determine how related the individual characteristics are to each other. A close correlation between individual characteristics is considered to be a measure of scale reliability.

For this analysis, the pairs of data with unacceptably high levels of discrepancy between observer pair scores were removed. It should be noted that because of the very small sample size, these results are indicative only but are all significant at *p* = 0.01 level.[10]

As the perceptions of safety question was rated on a seven-point scale (so it could be compared to the Adelaide City Council's annual safety audit data) and all other variables were rated on a five-point scale, the remaining data (48 individual sets of data) were re-rated to reflect a five-point rating scale for feelings of safety. In adjusting the ratings, the assumption has been made that a rating of two and three were roughly equivalent and the same assumption was made about a rating of five and six. As only the ratings of one (very safe), four (neutral) and seven (very unsafe) were labelled on the Likert scale with two, three, five and six being without a label, it was felt this was a justified assumption. Table 38 indicates how the scale was reconfigured to represent a five-point scale.

Table 38. Reconfigured seven-point scale to five-point scale

Original scale	1 Very safe	2	3	4 Neutral	5	6	7 Very unsafe
Reconfigured scale	1 Very safe	2		3 Neutral	4		5 Very unsafe

[10] In statistical terms, the *p* value is the calculated probability to minimise uncertainty. A *p* value of 0.01 means a one per cent probability that the result is due to random chance. There's a 99 per cent of the data agreeing with the hypothesis. At *p* = 0.1 there is a one in ten chance of false positive result.

Table 39. Pearson's *r* correlations with perceptions of safety

Site or behavioural factor	Pearson's r coefficient
Mood	0.83
Combined site upkeep, attractiveness and cleanliness (Cronbach's alpha = 0.88)	0.80
Density of people in the site	0.77
Site attractiveness	0.76
Site upkeep	0.72
Site cleanliness	0.72
Crowding	0.72
Music noise	0.72
Male rowdiness	0.68
Voice noise	0.66
Intoxication	0.52

The strongest relationship was found between observers' rating of mood of the site and perceptions of safety with a correlation of $r = .83$ (see Table 39). Sites 1 and 2 (small and mixed venue sites) rated on the friendly end of the five-point scale (average of 1.9 and 1.7 respectively, see Table 6), while Sites 3 and 4 (medium and large venue sites) rated closer to the unfriendly end of the scale with a rating of 3.5 for both sites. As already noted, Sites 1 and 2 (small and mixed venue sites) also rated on the safer end of the perceptions of safety scale (Table 35) than Sites 3 and 4 (medium and large venue sites), suggesting that as the mood of a site is perceived to be less friendly, observers perceived the area to be less safe. Again, it is not possible to attribute causality and it is possible there is interplay with other variables which impact on both feelings of safety and mood, both of which are subjective, in a similar way.

A relationship was found between observers' perceptions of safety and average density of people in the site ($r = 0.77$). Sites 3 and 4 (medium and large venue sites) were rated as having a greater density of people; average total density of people for Site 3 (medium and large venue site) is 3.0 and Site 4 (medium and large venue site) is 3.8 (on a rating scale of one to five, where one is very safe and five is very unsafe). This is compared to an average density rating of 1.2 for both Site 1 (small venue site) and Site 2 (mixed venue site) (see Table 6). Sites 3 and 4 (medium and large venue sites) had lower perceptions of safety than Sites 1 and 2 (small and mixed venue sites) (see Table 35). This would suggest a negative relationship between perceptions of safety and the number of people within the site, with perception of safety decreasing as density of people increases. However, it is not possible to attribute causality. The Pearson's *r* coefficient is not expressed as a negative number because the rating scale was designed so that a higher number represented lower feelings of safety.

The correlation analysis showed relationships between observers' perceptions of safety and site upkeep ($r = 0.72$) and site cleanliness ($r = 0.72$). This is consistent with observers' self-reporting of factors influencing their feelings of safety where upkeep was listed as an influencing factor on seven occasions and site cleanliness on ten occasions (as per Table 36). Observers' ratings showed that Sites

1 and 2 which had lower (more positive) ratings for site upkeep and cleanliness (see Table 6), also received lower (more positive) perceptions of safety scores (Table 35). These results combined suggest that as the upkeep and cleanliness of a site increased, observers felt safer.

A correlation was found between observers' perceptions of safety and perception of site attractiveness (r = 0.76). This is reflected in the average scores for the sites where Site 1 (small venue site) and Site 2 (mixed venue site) were rated at the more attractive end of the scale (1.9 for both sites, see Table 6) and also rated towards the safer end of the perceptions of safety scale (2.9 and 2.3 respectively, as per Table 35).

There was found to be a relationship between the variables of site cleanliness, site upkeep and site attractiveness (Cronbach's alpha coefficient of 0.88). A stronger correlation was found between these combined variables and perceptions of safety (r = 0.80) than any of those variables on their own.

A correlation between perceptions of safety and average crowding (where the early and late ratings of crowding were averaged) was also found (r = 0.72).

A relationship of r = 0.66 was found between voice noise and perceptions of safety and a stronger relationship was found between music noise and feelings of safety (r = 0.72). Observers rated their perceptions of safety as lower in Sites 3 and 4 (medium and large venue sites) where the level of music noise was perceived to be more intrusive (as per Table 6).

> *"People are shouting at each other because of the loud music."* – Site 4 (medium and large venue site).

None of the social behavioural variables showed a correlation of any strength with perceptions of safety. A correlation was found between feelings of safety and male rowdiness (r = .68) which lends some support to observer's self-reporting that this variable influenced their perception of safety (as per Table 37). Surprisingly however, a low correlation of r = .52 was found between feelings of safety and both male and female intoxication.

4. Discussion

This study aimed to investigate three questions:

- How do perceptions of safety in an area populated predominantly with smaller licensed venues differ from a location populated predominantly with larger licensed venues?
- Does the behaviour of patrons outside small licensed venues differ from that of patrons of larger licensed premises?
- What if anything, can the difference between perceptions of safety and patron behaviour around small licensed venues compared to large licensed venues tell us about managing the public realm to improve perceptions of public safety?

The results of this study in relation to these questions are explored in this section.

4.1. How do perceptions of safety in an area populated predominantly with smaller licensed venues differ from a location populated predominantly with larger licensed venues?

The two sites that were consistently rated more positively on physical site and social behavioural variables and were rated on the safer end of the scale for perceptions of safety had a majority or even mix of venues with a capacity of up to 120 people (Sites 1 and 2). Site 1 had 100 per cent of venues (six) with capacity up to 120 people, and these venues ranged from 53 to 100 people. This gave Site 1 (small venue site) the combined capacity of 481 people. Site 2 had three sites out of six that had a capacity greater than 120 people. The venues ranged from three small bars with capacity for 45 to 104 people, two medium venues with capacity for 182 to 189 people and one large venue with capacity for 430 people. This gave Site 2 (mixed venue site) a combined capacity of 1,050 people. Site 3 had four out of six venues with a capacity over 120 people. This consisted of two small venues of 100 to 112 people, three medium venues with capacity for 229 to 300 people and one large venue with capacity for 822 people. This gave Site 3 (medium and large venue site) a combined capacity of 1,936 people. All venues in Site 4 had a capacity greater than 120 people. This consisted of three medium venues with capacity for between 250 to 362 people and three large venues with capacity for between 458 and 928 people. The combined capacity of Site 4 (medium and large venue site) is 3,141 people.

Thus, it can be seen that the combined capacity of licensed venues within the sites is notably different. For example, in Site 3 (medium and large venue site) one venue had a capacity of over 800 people and in Site 4 (medium and large venue site) one venue had a capacity of over 900 people. These capacity differences, which increases the numbers of people, the amount of alcohol consumed and number of people within an area (density), is a significant factor in all the findings in this study.

In their analysis of licensed venue risk factors for the Victorian Department of Justice, the Allen Consulting Group (2009) note a positive relationship between venue capacity and offences on or near licensed premises. In particular, the report noted that venues with a capacity of greater than 400 patrons are associated with more offences. One venue in Site 2 (mixed venue site), one in Site 3 (medium and large venue site) and three in Site 4 (medium and large venue site) met this criterion.

Sites with higher combined venue capacity are likely to attract more people, which in turn are likely to result in increased noise and litter. The results of this study support this hypothesis, with the two sites with the highest total venue capacity rating notably worse than the other two sites in terms of cleanliness, upkeep, music and voice noise. The results of this study also suggest that the combined cleanliness, upkeep and appearance of venues in a site could exert greater influence over perceptions of safety in an area than any of those variables on their own. In Adelaide, the larger venues are located in close proximity to takeaway outlets, which exacerbates the problem. As can be seen from the map below; there are 18 outlets offering takeaway food within 100m of observation Sites 1, 3 and 4. Seven of those takeaway outlets operate after 2am on a Saturday night/Sunday morning with the other 11 outlets closing at various times prior to 2am.[11] There are no takeaway outlets open on Saturday nights within 100m of Site 3 (medium and large venue site).

[11] Information taken from the 2014 Adelaide City Council Land Use Survey and on-site survey.

