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**Last Orders for Alcohol Related Violence:
exploring salient factors in the occurrence of
violent incidents in UK pubs and other late
night venues**

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Section 1: Preliminary Information

1.1. Research Team

Dr Winder led on the project; Dr Wesson, an experienced social psychologist, acted as the research co-ordinator. A small sample of the interviews were carried out by an additional researcher based in Scotland.

1.2. Researchers' Contact Details

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1.3. Research Ethics, Risk and Data Governance

All research was carried out in accordance with the British Psychological Society's Code of Ethics and Conduct and adhered to relevant BPS requirements in terms of ethics and data governance. Ethical approval for the project was obtained from the Psychology Ethics and Risk Committee (PERC) of the College of Business, Law and Social Sciences at Nottingham Trent University prior to commencement of the research (reference ethics ST06/15 & ST06/25).

PERC comprises trained Chartered Psychologists as well as external lay people; it operates according to the British Psychological Society's guidelines, both in terms of ethical principles and in safeguarding risks to researchers.

1.4. Project Title

Exploring salient factors in the occurrence of violent incidents in UK pubs and other late night venues

1.5. Overview of Research and Research Report

This research has been conducted in order to provide a considered and objective opinion on (i) issues relating to specific types of drinking containers that are commonly found in pubs and other late night venues, (ii) the possible interaction between drinking container and anti-social behaviour in such establishments and (iii) identifying salient factors leading to violent incidents in pubs and other late night venues in the UK.

This report is sub-divided into seven sections. Section 1 contains the preliminary information for this research study, including the research questions to be addressed by the research and the abstract (a summary of the research studies and findings); Section 2 comprises a literature review of relevant psychological literature, company data and any other relevant information such as accident/injury statistics, media reports and other literature as appropriate, together with a delineation of the research questions; Section 3 details the methodology used in this research (and includes information pertaining to ethical considerations); Section 4 outlines the results of the study; Section 5 reports the researchers' conclusions and outlines a number of recommendations; Section 6 contains a list of references and Section 7 contains the appendices.

1.6. Abstract

Research was conducted exploring the possible interaction between drinking containers and anti-social behaviour in pubs and other late night venues in the UK. The research further attempted to identify salient factors leading to violent incidents at these locations.

The research comprised two types of study; an interview study and three correlational surveys. For the interview study, a purposive sample of 50 individuals who had either been involved in an aggressive / violent altercation in a pub, bar or other late night drinking venue in the last 3 years, or who had first hand experience of the same, was recruited. Participants were recruited from a number of UK cities, including Birmingham, Wolverhampton, Sheffield, Nottingham and city locations in Scotland.

Five themes were identified from the interviews: rivalry; crowding; staff; glass and accidental injury and glass as a weapon. Each of these themes was considered in turn and examples from participants' transcripts were included in the results to allow the reader to assess the interpretations.

In all of the incidents described by participants alcohol was involved, although this is probably to be expected given that the research focused on late night drinking venues. Nevertheless, the majority of incidents described involved people who were drunk and hence it is probably fair to state that alcohol is a major factor linked to violent / aggressive incidents in pubs and other late night venues. However, other factors are necessary to trigger violent / aggressive behaviour, and three factors (or themes) were identified from the research interviews conducted for this study. These factors are outlined below; they include rivalry, crowding and staff. In addition, two further themes emerged from the interviews; these related to glass and accidental injury and glass as a weapon.

Key factors relating to the theme of *rivalry* were: sporting rivalry, local or territorial rivalry, and romantic rivalry. In the case of the first two factors, aggression evolved from social tensions created when different groups met, such as rival football supporters or groups of students and locals. However, there was a clear consensus that staff in venues are aware of these factors as potential sources of aggression and already take necessary steps to avoid conflict. The latter factor was much more unpredictable, and predicting where and when such aggression would occur is more problematic.

The key factors within the theme of *crowding* were: bad management practices, poor design, and frustration. Participants were critical of venues that allowed in more clients than they could comfortably accommodate, especially in venues where the layout meant bumping into people at peak times was inevitable. Such factors link into the issue of frustration, as overcrowding can lead to increased waiting times to get served, and invasion of personal space.

Criticism of how venues are managed continued into the theme of *staff*. Here participants highlighted the fact that it was not always the clientele of pubs that were fully to blame when aggressive incidents escalated, with door staff being criticised for a lack of intervention, or too much intervention, in that they were deemed to be excessively aggressive. However, staff themselves also commented that aggressive behaviour can arise when they try to enforce sensible serving practices.

The final two themes related to specifically to the use of glassware; *glass and accidental injury* and *glass as a weapon*. Participants noted that although many venues used glassware, accidental injury did occasionally arise from this. Many venues already self-manage where and when glass could and could not be used, although it is noted that more efficient house-keeping of venues would further reduce incidences of accidental injury.

There were two differing perspectives on the theme of *glass as a weapon* – it was perceived as either a deliberate action to cause harm, or it was an unintentional action in which glass was not intended as a weapon. Although severe, the deliberate action of using glass as a weapon was the exception to the norm and incidences were deemed rare, especially given the extensive use of glassware in the venues participants frequented. In the case of the latter a further noteworthy factor emerged. Glass was seen more often to be used as a threat rather than an actual weapon. However, this perceived threat was sometimes the catalyst for an aggressive response, thus blurring the boundaries between ‘perpetrator’ and ‘victim’ in the case of such incidents.

Data from the correlational surveys suggested that the most effective form of intervention in terms of reducing accidents and injuries would be a more stringent policy to bar aggressive individuals and prompt action by bouncers / bar staff to deal with potential trouble. Banning the use of glass vessels was not seen as a useful strategy in reducing aggression in pubs.

Additional qualitative comments from the largest survey (n = 165) were further analysed and three main distinct themes identified in the responses: Considering the causes of aggressive behaviour, Methods to address aggressive behaviour and the Impact of the drinking vessel.

Considering the causes of aggressive behaviour there were some suggestions put forward by respondents as to the causes of these. These include the amount of alcohol consumed, overcrowding in the pubs, televising sports events, attitudes, culture and acceptance of binge drinking, promotional offers and happy hours and the non-management of the queue for the bar.

Respondents also suggested methods that they feel would address these events. These include bar staff having greater powers and training to refuse service to intoxicated customers and extending licensing hours. However some respondents felt that extending licensing hours would not make any difference to the amount of aggression shown by individuals.

Regarding the vessels drinks are served in, there was a re-occurring theme that aggressive customers would probably use other objects in a conflict, if they did not have a glass in their hand at that time. Conversely to this, there was a theme suggesting that if glass was replaced with plastic then there would be less damage caused. However participants mostly followed this suggestion with the theory that if plastic vessels were only used, they would use another object (e.g. ashtray) in any aggressive conflict.

Overall therefore the analysis suggests that respondents feel there are many causes of aggressive behaviours and that glass vessels are not responsible. If they were replaced with plastic vessels, then the aggressors would replace them with another implement.

[Please see [section 5.3](#) for a list of recommendations following this research]

Section 2: Introduction and Literature Review

2.1. Anger and Aggression

Early definitions of aggression placed the concept almost exclusively in the realms of a physical attack on others (Geen, 1970; Baron, 1971); however, later theorists broadened and expanded this definition – for example, Deaux, Dane and Wrightsman (1993) defined aggression as ‘any behaviour directed toward harming another living being’ (p.254), thus moving the boundaries of what constitutes aggression to something beyond that of simply physical violence. Since this research is interested in behaviours and attitudes that may lead, ultimately, to tangible manifestations of aggression, but which may nonetheless start only with very subtle nuances of aggression, a more detailed framework for assessing aggression is required. Siann (1985) provides a thorough definition of what constitutes aggression and this is reproduced below.

‘Aggression (a) involves the intention to hurt or (b) emerge superior to others. (c) Does not necessarily involve physical injury (violence). (d) May or may not be regarded as being underpinned by different kinds of motives. (e) Aggression is not always negatively sanctioned but is more likely to be so when one of the participants does not enter willingly into the interaction. (f) Applying the label ‘aggressive’ in a pejorative manner to a person or persons is a matter of subjective judgment on the part of the *labeller*. (g) The labeller will be affected both by his or her own value system and by his perception of the extent to which the person or persons to whom the label is applied is acting provocatively or defensively’.