Figure 2. Takeaway outlets within 100m of observation sites

The Adelaide City Council has significant anecdotal evidence to indicate litter in the late night entertainment area is more problematic around takeaway outlets. All areas of the late night entertainment area are cleaned during the day by Council. However, licensees have responsibility as detailed in their liquor licence and where applicable, their outdoor dining permit, to keep their outside areas clean during hours of operation. Congregation of people outside takeaway venues can lead to congestion and crowding issues on the footpath.

'Broken windows theory' (Wilson & Kelling, 1982 cited in Homel, 1998) suggests that environmental factors such as litter and poor upkeep of an area can lead to both decreased perceptions of safety and increased low level anti-social behaviour and crime. Several studies lend support to this theory (see for example Graycar, 1998; Begall, Kiewiet, Sapulete & Veldhuis, 2006; and Hinkle, 2009). A related theory known as the 'incivilities thesis' (Roberts & Indermaur, 2012, p.64) also suggests that 'incivilities' such as litter and poor upkeep of an area can have a negative impact on people's perceptions of safety and fear of crime. LaGrange, Ferraro and Supancic (1992) found significant relationships between social and physical incivility and perceptions of risk and fear, and Wood et al. (2008) found in their study that people living in well maintained areas had more positive perceptions of safety.

Observer ratings did however show that the music and voice noise was perceived to be more intrusive in the sites that received less safe perceptions of safety ratings: Sites 3 and 4 (medium and large venue sites). Correlations run also indicated a relationship between music and voice noise and perceptions of safety which is consistent with other studies reporting noise as a risk factor for alcohol-related problems within venues (Hughes et al., 2011; Green & Plant 2007a; Quigley, Leonard & Collins, 2003). It is important to note however, that the open narrative sections of the observation tool indicated that music noise from buskers rather than venues was viewed negatively, particularly in Site 3 (medium and large venue site). There may be a place for Council to utilise its role as regulator to manage busking late at night which supports a more positive feeling in the public realm.

The results of this study cannot confirm that diversity in the scale (capacities) of licensed venues impacts on perceptions of safety. What this study can suggest however is that in areas where the spread of venue capacities lean towards more venues with greater capacities, as can be seen in Sites 3 and 4 (medium and large venue sites) perceptions of safety are reduced. Also, where areas have high proportions of small venues, that perceptions of safety are increased. However, it is noted that in this study it did not appear that the one or two small venues in sites with predominantly medium and large capacity venues exerted any moderating influence on the behaviour of people within those sites. While out of scope for this study, observers noted that the small venues located within groups of larger venues did not attract as much patronage as small venues located in small venue clusters and mixed capacity areas. It would appear that small venues may have a moderating effect in terms of attracting a greater diversity in patrons and patron behaviour when the site is made up of predominantly small to medium capacity venues. In the context of the broader environment, the two small venue sites also had smaller capacities and density overall. It is difficult to attribute all the increased perceptions of safety findings to the small bars only without considering how capacities (fewer people and venue density overall in the areas) effect the findings, in addition to the 'small bar factor'.

An aspect of venue characteristics not investigated in this study, but worthy of consideration is the impact of different types of venues on perceptions of safety in a site. Venues within sites observed for this study can broadly be categorised as either a; lounge bar/wine bar, restaurant, dance club/nightclub, hotel/pub or adult content venue. It is notable that in the two sites with the safest perception of safety ratings, Sites 1 and 2 (small and mixed venue sites) there were no dance/nightclubs, hotel/pubs or adult content venues. This is consistent with literature suggesting a relationship between licensed venue type and alcohol-related problems (see Briscoe & Donnelly, 2003; Green & Plant, 2007a; Stockwell et al., 1992, cited in National Drug Research Institute 2007).

4.2. Does the behaviour of patrons outside small licensed venues differ from that of patrons outside larger licensed premises?

The results of this observational study do indicate a difference in the age and behaviour of people in sites with high capacity venues compared to sites with a larger proportion of small venues. It is not possible from this study to state with certainty whether the people observed were patrons of small or large capacity venues, only that they were in the public realm near venues with either predominantly large or predominantly small capacities.

Hostility, roughness and bumping, rowdiness, swearing and sexual activity were all rated higher in Sites 3 and 4 (medium and large venue sites) compared to Sites 1 and 2 (small or mixed venues).

The one variable where this was not the case was public urination and vomiting where Site 1 (small venue site) had a higher average rating than both Site 2 (mixed venue site) and Site 4 (medium and large venue site). As noted previously, it is hypothesised that Site 1 (small venue site) may have experienced some 'spill over' of behaviour from Hindley Street, where Sites 3 and 4 are located, though this cannot be confirmed.

There was also a difference in the reported levels of intoxication of people in the sites when comparing those with larger capacity venues to those with small and mixed venues. The levels of intoxication in sites with more small venues were very similar, with an average rating (on a scale of one to five, where one represents none and five represents very high) of 3.0 for males and 2.8 for females in Site 1 (small venue site) and 3.1 for males and 2.7 for females in Site 2 (mixed venue site). The average rated level of intoxication was also very similar between the two sites with larger capacity venues: 4.1 for both males and females in Site 3 (medium and large venue site) and 4.1 for males and 3.9 for females in Site 4 (medium and large venue site).

Average counts of low level aggressive incidents were also higher in sites with a greater proportion of medium and large venues, and these sites also had the highest number of low level aggressive incidents in one observation session.

Graham et al. (2006) found in their study that patron age of less than 25 was a significant predictor of frequency of aggression and several other studies have shown younger people (particularly males) to be at greater risk of being involved in alcohol-related aggression and violence (Doherty & Roche, 2003; National Drug Law Enforcement Research Fund, 2013; Quigley, Leonard & Collins, 2003). The difference in behaviour observed in this study may have been related to the observed differences in ages of people within the sites. Sites 3 and 4 (medium and large venue sites) had very similar results in terms of spread of people across age groups. In these sites more than half of people were in the 18 to 25 age group, compared to Sites 1 and 2 (small and mixed venue sites) where around 33 per cent of people were estimated to be in the 18 to 25 age group.

4.3. What if anything, can the difference between perceptions of safety and patron behaviour around small licensed venues compared to large licensed venues tell us about managing the public realm to improve perceptions of public safety?

Correlations conducted on the data from this study indicate that the physical aspects of the public realm near licensed venues have a stronger relationship with perceptions of safety than the behaviour of people in the site.

External factors such as location of rubbish bins and amenities, location and management of public transport hubs, Closed Circuit Television (CCTV) and lighting have previously been identified as factors influencing alcohol-related problems (Australian Institute of Criminology, 2009; Doherty & Roche, 2003). In the context of this study, Adelaide has six managed taxi ranks, three of which are in walking distance of all the sites observed. Two of the four sites observed have CCTV coverage which is monitored by police 24 hours a day, seven days a week.

This study found the general appearance and upkeep of the public realm outside licensed venues may also impact on how safe people feel in the space. Those sites that had higher ratings in terms of cleanliness, upkeep and attractiveness also had more positive feelings of safety ratings.

The attractiveness, cleanliness and upkeep of the site and venues within the site all correlated more strongly with perceptions of safety than behavioural factors such as rowdiness, hostility and intoxication. The nature of an observational study means that conclusions about causality cannot be drawn from the results. However, it is not unreasonable to assume that the attractiveness and upkeep of an area, which is relatively consistent at least in the short term, exerts influence on how safe people feel. As previously discussed, these findings are consistent with other research based on ‘broken windows theory’ (Wilson & Kelling, 1982 cited in Homel 1998) and the ‘incivilities thesis’ (Roberts & Indermaur, 2012).

The importance of attractiveness and cleanliness is particularly useful information for Local Government policymakers. Ultimately local governments have limited direct control over the behaviour of licensed venue patrons either within venues or out in the public realm, which is influenced by numerous factors. Local governments can have a direct influence on the physical appearance of the public realm near licensed venues and are responsible for the installation of bins, rubbish collection and general street cleansing programs. In Hindley Street, the Adelaide City Council

sweeps the street in the early morning on a daily basis and bins are emptied in the morning and afternoon every day.

Councils also have the opportunity to exert some influence over the attractiveness and upkeep of an area through street improvement programs, planting and ensuring that the external appearance of council owned/managed buildings are maintained to a high standard. They may also have the ability to encourage private building and venue owners to maintain their buildings to a high standard through incentive schemes and grants. In Adelaide for example, the Rundle Mall Act requires the upkeep of all buildings in the vicinity of Rundle Mall (the main pedestrianised shopping area) to be maintained to a high standard by building owners.

Density of people in the site and crowding also had a stronger relationship with perceptions of safety than the behaviour of people in the site. Each of the sites in this study had roughly the same number of venues, what differed markedly was the capacity of venues and the overall site capacity. The site with the highest rated density and crowding (Site 4) was also the site with the highest capacity venues and the highest overall site capacity (3,141 people). This is also the site that had the least positive perceptions of safety ratings. This is consistent with studies that have identified crowding inside venues as a risk factor for alcohol-related aggression and disruptive behaviour (Briscoe & Donnelly, 2003; Doherty & Roche, 2003; Green & Plant, 2007).

The number of people within an area has relevance to local government and others involved in liquor licensing decision making. The results of this study lend support to previous studies and literature suggesting outlet density should not be viewed in isolation. Considering only the number of licensed outlets without also considering their capacity and relative contribution to site capacity, density of people and crowding in the public realm is unhelpful. Local governments may be able to use this information when considering spatial planning including planning approvals, land use planning and liquor licensing.