(Siann, 1985, p.14)

Of course, identifying and studying non-physical aggression is far more difficult than researching physical aggression as it cannot be observed directly (Cashdan, 1999) and therefore the assumption of aggression is far more subjective. However, the effects of aggression may result in more damage than obvious physical damage to a person or property and Burbank’s (1987) definition of aggression emphasises this, as she asserts that aggressive behaviour is ‘any action undertaken with the apparent intent of causing physical or psychological harm’ (p.72).

2.1.1. Sex Differences in Anger and Aggression

Researchers have consistently reported that the most established disparity between males and females in psychological research is in the domain of aggression. Numerous studies have promulgated this difference between males and females through literature reviews of relevant studies (e.g. Frodi, Macaulay & Thorne, 1977) or through meta-analyses of available data (for example, Maccoby & Jacklin, 1974; Hyde, 1984; Eagly & Steffen, 1986). However, later research indicated that the gender gap was not as great as was first thought (Hyde, 1990; Hyde & Linn, 1986). Nevertheless, this disparity still represents a significant difference between the sexes and it has been affirmed that it is of considerable practical importance (Eagly, 1994), having been highlighted across a range of situations and cultures (Maccoby & Jacklin, 1974). Of relevance to this research is the finding that, while women are not as aggressive as men, research has demonstrated that women do experience anger to the same extent as men (Frost & Averill, 1982; Averill, 1983).

Thus, while women may experience anger to the same intensity and with a similar frequency as men,

the salient differences between the sexes are in terms of how this anger is expressed (Lerner, 1985; Tavis, 1989). Men are thus more likely to express their anger (and to be *able* to express their anger) in the form of aggression, particularly, but not exclusively, through physical aggression, because it is more socially acceptable for men to do so. Women's anger many manifest in different ways (Thomas, 1993) and finding an adequate outlet may be quite problematic. Researchers have argued that, whilst both sexes experience the same degree, intensity and frequency of anger as an emotion, women do not generally display overt aggression because they are prevented, or at least deterred, from doing so by societal constraints and pressures. Men have learnt that it is okay to express their anger through aggression and physical violence, and that this will help to resolve their frustration. There are also plenty of role models available for men to confirm that the physical expression of anger is a legitimate, even 'macho', way of expressing anger and frustration. A study by Dietz (1998) utilising the method of content analysis (defined by Holsti (1969, p.14) as a "technique for making inferences by objectively and systematically identifying specified characteristics of messages") examined the portrayal of violence and gender roles in a sample of thirty-three popular video games. The findings of the study were that violence was a central theme in the majority of the games, and was the requisite strategy that the player needed to employ to 'win' in over 80% of the games. While 27% of the games included, what Dietz termed, 'socially acceptable' aggression, there were a key focus on socially unacceptable aggression, and, for example, approximately half of the games in the sample required violence to be directed specifically at other people.

Campbell and Muncer (1987) explored people's attitudes to dealing with aggression in their own lives through a series of interviews with couples. The researchers suggested that the sexes perceived and experienced anger and aggression in very different ways; for women, aggression was generally perceived as a negative, and (in the eyes of the world) a potentially irrational act which could even be indicative of mental instability. This pressure not to act aggressively appeared to leave women frustrated by their lack of control over a situation in which they feel angry, but do not feel that able to manage their anger through a display of aggression.

Men have significantly less societal pressure on them in terms of displaying aggression – for men, it is perceived as a legitimate and normal response in some situations, and an acceptable means of managing the emotion of anger. Rather than feeling expected to justify their aggressive behaviour (as the female participants did), males would typically state that it was a normal reaction to the particular predicament they were in.

Turning now from aggression, the next section of this report focuses on alcohol and drinking guidelines, whilst section 2.3 (and onwards) explores the links between alcohol and aggression.