5. Conclusion

This exploratory observational study of the public realm in sites with licensed venues of differing capacities examined the relationship between physical factors, social behavioural factors and perceptions of safety. It also contributes to filling the gap in research knowledge.

There are some limitations to this study, including the small data set and reliance on individual observers (and their personal experience) to assess feelings of safety, which means the findings should be interpreted as indicative rather than definitive.

The four sites observed had similar numbers of licensed venues, but significantly different venue capacities and overall site capacities. The results of this study show greater perceptions of safety in areas that had a higher proportion of low capacity (small) venues compared to areas with predominantly medium and high capacity venues. As discussed, the smaller venue sites also had comparatively less people in them overall. Further research could observe areas with similar street density (total capacities) but different venue types to clarify the impact of smaller venues on an environment.

The results lend some support to the hypothesis that areas with small venues attract people of different ages who display different behaviours in comparison to areas with larger venues. This study observed a higher proportion of people in the 18 to 25 age group in sites with large venues and also observed higher levels of intoxication, roughness, rowdiness, hostility and sexual contact in these areas. The results indicate the areas with a higher level of smaller venues do attract a broader age range of patrons and lower levels of some of the negative alcohol-related behaviours seen in the public

realm. This study indicated that one or two small venues in an area with predominantly large or very large venues did not positively impact on perceptions of safety in the public realm. However, groupings of small to medium capacity venues appear to create spaces with higher perceptions of safety.

Although not the focus of this study; it was noted that the types of venues within sites differed between sites, and this may have had some impact on perceptions of safety ratings of sites. The sites with better perceptions of safety, Sites 1 and 2 (small and mixed venue sites), had no nightclub, hotel/pub or adult content venues. This finding supports the literature already available on the impact of venue type on alcohol-related problems. Further research into the impact of locating a mixture of venue sizes and types may also be warranted.

Interestingly, the results indicate a stronger relationship between the physical site factors of attractiveness, upkeep and cleanliness of the site and perceptions of safety than social behavioural factors and perceptions of safety. Of these physical factors, site attractiveness was found to be the most highly correlated to perceptions of safety ($r = 0.76$), and upkeep and cleanliness of the site equally correlated to safety (both $r = 0.72$).

The number of people in the site showed the strongest relationship with perceptions of safety of any individual factor ($r = 0.77$). A moderately strong relationship was also found between the perceived level of crowding with perceptions of safety ($r = 0.72$). This is consistent with the observer ratings of people density, perceived crowding and perceptions of safety which showed that the number of people (density) and crowding were rated higher, and perceptions of safety were rated lower, in the two medium and large venue sites.

The results of this study have relevance to local governments and others involved in liquor licensing and policy decision making. Of particular relevance to local governments, is the importance of the upkeep and cleanliness of the public realm on perceptions of safety as local government have the potential to exert greater influence over these physical factors in late night entertainment areas.

Those involved in liquor licensing and spatial planning may also find the results useful in considering the relevance of outlet density, but also venue and area capacity and the effects of groupings of large venues when assessing the impact of additional licensed venues.

There may also be consideration given to the number of people and crowding in the public realm, based on venue capacity, to street length. There could be planning regulations or guidelines developed to manage the public space based on the capacity inside venues to avoid crowding and potential violence in the public realm in the vicinity venues. Footpath design and upgrade in areas with higher site density (based on person per street metre) to improve the flow of pedestrian movement and provide more space could assist in reducing violence stemming from contested space.

Clusters or areas of predominantly small venues (smaller capacities) mixed among larger venues could help to regulate the number of patrons walking out of venues into a street, and help improve perceptions of safety in an area, better managing people and space. Facilitating places with a cluster of smaller venues can help create a more attractive destination for some people in the evening economy. In addition, supporting larger venues to locate in areas not already experiencing high levels of density and crowding, based on an assessment of maximum venue capacity and person per street metre, may assist in maintaining a positive public realm environment.

6. References

Allen Consulting Group. (2009). *Alcohol-related harm and the operation of licensed premises*; *report to the Department of Justice*. Melbourne: Department of Justice.

Australian Institute of Criminology. (2009). *Key issues in alcohol-related violence.* Summary paper No. 04, December 2009. Canberra: Australian Institute of Criminology.

Begall, K., Kiewiet, J., Sapulete, S., & Veldhuis, T. (2006). *Broken windows: The effect of disorder on fear.* Masters thesis, University of Groningen. Retrieved from: http://www.ppsw.rug.nl/~veenstra/Supervision/Master/BrokenWindows.pdf

Briscoe, S., & Donnelly, N. (2003). Problematic licensed premises for assault in inner Sydney, Newcastle and Wollongong. *The Australian and New Zealand Journal of Criminology,* vol. 36(1), pp. 18-33.

Bradley, T. (2014). 'Liquor licence density and planning'. In *Stemming the tide of alcohol: Liquor licensing and the public interest.* Canberra: Foundation for Alcohol Research and Education (FARE).

Burgess, M., & Moffatt, S. (2011). The association between alcohol outlet density and assaults on and around licensed premises. *Crime and Justice Bulletin*, no. 147.

Chikritzhs, T., Catalano, P., & Pascal, R. (2007). *Predicting alcohol-related harms from licensed outlet density: A feasibility study.* Hobart: National Drug Law Enforcement Research Fund.

Doherty, S., & Roche, A. (2003). *Alcohol and licensed premises: Best practice in policing.* Hobart: National Drug Law Enforcement Research Fund.

Donnelly, N., Poynton, S., Weatherburn, D., Bamford, E., & Nottage, J. (2006). Liquor outlet concentrations and alcohol-related neighbourhood problems. *Crime and Justice Bulletin*, no. 8.

Finney, A. (2004). *Violence in the night-time economy: Key findings from the research.* London: Home Office.

Graham, K. (2000). *Safer bars training manual*. Retrieved from: http://publish.uwo.ca/~kgraham/observer_training_manual.doc

Graham, K., Bernards, S., Osgood, D.W., & Wells, S. (2006). Bad nights or bad bars? Multi-level analysis of environmental predictors of aggression in late-night large-capacity bars and clubs. *Addiction.* vol. 101, pp. 1569-1580.

Graycar, A. (1998). *Crime prevention perspectives*. Paper presented at the Partnerships in Crime Prevention Conference, Hobart. Retrieved from: http://www.aic.gov.au/media_library/conferences/partnership/graycar.pdf

Green, J., & Plant, M. (2007a). Safer bars, safer streets? Editorial. *Journal of Substance Use*, vol. 12(3), pp. 151-155.

Green, J., & Plant, M. (2007b). Bad bars: A review of risk factors. *Journal of Substance Use*, vol. 12(3), pp. 157-189.

Grimshaw, R. (2010). *The consequences of queuing: Crowding, situational features and aggression in entertainment precincts.* Honours thesis, School of Criminology and Criminal Justice, Faculty of Arts, Griffith University.

Hinkle, J. (2009). *Making sense of broken windows: The relationship between perceptions of disorder, fear of crime, collective efficacy and perceptions of crime*. Doctorate dissertation, Department of Criminology and Criminal Justice, University of Maryland. Retrieved from: http://drum.lib.umd.edu/bitstream/1903/9547/1/Hinkle_umd_0117E_10573.pdf

Homel, P. (1998). *Issues in police partnerships: US/Australian comparisons.* Paper presented at the Partnerships in Crime Prevention Conference, Hobart. Retrieved from: http://www.aic.gov.au/media_library/conferences/partnership/homel_p.pdf

Hughes, K., Quigg, Z., Eckley, L., Bellis, M., Jones, L., Calafat, A., Kosir, M., & Hasselt, N. (2011). Environmental factors in drinking venues and alcohol-related harm: The evidence base for European intervention. *Addiction*, vol. 106 (Suppl 1), pp. 37-46.

Ising, H., & Braun, C. (2000). Acute and chronic endocrine effects of noise: Review of the research conducted at the Institute for water, soil and air hygiene. *Noise Health* [serial online]. Retrieved from: http://www.noiseandhealth.org/article.asp?issn=1463-1741;year=2000;volume=2;issue=7;spage=7;epage=24;aulast=Ising

Ising, H., & Michalak, R. (2004). Stress effects of noise in a field experiment in comparison to reactions to short term noise exposure in the laboratory. *Noise Health* [serial online]. Retrieved from: http://www.noiseandhealth.org/article.asp?issn=1463-1741;year=2004;volume=6;issue=24;spage=1;epage=7;aulast=Ising

Kypri, K., Jones, C., McElduff, P., & Barker, D. (2010). Effects of restricting pub closing times on night-time assaults in an Australian city. *Addiction*, vol. 106, pp. 303-310

Kypri, K., McElduff, P., & Miller, P. (2013). Restrictions in pub closing times and lockouts in Newcastle, Australia five years on. *Drug and Alcohol Review. (*May 2014), vol. 33, pp. 323-326

LaGrange, R., Ferraro, K., & Supancic, M. (1992). Perceived risk and fear of crime: Role of social and physical incivilities. *Journal of Research in Crime and Delinquency*, vol. 29 (3), pp. 311-334.

Livingston, M., Chikritzhs, T. & Room, R., (2007). Changing the density of alcohol outlets to reduce alcohol-related problems. *Drug and Alcohol Review*, vol. 26, pp. 557-566.

Mahmood, R., Parveen, N., Jilani, G., Rehman, J., Haq, A. & Haq, I. (2008). Cardiovascular effects of short term noise of a constant frequency and intensity. *Pakistan Journal of Physiology*, vol. 4 (2). Retrieved from: http://www.pps.org.pk/PJP/4-2/Rashid.pdf

National Drug Law Enforcement Research Fund (NDLERF). (2013). *Patron offending and intoxication in night-time entertainment districts: Final report.* Canberra: NDLERF.

National Drug Research Institute (NDRI). (2007). *Restrictions on the sale and supply of alcohol: Evidence and outcomes.* Perth: NDRI, Curtin University of Technology.

Roberts, L., & Indermaur, D. (2012). 'Are neighbourhood incivilities associated with fear of crime?' In Pietsch, J., & Aarons, H. (Eds) *Australia: Identity, fear and governance in the 21st Century.* Canberra: Australian National University E Press. Retrieved from: http://books.google.com.au/books?id=4yWe1cJgg-cC&pg=PA65&lpg=PA65&dq=physical+incivilities+and+perceptions+of+safety&source=bl&ots=Cag05-ylHn&sig=WVRDffZXZFB7MyohKe6JuLDAI3s&hl=en&sa=X&ei=rWY0VPiFO8-togSU7ILQAw&ved=0CCEQ6AEwATgK#v=onepage&q=physical%20incivilities%20and%20perceptions%20of%20safety&f=false

Townsley, M., & Grimshaw, R. (2013). The consequences of queuing: Crowding, situational features and aggression in entertainment precincts. *Crime Prevention and Community Safety*, vol. 15(1), pp. 23-47.

Quigley, B., Leonard, K., & Collins, L. (2003). Characteristics of violent bars and bar patrons. *Journal of Studies on Alcohol*. November 2003, pp. 765-771.

Wood, L., Shannon, T., Bulsara, M., Pikora, T., McCormack, G., & Giles-Corti, B. (2008). The anatomy of the safe and social suburb: An exploratory study of the build environment, social capital and residents' perceptions of safety. *Health and Place.* vol. 14, pp. 15-31.

World Health Organization (WHO). (2009). *Evidence for the effectiveness and cost-effectiveness of interventions to reduce alcohol-related harm.* Geneva: WHO.

7. Appendices

7.1. Appendix A: Observation tool

Small Bars Observation Tool - FARE

1. Initials of observer

2. Date of observation

Date DD / MM / YYYY

3. observation session - early or late

- ◯ Early: 11:15pm - 12:45am
- ◯ Late: 1:00am - 2:30am

Small Bars Observation Tool - FARE

Early Observations

Please complete this section after completing the walk-through of the site in the first 15 mins of observing.

4. Density of people in the site

	very low	low	moderate	high	very high
Density	○	○	○	○	○

5. Pedestrian flow

	clear pedestrian flow	some impediment to flow	movement, but slow	flow has slowed considerably	foot traffic flow on footpath has ceased
flow	○	○	○	○	○

6. Crowding of people in the site

	none	low	moderate	high	very high
crowding	○	○	○	○	○

7. Low level aggression

Number of incidents

8. Weather conditions

9. Were any venues operating queues during this 15 mins of observation?

○ Yes

○ No

Small Bars Observation Tool - FARE

10. Venues operating queues

- [ ] Peel St venue 1
- [ ] Peel St venue 2
- [ ] Peel St venue 3
- [ ] Peel St venue 4
- [ ] Peel St venue 5
- [ ] Peel St venue 6

11. Flow of queues. Answer for those operating a queue.

	moving continuously		stopping and starting		at a standstill	N/A
Peel St venue 1	○	○	○	○	○	○
Peel St venue 2	○	○	○	○	○	○
Peel St venue 3	○	○	○	○	○	○
Peel St venue 4	○	○	○	○	○	○
Peel St venue 5	○	○	○	○	○	○
Peel St venue 6	○	○	○	○	○	○

12. Queue size. Answer for those operating a queue.

	1-10	11-20	21-30	31-40	41-50	51-60	61-70	70+
Peel St venue 1	○	○	○	○	○	○	○	○
Peel St venue 2	○	○	○	○	○	○	○	○
Peel St venue 3	○	○	○	○	○	○	○	○
Peel St venue 4	○	○	○	○	○	○	○	○
Peel St venue 5	○	○	○	○	○	○	○	○
Peel St venue 6	○	○	○	○	○	○	○	○

Small Bars Observation Tool - FARE

Physical Environment

This section should be completed at the end of the observation period. Please rank the following environmental factors based on your impression for the whole observation period.

13. Lighting

	very good	good	average	bad	very bad
Lighting	○	○	○	○	○

14. Smoking level - percentage of people were smoking over the observation period

	none	1 - 25%	26 - 50%	51 - 75%	76 - 100%
Smoking Level	○	○	○	○	○

15. Cleanliness

	very clean	clean	moderate	dirty	very dirty
Cleanliness	○	○	○	○	○

16. Upkeep

	very good	good condition	moderate	slightly rundown	very rundown
Upkeep	○	○	○	○	○

17. Amount of Graffiti

	none	low	moderate	high	very high
Amount of Graffiti	○	○	○	○	○

18. CCTV visibility and signage

	Yes	No
Are any CCTV cameras visible in the site	○	○
Are any signs advising of CCTV in the area visible in the site	○	○

19. Line of sight/visibility into venues

	clear visibility	some visibility		limited visibility	no visibility
Line of sight/visibility	○	○	○	○	○

20. Looking at the front of venues; how attractive do you rate the site overall?

	very attractive	somewhat attractive	neutral	somewhat unattractive	very unattractive
attractiveness	○	○	○	○	○

21. Which of the factors listed above most influenced how you feel about the space in terms of safety?

- ○ Lighting
- ○ Smoking leve
- ○ Cleanliness
- ○ Upkeep
- ○ Amount of graffiti
- ○ CCTV surveillance
- ○ Line of site into venues
- ○ Site attractiveness/appeal

22. Temporary Objects

Object 1	
Object 2	
Object 3	
Object4	

23. Notes on physical environment

Small Bars Observation Tool - FARE

Social Environment

This section should be completed at the end of the observation session. Please rate the following social environment factors based on your impression over the whole observation.

24. Noise - how intrusive is the noise level?

	not at all intrusive		neutral		highly intrusive
MUSIC	◯	◯	◯	◯	◯
VOICE	◯	◯	◯	◯	◯

25. Hostility

	none	low	moderate	high	very high
Males	◯	◯	◯	◯	◯
Females	◯	◯	◯	◯	◯

26. Roughness and bumping

	none	low	moderate	high	very high
Males	◯	◯	◯	◯	◯
Females	◯	◯	◯	◯	◯

27. Rowdiness

	none	low	moderate	high	very high
Males	◯	◯	◯	◯	◯
Females	◯	◯	◯	◯	◯

28. Swearing

	none	low	moderate	high	very high
Males	◯	◯	◯	◯	◯
Females	◯	◯	◯	◯	◯

29. Intoxication

	none	low	moderate	high	very high
Males	◯	◯	◯	◯	◯
Females	◯	◯	◯	◯	◯

30. Permissiveness and Standard Setting (by security/crowd control staff)

	very strict	strict	moderate	lenient	anything goes	N/A
Permissiveness and standard setting	○	○	○	○	○	○

31. Sexual activity and contact

	none	low	moderate	high	very high
Sexual activity and contact	○	○	○	○	○

32. Public urination and/or vomiting

	none	low	moderate	high	very high
Public urination and/or vomiting	○	○	○	○	○

33. Mood of the space

	friendly		neutral		unfriendly
Mood	○	○	○	○	○

34. How safe do you think you would feel here if you were alone at night?

	very safe			neutral			very unsafe
How safe	○	○	○	○	○	○	○

35. How do your rate your feelings of enjoyment of being in the space?

	enjoyed being in space			neutral			did not enjoy being in space
Level of enjoyment	○	○	○	○	○	○	○

36. Which of the factors listed below has most influenced how you feel about the space in terms of safety and enjoyment?

- ○ music noise
- ○ voice noise
- ○ hostility
- ○ roughness and bumping
- ○ rowdiness
- ○ swearing
- ○ intoxication
- ○ permissiveness and standard setting
- ○ sexual activity, contact & competition
- ○ public urination/vomiting
- ○ mood

37. Notes on social environment

Small Bars Observation Tool - FARE

Street Population

This section should be completed at the end of the observation period. Please provide details regarding the general demographics of street population in the site over the whole observation period.