2.2. Alcohol

Alcohol is a generic term for the chemical *ethanol*; this is produced by the fermentation of products such barley, hops, or grapes. Ethanol has a depressive effect on a number of areas of the brain and will progressively cause the following impairments as more alcohol is consumed: (i) Disinhibition of normal social functioning (excessive talking, showing off); (ii) Loss of memory; (iii) Confusion and disorientation, with lack of co-ordination in even basic movements; (iv) Progressive lethargy; (v) Coma, and ultimately a shutdown of the respiratory centres and death (emedicine.com, 2006).

Thus, "a person is said to suffer from alcohol intoxication when the quantity of alcohol the person

consumes exceeds the individual's tolerance for alcohol and produces behavioral or physical abnormalities. In other words, the person's mental and physical abilities are impaired. The person can't function and certainly should not be operating a motor vehicle" (emmedicine.com, 2006).

An average person is able to metabolise one standard unit of alcohol every hour. A standard unit of alcohol comprises 10g fluid; this represented 10 ounces (300cc) of standard beer or lager (at 5% alcohol content); 3-4 ounces of wine (at 12% alcohol content) or 1 ounce of spirits (at 40% alcohol content or 80% proof). Approximately 20% of an alcoholic drink will be absorbed into the bloodstream directly from the stomach, and 80% from the small intestine. Consequently, the longer the alcohol remains in the stomach, the slower it will be absorbed and the lower will be the peak in the blood alcohol concentration (BAC). Since having food in one's stomach slows the emptying of the stomach's contents into the small intestine, the longer it will take to absorb any alcohol that has been imbibed, and the lower the peak BAC overall. The body metabolises alcohol in several ways: our livers metabolise about 90% of the ethanol - some of it is used as energy and some stored as fat, depending on the calorie intake of the individual; a small amount is excreted, unchanged, through breath (approximately 5%) and urine (another 5%) (from emedicine.com, 2006).

2.2.1. Drinking Guidelines

Pre-1995, the recommended guidelines were that men should drink less than 21 units per week and that women should drink less than 14 units per week (since ethanol is highly soluble in water and is absorbed much less in fat, it tends to distribute itself mostly in tissues rich in water (e.g. muscle) rather than those rich in fat. Given that women's bodies, on average, will contain more fat and less water than men's, and, in addition, they are likely to weight less overall, women will reach higher BAC levels than men even when both intake the same amount of alcohol). In 1995, the government published their report on 'Sensible Drinking' in which the advice was changed to reflect drinking on a daily basis. New guidelines were 3-4 units for men and 2-3 units for women. This change to a daily rate was intended to 'draw people's attention to limits for daily drinking by identifying a safe level for moderate, regular drinking and help people to decide how much to drink on a single occasion' and 'avoid drunkenness'(Alcohol Concern, 2005).

2.3. Alcohol, Anger and Aggression

Meta-analyses of experimental literature relating to alcohol intoxication and aggressive responses conclude that alcohol leads to more verbal and physical aggression (Bushman & Cooper, 1990; Bushman, 1993; 1996). The relationship between alcohol and aggression has received much empirical and theoretical attention, to the extent that over 50 explanations have been identified within the literature to account for this relationship (Graham, Wells, & West, 1997). Graham, Wells, and West (2000) gather these explanations under four general 'causes': the effects of alcohol; the effects of the drinking environment; personality, attitudes or other expectations of the drinker and societal attitudes, expectations, and values.

A number of biological factors have been identified in the aetiology of aggression, which in turn may interact with the effects of alcohol. Aggression has been associated with changes in levels of monoamine neurotransmitters, such as serotonin, dopamine and norepinephrine. For instance, serotonin is thought to function as a behavioral inhibitor, with decreased serotonin activity being associated with increased aggressiveness (Virkkunen & Linnoila, 1996) as well as with early-onset

alcoholism among men (Higley & Linnoila, 1997). Serotonin may therefore be a mediatory factor in the association between alcohol and aggression (Boles & Miotto, 2003). Although the studies are inconclusive, the alcohol-aggression link may be mediated by chemical messengers in addition to serotonin, such as dopamine and norepinephrine, both of which are involved in behavioural regulation, and accordingly moderate aggressive behaviour (Berman & Coccaro, 1998; Coccaro & Kavoussi, 1996).