38. Age ratio (%)

Under 18	
18 - 25	
26 - 30	
31 - 39	
40+	

39. Gender ratio (%)

Male	
Female	

40. Group size (%)

Small (1-3 ppl)	
Medium (4-6 ppl)	
Large (7+ ppl)	

41. Ethnicity (%)

Caucasian	
Middle Eastern	
Pacific Islands	
Aboriginal	
Asian	
African	
Other	

42. Other - specify

43. What words would you use to describe the people in the site? Choose as many as apply.

- ☐ cheerful
- ☐ rude
- ☐ polite
- ☐ mature
- ☐ impersonal
- ☐ immature
- ☐ restless
- ☐ warm
- ☐ approachable
- ☐ anti-social
- ☐ angry
- ☐ inconsiderate
- ☐ considerate
- ☐ sociable
- ☐ intoxicated
- ☐ calm
- ☐ intimidating

Other (please specify)

44. Did a service provider visit the area during the observation period?

- ○ Yes
- ○ No

45. Which service providers were present?

- ○ Police
- ○ Green Team, Mission Aust Youth Beat and other Youth Streetwork Services
- ○ Salvation Army
- ○ Ambulance Officers
- ○ Council Parking Officers
- ○ Other (please specify)

46. Notes on street population

Small Bars Observation Tool - FARE

Queues

This section should be completed at the end of the observation session. Please provide information regarding the queues within the site. This is your overall impression for the WHOLE OBSERVATION PERIOD.

47. Were any venues operating queues during the observation period?

- ◯ Yes
- ◯ No

Small Bars Observation Tool - FARE

Overall Queues details

48. Management and situational features - select where the answer is 'yes', leave blank where the answer is 'no'.

	Peel St venue 1	Peel St venue 2	Peel St venue 3	Peel St venue 4	Peel St venue 5	Peel St venue 6
Did not operate a queue for the whole period	☐	☐	☐	☐	☐	☐
Are security staff provided	☐	☐	☐	☐	☐	☐
Do security staff actively monitor the queue	☐	☐	☐	☐	☐	☐
Are bollards (or similar) used to define queuing space	☐	☐	☐	☐	☐	☐
Does queue impede pedestrian movement	☐	☐	☐	☐	☐	☐

49. Overall, what is the behaviour of people in each of the queues like? Answer for those operating a queue.

	completely ordered	mostly ordered	neutral	somewhat disordered	completely disordered
Peel St venue 1	○	○	○	○	○
Peel St venue 2	○	○	○	○	○
Peel St venue 3	○	○	○	○	○
Peel St venue 4	○	○	○	○	○
Peel St venue 5	○	○	○	○	○
Peel St venue 6	○	○	○	○	○

50. Overall, what is the mood of people in each of the queues like? Answer for those operating a queue.

	very friendly	somewhat friendly	neutral	somewhat unfriendly	very unfriendly
Peel St venue 1	○	○	○	○	○
Peel St venue 2	○	○	○	○	○
Peel St venue 3	○	○	○	○	○
Peel St venue 4	○	○	○	○	○
Peel St venue 5	○	○	○	○	○
Peel St venue 6	○	○	○	○	○

51. Notes on queues

Small Bars Observation Tool - FARE

High Level Aggression

52. Number of low-level aggressive incidents observed in the site OUTSIDE OF THE COUNTS MADE DURING THE EARLY/LATE OBSERVATION PERIODS

low-level aggressive incidents

53. Number of high level aggressive incidents observed within the site THROUGHOUT THE WHOLE OBSERVATION PERIOD

number of high level aggressive incidents

Small Bars Observation Tool - FARE

Late Observations

Please complete this section after doing the walk-through of the site in the last 15 mins of observing.

54. Density of people in the site

	very low	low	moderate	high	very high
Density	○	○	○	○	○

55. Pedestrian flow

	clear pedestrian flow	some impediment to flow	movement, but slow	flow has slowed considerably	foot traffic flow on footpath has ceased
flow	○	○	○	○	○

56. Crowding of people in the site

	none	low	moderate	high	very high
crowding	○	○	○	○	○

57. Low level aggression

Number of incidents

58. Weather conditions

59. Were any venues operating queues during this 15 mins of observation?

○ Yes

○ No

Small Bars Observation Tool - FARE

Details of queues - late

60. Venues operating queues

- ◯ Peel St venue 1
- ◯ Peel St venue 2
- ◯ Peel St venue 3
- ◯ Peel St venue 4
- ◯ Peel St venue 5
- ◯ Peel St venue 6

61. Flow of queues. Answer for those operating a queue

	moving continuously		stopping and starting		at a standstill
Peel St venue 1	◯	◯	◯	◯	◯
Peel St venue 2	◯	◯	◯	◯	◯
Peel St venue 3	◯	◯	◯	◯	◯
Peel St venue 4	◯	◯	◯	◯	◯
Peel St venue 5	◯	◯	◯	◯	◯
Peel St venue 6	◯	◯	◯	◯	◯

62. Queue size. Answer for those operating a queue.

	1-10	11-20	21-30	31-40	41-50	51-60	61-70	70+
Peel St venue 1	◯	◯	◯	◯	◯	◯	◯	◯
Peel St venue 2	◯	◯	◯	◯	◯	◯	◯	◯
Peel St venue 3	◯	◯	◯	◯	◯	◯	◯	◯
Peel St venue 4	◯	◯	◯	◯	◯	◯	◯	◯
Peel St venue 5	◯	◯	◯	◯	◯	◯	◯	◯
Peel St venue 6	◯	◯	◯	◯	◯	◯	◯	◯

Small Bars Observation Tool - FARE

Observer Narrative

Please provide any general notes, details or observations for the full observation period

63. Observer Narrative

7.2. Appendix B: Observers' training manual

Safer Places and Small Bars Research Project

Training Manual for Observers

March 2014

This manual has been developed by Adelaide City Council for the Safer Places and Small Bars research project funded by the Foundation for Alcohol Research and Education (FARE) and auspiced by the Adelaide West End Association.

This manual is based on the training manual written by Robert Grimshaw, School of Criminology and Criminal Justice, Griffith University for his 2010 research study on the consequences of queuing*. Grimshaw's training manual drew on the work of Kathryn Graham, Centre for Addiction and Mental Health in her book Safe Bars Training Manual for Observers (2000).

*Townsley, M. & Grimshaw, R. 2013. "The consequences of queuing: Crowding, situational features and aggression in entertainment precincts", *Crime Prevention and Community Safety*, Vol 15 (1), Pp 23 – 47.

Introduction:

Purpose of project:

This project is funded by the Foundation for Alcohol Research and Education (FARE). The project will involve collaboration between the Adelaide West End Association, Adelaide City Council, South Australia Police and Drug and Alcohol Services South Australia. It aims to investigate the impact on perceived public safety of the establishment of an increasing number of small licenced venues (up to 120 patrons) in an area with an already high density of licenced premises. The project will use a direct-observation research approach to undertake eight late night research observation surveys of the West End of Adelaide over a four month period (March to June 2014). This project will gather both quantitative and qualitative data in areas of high licenced venue density in order to examine the impact of small bars on perceived safety of an area and patron behaviour in small compared to larger licenced venues.

Research field officer's role:

The Research Field Officer will be responsible for coordinating, conducting and leading eight late night observation nights. The Research Field Officer will be the primary contact person for observers.

The Research Field Officer will contact observers prior to observation nights to remind them of meeting time and venue. They will be paired with one of the observers to undertake observations but will also be available by phone for the other pair of observers to ask questions, raise issues, etc. The Research Field Officer will lead the debrief sessions held immediately after observations.

They will also be responsible for ensuring the data collected is collated after each observation night and forwarded to Adelaide City Council.

Following the completion of the observational phase of the project the Research Field Officer will write the final report to be submitted to FARE in October 2014.

Observers' role:

In addition to the Research Field Officer there will be three observers involved in the project and one stand-by observer available to fill in if another observer is unable to attend an observational night.

Observers are responsible for ensuring their availability for observations on the allocated nights and meeting at the pre-determined meeting point on time.

Observers need to be familiar with the observation tool and the definition of terms. They are responsible for providing a suitable electronic device (i.e. iphone or android smartphone) on which the survey is downloaded, and ensuring the device is fully charged and functional on observation nights.

On observation nights observers are to undertake counts and general observations of their allocated sites and complete the observation tool as per the provided schedule. Observers must ensure that the observational survey is completed accurately and in full to ensure the integrity of the data.

Dates and times of observations:

Obs 1 - Saturday, **March 8th**: 11:00pm – 3:00am (including debrief)

Obs 2 - Saturday, **March 22nd**: 11:00pm – 3:00am (including debrief)

Obs 3 - Saturday, **April 12th**: 11:00pm – 3:00am (including debrief)

Obs 4 - Saturday, **April 26th**: 11:00pm – 3:00am (including debrief)

Obs 5 - Saturday, **May 10th**: 11:00pm – 3:00am (including debrief)

Obs 6 - Saturday, **May 24th**: 11:00pm – 3:00am (including debrief)

Obs 7 - Saturday, **June 7th**: 11:00pm – 3:00am (including debrief)

Obs 8 - Saturday, **June 21st**: 11:00pm – 3:00am (including debrief)

Tuesday, **June 24th:** 10:00am – 12:00noon End focus group

Observation sites

Site 1 Peel Street

Site 2 Waymouth Street

Site 3 Hindley/Morphett Street

Site 4 Hindley/Rosina Street

See map for further details.