The hormone testosterone, responsible for the development of male primary and secondary sexual characteristics, has also been linked to aggression, with higher concentrations of testosterone being found in violent offenders (Banks & Dabbs, 1996; Brooks & Reddon, 1996). As low, but acute, doses of alcohol can also lead to a temporary increase in aggressive behaviour (Reiss & Roth, 1993), the link between testosterone levels and aggressive behaviour may go some way in explaining the higher incidence of alcohol-related aggression amongst young males. This age group tends to have higher levels of testosterone compared to the rest of the population. Certainly, men who are aggressive at this age become less aggressive as they reach their forties (Robbins, 1996), an age which sees simultaneous decreases in testosterone levels and increases in serotonin levels (Brown & Linnoila, 1990).

Alcohol consumption may promote aggression by disrupting normal brain functioning. Alcohol can disinhibit fear, via anxiolytic action, and can also increase pain perception (Lavine, 1997). By reducing inhibitions, alcohol can impair attention to behavioural cues and to the consequences of one's actions. The disinhibition hypothesis therefore suggests that alcohol weakens the brain mechanisms which normally restrain impulsive behaviours, such as inappropriate aggression (Gustafson, 1994). For example, alcohol affects the GABA-benzodiazepine receptor complex (Miczek, Weerts & Debold, 1993; Miczek, DeBold, Van Erp & Tornatzky, 1997). This has the potential to lead to aggressive behaviour by making a drinker less anxious about the outcome of that behaviour (Pihl, Peterson, & Lau, 1993), can lead to a drinker misjudging social cues, and therefore over-reacting to perceived threats (Miczek, et al., 1997). The cognitive impairment induced by alcohol (Hindmarch, Kerr, & Sherwood, 1991; Peterson, Rothfleisch, Zelazomay, & Pihl, 1990) and can also reduce a drinker's ability to deal with potentially aggressive behaviours in a social situation by, for example, decreasing the capacity to plan actions in response to threatening situations (Boles & Miotto, 2003). Hence, excessive alcohol consumption can lead to overconfidence, impulsive or reckless behaviour, a lack of awareness and aggression (Engineer, Phillips, Thompson, & Nicholls, 2003).

2.3.1 Alcohol and Mood

Since alcohol affects the neurotransmitters in our brains, it is perhaps not surprising that it may affect a person's mood. The consumption of alcohol is generally considered to bring about an elevation in mood, with irritability and frustration most likely to occur in those who are trying to stop drinking or who are unable to purchase more drinks (see APAS, 2006). While the BCS demonstrates that there is a link between alcohol and crime, there is considerable debate as to the role alcohol may play, and great difficulties in proving causation per se. APAS (2006) state that "although it would seem reasonable to conclude that the increase in "alcohol fuelled" violence in cities after pub closing is due to the effects of alcohol it has been argued that it may be more to do with the psychological and/or social conditioning i.e. when someone drinks they believe it makes them violent and they are subconsciously fulfilling this role when they are, and sometimes only when they think they are, under

the influence of alcohol". The latter idea is important when considering moves to enforce blanket bans as a means of reducing violent incidents in drinking venues.

2.3.2. Alcohol and Behaviour

The role of alcohol in aggressive behaviour is multi-faceted (Graham, Leonard, Room, Wild, Pihl, Bois, & Single, 1998; Homel et al., 2001). Alcohol operates in environmental, social, situational, and cultural contexts that influence the potential for aggressive behaviour. Additionally, alcohol affects individuals in different ways, for instance based on their gender, their physiology, and other personal and cultural factors (Boles & Miooto, 2003). However, alcohol contributes to the occurrence of aggressive/violent behaviour rather than being the cause of it (McCord, 1993). Furthermore, alcohol does not increase problems of aggression in neutral situations, but does in situations of provocation, threat or frustration, especially when heavy drinking is involved (IAS, 2006a).