General procedures

Procedures for observation nights:

The following are general procedures for all observation nights:

1. Park and meet the Research Field Officer at Topham Mall UPark [precise location]. You must be there precisely at 11:00pm to be assigned your partner. You will have had the two observational surveys for the sites you will be observing sent to you via email the previous day.
2. Walk to the first assigned observation site with your partner.
3. Once you arrive at your first site, take a moment to observe the site.
4. Go into the site and walk the length of the site and back again.
5. Move to the opposite side of the road to a suitable location within the site to make observations. Record Early Observations.
6. Make counts and observations of the site. Do not fill in the survey, but if necessary note on your phone anything of particular interest.
7. 20 minutes before the end of the observation period (12:25am or 2:10am) one observer is to complete the full observation survey (up to but not including the Late Observations section) while the other observer continues to observe, and then swap over. Each observer should complete their observation survey independently and without discussion with their observation partner.
8. Approximately 10 minutes before the end of the observation period you should cross the road as a pair and walk the length of the site and back again.
9. Return to the position on the opposite side of the road. Complete the Late Observations. Ensure you have fully completed the survey (it is not necessary to complete the Observer Narrative at this

point, this can be done during the debrief if needed) and hit “Done” to save your answers (it will still be possible to go in and enter further notes later).
10. Walk to the second observation site with your partner.
11. Repeat procedures 3 to 9 for the second site.
12. Walk with your partner to the debrief meeting point (Pancake Kitchen, 13 Gilbert Place) and undertake ½ hour debrief with Research Field Officer and other observers. Complete Observer Narrative section if not already completed. Complete a casual timesheet and give to Research Field Officer.
13. Travel together to Topham Mall UPark and travel home safely.

Timesheets and pay:

Observers are employed on a casual basis by Adelaide City Council.

The Research Field Officer will provide you with a casual timesheet at the debrief sessions immediately following the observation sessions. Complete the timesheet during the debrief and hand back to the Research Field Officer.

The casual hourly pay rate for observers is: $29.82/hour, before tax. Observation nights are paid at double time rate.

Adelaide City Council pays casuals into your nominated bank account on Wednesdays on a fortnightly basis. Because timesheets need to be in on the Friday before a pay week, it may be more than two weeks before you receive payment for an observational shift.

Special conditions:

Observers are required to provide their own electronic device (iphone or android smartphone) on which the observation survey app can be downloaded. Observers must ensure that their phone has adequate battery charge on observation nights. Observers are responsible for their own device. FARE, Adelaide West End Association and Adelaide City Council accept no responsibility for devices that are damaged, lost or stolen on an observation night.

Parking access passes are provided by Adelaide City Council for the Topham Mall UPark. The access passes are to be used only for the observation nights and hours. Any misuse of the access passes will be charged to the observer accordingly.

Adelaide City Council will pay for food/drinks up to the value of $10 per observer for the debrief sessions on each observation night.

Safety and legal issues for observers

Personal safety

While steps have been taken to help keep observers as safe as possible, ultimately personal safety is the individual’s responsibility. Therefore, the following guidelines are suggested:

- When conducting an observation, keep an eye out for any potentially threatening people or behaviours.
- Only one observer should record on their electronic device at a time. The other observer should continue to observe the site.
- Before conducting the walk-through of the site for crowding rating and low-level aggression counts take a moment to observe from across the road and assess any potential safety risks. If you do not

feel safe entering the more crowded side of the road, note this on your observation survey and do not conduct the walk-through.

It is very unlikely that you will be faced with threatening or dangerous situations. However, if a threatening situation arises, it is very important that you are prepared. The following are some guidelines for reducing risks to your personal safety:

- Carry as little as possible with you – preferably only what you can carry in your pocket or in a small across-the-body bag. Don't carry large bags or backpacks.
- Keep your ID on you at all times.
- Don't make eye contact with drunk or aggressive people.
- Do not stand too close to an aggressive incident.
- Do not attempt to intervene in an aggressive incident.
- Stay on the planned route and always stay with your pair.
- If at any point you feel your safety is threatened, cease observing immediately, remove yourself from the site to a safe location and contact the Research Field Officer immediately. If police attendance is needed call 131 444. ***In an emergency always call 000 for assistance.***

Your role during this study is to observe rather than intervene. If you observe an incident or identify a person needing assistance (but where police involvement is not required) please contact The Hub [8212-0085] providing your details, your location and requesting assistance for the person. Also contact the Research Field Officer to advise them. You will need to stay near the person until assistance arrives but if at all possible continue to conduct your observations of the site. Most importantly you should stay in your pair.

Illegal behaviour

Observers will be required to use their own good judgement in deciding whether to call for emergency assistance if they witness illegal behaviour. An initial judgement should be based on the presence of other persons capable of taking action (e.g. security, door staff, other bystanders) and the severity of the situation. If initially a decision is made not to call for assistance, the situation must be reviewed shortly after (e.g. 5 mins) to assess if emergency and/or medical assistance has arrived.

Although the research data will be kept confidential, you as observers in the research study have no special legal status. As such, given you will be observing public behaviour your status as a witness to incidence of violence is the same as any other witness. Provide information to the police or other authorities as requested. If any situations involving yourself and the police do arise, you should call the Research Field Officer as soon as possible.

Observers may, at their own discretion record or remember details of persons involved in illegal incidents and provide witness statements to police. Such details, if recorded must be kept entirely separate from the observational data recorded.

Policies regarding lateness, absenteeism and alcohol consumption by observers

This project relies on observers working in pairs and as an overall team. An observer who does not arrive at the arranged meeting point on time, or who does not show up at all inconveniences their fellow observers and puts the project at risk. Therefore, lateness and absenteeism cannot be tolerated.

These procedures are essential to ensure the quality and integrity of the data for this project:

- Observers need to complete their surveys on-site and hit the “done” button to submit their survey. This should be done before moving onto the next site/ the debrief location.
- Observers who miss a shift (without notifying the Research Field Officer in advance) for any reason will have their performance reviewed by the Research Field Officer. This observer may not be used for future observation nights.

Because it is so important that site observations start on time, the following will happen if an observer arrives late for an observation night:

- The first site observation for that pair will be cancelled. If possible the second site observation will be undertaken. The observer who was on time will be paired with the other observer present so that the RFO is free to make/take phone calls to the late observer.
- The observer who is late will not be paid for the period of the first site observation, and will only be paid for the second site observation and debrief (assuming they arrive in time to undertake the second site observation). The observer who was on time will be paid for the full shift.
- The observer who was late will be required to meet with the Research Field Officer and may be put on probation or dismissed.

Alcohol consumption by observers

Alcohol consumption by observers not only impairs their ability to observe accurately, it may also put the observer and his/her partner at risk.

- Observers will not drink any alcohol during the six-hour period prior to the observational period.
- Observers will not drink any alcohol during the observational period.
- It is strongly recommended that observers have with them water or some other non-alcoholic drink during the observational period.

Guidelines for observing in public settings

Observers are encouraged to be subtle and unobtrusive in their observations and recording, however it is not essential to remain entirely covert. If you are approached by a venue owner or member of the public and asked what you are doing you should advise them that you are undertaking observations of the late night economy on behalf of Adelaide City Council and the Adelaide West End Association, and provide them with Jennifer West’s business card for further information.

Below are some general guidelines for remaining unobtrusive:

- Don’t carry obvious recording equipment and writing material. Use your phone to record
- Try to behave like you normally would, or like most others in the area are acting
- Dress in a way that will help you blend in with others, as you would for a night out at a club or pub
- Maintaining friendly interaction with your partner is important. Avoid simply sitting and staring.
- Do not confront or respond aggressively or negatively to anyone.
- Don’t tell your friends and family specifically where you will be. If you happen to see someone you know, try to minimise contact.

Observing in pairs:

All observations will be conducted in pairs for two reasons:

1. It allows for assessment of the reliability of the data collected by comparing the ratings made by the two observers
2. Safety of the observers

- Never conduct an observation without a partner.
- Stay together throughout the whole observational period, including walking to and from sites.
- Complete the forms independently, without consulting or discussing your ratings with your partner.

Using the electronic observational survey (Survey Monkey)

The Observation Survey will be downloaded and tested on your phone during the training session.

Observers are strongly encouraged to only use their phone to make all recordings (i.e. don't write anything on a piece of paper).

When you start a new survey you are able to save it and then re-enter and edit/update it repeatedly until you have finished with it. The survey questions are presented in the order in which you need to complete them. The questions regarding the 'early observations' (in the first 15 minutes) are presented first, followed by the main body of the survey (to be completed towards the end) and the 'late observations' (last 15 minutes) are presented last.

The survey includes 'skip logic' so that if you answer 'no' to the question "were any queues operating during the observation period"; questions about the venues operating queues and their flow, length, etc will be automatically skipped.

Observation question definitions

Que No.	Survey Question	Definition
1	**Initials of observer**	Initials
2	**Date**	Date DD/MM/YYYY
3	**Observation session**	Choose one. First observation session for the night is Early, second is Late.

	Early Observations	To be completed after the walk-through in the first 15 mins.
4	Density of people in site	This is to do with the number of people in the site – but is separate from the crowding. Very low = few people in the space, lots of room to move. Very high = high number of people in the space, no room to move.
5	Pedestrian flow	How easy or difficult it was for you (and others) to move through the site. Clear pedestrian flow = no impediment, can walk-through and maintain a 'normal' walking pace. Movement, but slow = there is still movement in pedestrian flow, but walking pace needs to be adjusted to take account

		of impediments. Foot traffic flow on footpath has ceased = the footpath has reached virtual 'gridlock'.
6	Crowding of people in site	Your impression on the level of crowding based on low level contacts within the crowd including brushing past, very slight contact, unintended contacts where there is clearly no intention to cause harm or act aggressively.
7	Low level aggression	Number of low level-aggression incidents observed while you were walking through the site including, bumps, knocks, knocked bags, arguments where an intention to act aggressively was probably present at some point in the interaction.
8	Weather conditions	E.g. Fine, cloudy, warm, mild, cool, cold, raining
9	Were queues operating	Yes – at least one venue was operating a queue within that first 15 minute observational period. Selecting No will skip questions 10 - 12.
10	Venues operating queues	Select the venues operating a queue.
11	Flow of queues	How quickly or slowly the queues were moving. Moving continuously (even if moving slowly), stopping and starting (few people going in then no movement, then few more people going in, etc), at a standstill (the queue didn't move at all in that 15 minutes).
12	Queue size	For each venue operating a queue, the size of the queue to the nearest ten.

	Physical Environment	
13	Lighting	The average of the whole site. If it is generally well lit, but with a pocket of darkness, rate based on the generally well lit, but note the dark pocket in the PE notes section. Very good = you can clearly see everyone's facial expressions from a distance. Very bad = not lit at all, cannot see the site or people in it.
14	Smoking	The average across the observation period, not just a spike at one point. None = no one smoking outside across the whole period.
15	Cleanliness	Amount of rubbish. Very clean = no rubbish left on the ground in the area, bins are not overflowing. Very dirty = rubbish strewn all over the area, overflowing bins. If generally clean but one area of a lot of litter, note this in the PE notes section.
16	Upkeep	Maintenance, amount of broken or damaged items. General appearance of the site. Very good = no damage to building, footpath or street furniture. Area is presented well. Very rundown = building is not maintained, windows/doors/walls damaged, broken furniture. Area is poorly presented.
17	Amount of Graffiti	None = there is no graffiti anywhere in the site. Very high = almost all the site has been tagged in some way.

18	Surveillance - CCTV awareness CCTV signage	Are there any CCTVs visible? Yes/No Is there any signage visible indicating the CCTV is operating in the site? Yes/No
19	Line of sight/visibility into venues	Whether you can see into venues within the site. Clear visibility = you can see inside all of the venues within the site (you can see patrons inside, furnishings, etc). No visibility = you cannot see into any of the venues within the site (windows are painted over, etc).
20	How attractive the space is	Looking at the frontages of the venues within the site; your impression of how attractive the overall site is. Sites with venues that have dull, poorly designed or maintained frontages will rate low on the scale and sites with interesting, well maintained, well designed frontages will rate more highly.
21	PE factors most influencing how you feel about the space	Choose one of the factors on the list that is the predominant factor in determining how you feel about the space in terms of safety and enjoyment.
22	Temporary objects	Advertising signs, displays, stalls, buskers. Estimate size very roughly and note if they are causing any obstruction to queues or pedestrian flow.
23	Notes on PE	Any special notes about the physical environment or a rating you have given.

	Social Environment	
24	Noise – music Noise - voices	How intrusive the noise from music or voices is – can you hold a conversation without shouting? Not at all intrusive = can hold a conversation at normal volume to Highly intrusive = have to shout to be heard and strain to hear partner.
25	Hostility	Separate measures for male and female. How unfriendly and tense the crowd is. Seemingly aggressive.
26	Roughness and bumping	Separate measures for male and female. How rough the crowd is, bumping (whether hostile/aggressive or 'in fun'), etc.
27	Rowdiness	Separate measures for male and female. Yelling, screaming, cheering.
28	Swearing	Separate measures for male and female. Amount of swearing you can hear people use in conversation or calling out.
29	Intoxication*	Separate measures for male and female. See detailed description below.
30	Permissiveness and standard setting	Relates to venue staff/security - to what degree are people allowed to get away with bad behaviour, or is it in fact encouraged? What behavioural standard do they display – calm/aggressive. Very strict = venue staff actively challenge people about inappropriate behaviour/ remove them from the site or queue, etc – Anything goes = venue staff

		ignore/allow or even encourage inappropriate behaviour. N/A = there is no security or venue staff visible.
31	Sexual activity, contact	Level of overt sexual contact and sexualised behaviour. None = no overt sexual behaviour (includes kissing) during the observation period.
32	Public urination and/or vomiting	Evidence of public urination or vomiting. This could be seeing someone do these things or seeing/smelling evidence of it. None = no indication or sighting of anyone urinating or vomiting. Very high = many people publicly urinating and/or vomiting within the site.
33	Mood of the Space	Your impression of the mood of the site generally. Friendly – unfriendly.
34	How safe do you think you would feel here alone at night	Take a moment to consider how you would feel if you were standing alone in the space at that moment (for example if you were on a night out and were waiting for someone).
35	How do you rate your feelings of enjoyment of being in this space	Consider if you were not working, but were in the area for recreation. Is this somewhere you would enjoy being? Would you come back?
36	SE factors most influencing how you feel about the space	Choose one of the factors on the list that is the predominant factor in determining how you feel about the space in terms of safety and enjoyment.
37	Notes on SE	Any special notes about the social environment, including on your ratings.

	Street Population	
38	Age ratio	Best estimate of % in each age bracket – needs to add up to 100%
39	Gender ratio	Best estimate of % in each gender – needs to add up to 100%
40	Group size	Best estimate of % in each group size – needs to add up to 100%
41/42	Ethnicity / other	Best estimate of % in each ethnicity – needs to add up to 100%
43	What words would you use to describe people in the vicinity	Relates to the overall street population, not specific individuals. Choose as many words as you think apply.
44	Did a service provider visit the site	Did you see any of the services that are supposed to monitor the West End during the 1.5hr observation period?
45	Which service providers visited	Choose all that apply
46	Notes on Street Population	Any special notes about the street population, including on your ratings.

	Queues	

47	Were venues operating queues	This is for the whole observation period – not specific 15mins at beginning or end of session. Yes / No – choosing No will skip questions 48 – 51.
48	Each venue – questions relating to the management of the queue	To be completed once towards the end of the observation period, when other recording is being made. Your overall impression. If you tick 'Did not operate a queue for the whole period' for a venue, then no other boxes for that venue should be ticked.
49	Each venue - Behaviour of people in the queue	Completely ordered = standing in line, staying in their place, moving forward in an orderly way, through to Highly disordered = people jumping or swapping places in the queue, coming and going from the queue, etc. Answer only for those operating a queue at some point in the observation period. Leave blank for venues that did not operate a queue.
50	Each venue – Mood of people in the queue	Friendly = people chatting, no sign of hostility, to Unfriendly = people not interacting, some indication of hostility, getting annoyed at each other, etc. Answer only for those operating a queue at some point in the observation period. Leave blank for venues that did not operate a queue.
51	Notes on queues	Any special notes about queues, including on your ratings.

	Person Interactions	
52	Low-level aggression during the main observation period	This is the number of low-level aggressive incidents observed NOT within either of the 15 minute special observation times at the beginning and end of the observation session. Aggressive incidents observed during the early or late 15 min walk-through period should be recorded in those sections separately.
53	High-level aggression**	Number of incidents throughout the whole observation period including pushing, shoving, hitting, fighting where an intention to act aggressively was definitely present during the contact. Recorded at the end of the observation period. See below for further detail.

	Late Observations	To be completed after the walk-through in the last 15 mins.
54	Density of people in site	This is to do with the number of people in the site – but is separate from the crowding. Very low = few people in the space, lots of room to move. Very high = high number of people in the space, no room to move.
55	Pedestrian flow	How easy or difficult it was for you (and others) to move through the site. Clear pedestrian flow = no impediment, can walk-through and maintain a 'normal' walking pace. Movement, but slow = there is still movement in pedestrian flow, but walking pace needs to be adjusted to take account of impediments. Foot traffic flow on footpath has ceased = the footpath has reached virtual 'gridlock'.
56	Crowding of people in site	Your impression on the level of crowding based on low level contacts within the crowd including brushing past, very slight contact, unintended

		contacts where there is clearly no intention to cause harm or act aggressively.
57	Low level aggression	Number of low level-aggression incidents observed while you were walking through the site including, bumps, knocks, knocked bags, arguments where an intention to act aggressively was probably present at some point in the interaction.
58	Weather conditions	E.g. Fine, cloudy, warm, mild, cool, cold, raining
59	Were queues operating	Yes – at least one venue was operating a queue within that first 15 minute observational period. Selecting No will skip questions 60 - 62.
60	Venues operating queues	Select the venues operating a queue.
61	Flow of queues	How quickly or slowly the queues were moving. Moving continuously (even if moving slowly), stopping and starting (few people going in then no movement, then few more people going in, etc), at a standstill (the queue didn't move at all in that 15 minutes).
62	Queue size	For each venue operating a queue, the size of the queue to the nearest ten.

63	Observer Narrative	Short narrative of the night. Can be completed at the debrief session. Any incidents of highlevel aggression in particular should be noted (how it started, context, etc). Any other observations you feel were important but not covered by the survey.

**Recognising intoxication*

As part of this study you are asked to make a judgement on the level of intoxication of male and female persons in the site. This can be a difficult judgement to make from a distance, but is important for the study. The following is a definition of intoxicated under the Liquor Licensing Act 1997 (amended 5 December 2013) and suggested indicators of intoxication.

"A person is intoxicated if the person's speech, balance, co-ordination or behaviour is noticeably affected; and it is reasonable in the circumstances to believe that the affected speech, balance, co-ordination or behaviour is the result of the consumption of liquor or some other substance" (Liquor Licensing Act).

- Stumbling, swaying, staggering
- Falling into people or furniture
- Difficulty walking or standing
- Lack of coordination
- Difficulty opening/closing doors
- Glassy eyes and lack of focus
- Disorderly or offensive behaviour

- Confused
- Overly friendly
- Annoying to others
- Excessively loud, overly exuberant
- Drowsy or sleepy
- Uninhibited
- Aggressive, rude, threatening, physically violent or intimidating

****Examples of types of behaviours that should be documented as high-level aggression:***

- Someone bullying someone else.
- Someone touched, grabbed or fondled someone else when that person didn't want to be touched, fondled or grabbed.
- Someone challenged someone else, looking for a fight.
- Someone was angry or threatening to the world in general.
- Someone threatened a particular person (shouting, swearing, making threats).
- Two or more people became involved in a heated or serious argument.
- Someone pushed or grabbed someone else in an aggressive way.
- Someone slapped, punched or kicked someone else.
- Someone used a weapon on someone else.
- Two or more people became involved in a physical fight.
- One or more people because involved in what you would consider dangerous 'horseplay'.
- Someone threw something in anger at someone else.
- Someone hit an inanimate object in anger.
- Someone did something intended to cause trouble.
- Someone deliberately damages property.

(Reproduced from the Safer Bars training manual for observers – Copyright Kathryn Graham, Centre for Addiction and Mental Health 2000)

Monitoring the site for aggressive behaviour

The observations are intended to document what a watchful person can reasonably observe in a busy public space. You are not expected to note every little incident, but you are expected to remain focused and dedicated to the task.

Most of your observations will be visual as the noise levels in the public space and being positioned on the opposite side of the road (except for the periods when crowding and low-level aggression are being counted) will limit the amount you can hear. This means you will need to watch for body language indicating that a person may be getting upset, angry or anxious.

7.3. Appendix C: Tables of observer rating discrepancies

Table G1. Discrepancies between observer ratings by variable

Variable	No. of data pairs with high discrepancy between observers' ratings	Percentage of data for this variable with high discrepancy between observers' ratings
Site variables		
Lighting	4	12.5%
Cleanliness	2	6.25%
Upkeep	4	12.5%
Line of sight into venues	5	15.6%
Attractiveness of site	3	9.4%
Noise level (music)	1	3%
Noise level (voice)	4	12.5%
Density (early)	4	12.5%
Density (late)	0	0
Crowding (early)	2	6.25%
Crowding (late)	3	9.4%
Mood	1	3%
Social behavioural variables		
Hostility (male)	5	15.6%
Hostility (female)	3	9.4%
Roughness and bumping (male)	6	18.75%
Roughness and bumping (female)	2	6.25%
Rowdiness (male)	4	12.5%
Rowdiness (female)	4	12.5%
Swearing (male)	7	22%
Swearing (female)	6	18.75%
Sexual activity and contact	1	3%
Public urination/vomiting	1	3%
Intoxication (male)	0	0
Intoxication (female)	0	0
How safe do you think you would feel alone at night	8	25%

Table G2. Discrepancies between observer estimates by demographic variable

Demographic variable	No. of data pairs with high discrepancy between observers' ratings	Percentage of data for this variable with high discrepancy between observers' ratings
Age	32 out of 128 pairs	25%
Gender	8 out of 64 pairs	12.5%
Group size	45 out of 96 pairs	47%

7.4. Appendix D: Tables of observer ratings by site

Site characteristics

Table D1. Lighting observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Very good	7	7	3	5
Good	7	9	6	6
Average	2	0	7	5
Bad	0	0	0	0
Very bad	0	0	0	0
Total	*16*	*16*	*16*	*16*

Table D2. Cleanliness observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Very clean	1	4	0	0
Clean	6	10	1	0
Moderate	5	2	6	6
Dirty	4	0	6	10
Very dirty	0	0	3	0
Total	*16*	*16*	*16*	*16*

Table D3. Upkeep observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Very good	1	5	0	0
Good condition	12	10	2	2
Moderate	2	1	7	9
Slightly rundown	1	0	5	5
Very rundown	0	0	2	0
Total	*16*	*16*	*16*	*16*

Table D4. Lines of site /visibility into venues observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Clear visibility	9	1	1	3
Some visibility	7	10	3	1
	0	3	5	0
Limited visibility	0	2	7	10
No visibility	0	0	0	2
Total	*16*	*16*	*16*	*16*

Table D5. Attractiveness of site observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Very attractive	5	3	0	0
Somewhat attractive	8	12	1	0
Neutral	3	0	4	8
Somewhat unattractive	0	1	8	8
Very unattractive	0	0	3	0
Total	*16*	*16*	*16*	*16*

Table D6. Music noise observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Not at all intrusive	11	8	0	0
	5	5	1	0
Neutral	0	2	2	0
	0	1	8	7
Highly intrusive	0	0	5	9
Total	*16*	*16*	*16*	*16*

Table D7. Voice noise observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Not at all intrusive	7	6	1	0
	6	7	0	1
Neutral	2	3	4	2
	1	0	8	9
Highly intrusive	0	0	3	4
Total	*16*	*16*	*16*	*16*

Table D8. Density observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Very Low	14	14	0	0
Low	2	1	3	2
Moderate	0	1	7	1
High	0	0	5	11
Very high	0	0	1	2
Total	*16*	*16*	*16*	*16*

Table D9. Crowding observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	11	14	0	0
Low	5	2	7	2
Moderate	0	0	4	3
High	0	0	4	10
Very high	0	0	1	1
Total	*16*	*16*	*16*	*16*

Table D10. Mood of site observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Friendly	6	7	0	0
	7	6	1	0
Neutral	2	3	9	8
	1	0	3	8
Unfriendly	0	0	3	0
Total	*16*	*16*	*16*	*16*

Behaviour of people within sites

Table D11. Male hostility observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	3	7	0	0
Low	6	5	2	3
Moderate	5	4	10	8
High	2	0	4	4
Very high	0	0	0	1
Total	*16*	*16*	*16*	*16*

Table D12. Female hostility observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	3	7	0	0
Low	6	5	2	3
Moderate	5	4	10	8
High	2	0	4	4
Very high	0	0	0	1
Total	*16*	*16*	*16*	*16*

Table D13. Male roughness and bumping observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	9	11	2	1
Low	5	3	2	3
Moderate	1	1	9	5
High	1	1	3	7
Very high	0	0	0	0
Total	*16*	*16*	*16*	*16*

Table D14. Female roughness and bumping observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	12	12	6	2
Low	4	3	9	8
Moderate	0	1	1	6
High	0	0	0	0
Very high	0	0	0	0
Total	*16*	*16*	*16*	*16*

Table D15. Male rowdiness observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	4	6	0	0
Low	7	7	0	0
Moderate	3	1	7	5
High	2	2	8	11
Very high	0	0	1	0
Total	*16*	*16*	*16*	*16*

Table D16. Female rowdiness observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	10	8	0	1
Low	6	6	4	6
Moderate	0	2	8	8
High	0	0	4	1
Very high	0	0	0	0
Total	*16*	*16*	*16*	*16*

Table D17. Male swearing observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	1	3	0	0
Low	10	9	0	2
Moderate	4	3	8	8
High	0	1	6	4
Very high	1	0	2	2
Total	*16*	*16*	*16*	*16*

Table D18. Female swearing observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	2	4	0	0
Low	11	11	2	3
Moderate	1	0	6	9
High	2	1	7	3
Very high	0	0	1	1
Total	*16*	*16*	*16*	*16*

Table D19. Sexual activity observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	6	10	0	0
Low	10	6	9	9
Moderate	0	0	7	6
High	0	0	0	1
Very high	0	0	0	0
Total	*16*	*16*	*16*	*16*

Table D20. Public urination and vomiting observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	8	16	7	10
Low	4	0	5	4
Moderate	4	0	2	2
High	0	0	0	0
Very high	0	0	2	0
Total	*16*	*16*	*16*	*16*

Table D21. Male intoxication observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	0	0	0	0
Low	4	4	0	0
Moderate	8	7	1	1
High	4	4	13	12
Very high	0	1	2	3
Total	*16*	*16*	*16*	*16*

Table D22. Female intoxication observer ratings

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
None	0	2	0	0
Low	7	3	0	1
Moderate	6	9	2	2
High	3	2	11	11
Very high	0	0	3	2
Total	*16*	*16*	*16*	*16*

Perceptions of safety

Table D23. Perceptions of safety observer ratings*

	Site 1 Peel Street Small venues	Site 2 Waymouth Street Mixed venues	Site 3 Hindley/Morphett Medium and large venues	Site 4 Hindley/Rosina Medium and large venues
Very safe	2	4	0	0
	6	7	0	2
	2	1	2	1
Neutral	3	3	3	0
	2	1	5	10
	1	0	5	3
Very unsafe	0	0	1	0
Total	*16*	*16*	*16*	*16*

*All data – 7 point scale

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