2.3.3. Positive Effects of Alcohol

While a majority of research focuses on the negative aspects of, usually excessive, alcohol consumption, drinking in moderation can actually have beneficial effects. Baumbaicker (1985) suggests that the psychological benefits of moderate alcohol consumption can include reductions in stress, anxiety and tension. Moderate drinkers may also feel less self-conscious, thus making them feel more sociable, talkative, and lively in social situations. Moderate alcohol consumption is also reported to have health benefits. For instance, not only can low levels of alcohol consumption decrease the risk of coronary artery disease in men and women (NIAAA, 1992), but there is growing evidence to suggest that moderate drinkers live longer than those who either abstain or drink heavily (e.g. Gaziano, Gaziano, Glynn, Sesso, Ajani, Stampfer, Manson, Hennekens, & Buring, 2000).

2.3.4. Alcohol, Law and Crime

Most alcohol use occurs among people who are not violent. If alcohol simply led to aggressive behaviour in individuals, then all places where alcohol is available should have similar incidences of violence (Boles & Miooto, 2003). In reality, most drinking places are rarely the scenes of violent behaviour. 15 million adults in the UK regularly drink in bars, pubs and restaurant every week without encountering alcohol-related aggression (British Beer and Pub Association, 2006).

However, in many violent incidents, alcohol has been found to be present in the offender, victim, or both (Murdoch, Pihl, & Ross, 1990). In 2001 and 2002, 47% of all victims of violence described their attacker as being under the influence of alcohol at the time (Home Office, 2002) and, for example, one third of incidents of domestic or partner violence occur when the perpetrator has been drinking (Cabinet Office Strategy Unit Alcohol Project, 2003).

The British Crime Survey defines 'alcohol-related' incidents according to two measures (Budd, 2003). The first measure is the self-report of the victim, and whether they perceived the offender to be under the influence of alcohol at the time of the incident. However, Engineer et al. (2003) postulate that that the distinction between offender and victim in assaults is often unclear, finding that the boundaries between 'risking' 'offending' and becoming a 'victim' while drunk are easily crossed. The second measure refers to the location in which the incident occurred: those occurring in or around pubs and clubs are classified as alcohol-related. The British Crime Survey (BCS) of 2000 estimates that there were around 1.2 million incidents of alcohol-related violence occurring in 1999. Although this figure is of concern to us, the proportion of adults in England and Wales who were actually victims of such an

incident is small (2%). Furthermore, BCS findings from the latter half of the 1990s suggest that the rate of alcohol-related violence is falling, down 21% between 1995 and 1997, and remaining stable from 1997 to 1999 (Budd, 2003). This trend is continuing into the 21st century, reflecting an overall reduction in violent crime. Coleman, Hird and Povey (2006) note that although almost half of all victims in the 2004/5 BCS thought their attacker was under the influence of alcohol - a proportion that has been stable for a number of years, despite being an increase on figures from 1995 – the actual number of alcohol-related offences has dropped by approximately one third since 1995.

Certain groups are also more at risk of being involved in an incident of alcohol-related aggression than others. Budd (2003) summarises the risk factors as follows: being male and aged 16 to 29; being single; being unemployed; visiting a pub frequently; visiting a night club frequently; high levels of alcohol consumption. The main motivation behind assaults has been reported as the perpetrator being annoyed or upset by someone, revenge, or self-defence (Budd & Sharp, 2005).

2.3.5. Alcohol and Aggression in the Night-time Economy

Alcohol-related aggression tends to differ from non-alcohol-related aggression, with the former being more likely to occur in public places rather than in private, and to involve males, strangers and more than two people (IAS, 2006a). Indeed, whilst alcohol-related crime refers to a wide range of criminal offences, the term is particularly related to public disorder in the context of the night-time economy. The 'night-time economy' refers primarily to the entertainment areas of towns and cities, frequently clustered in the centres, and consisting of bars, pubs, clubs, and fast-food outlets (Finney, 2004). People who visit these areas are much more likely to be a victim of alcohol-related aggression than those who do not (Povey & Allen, 2003). The 2001/2 BCS found that 21% of all aggressive incidents occur in or around a pub or club, with 47% of offenders being under the influence of alcohol, making the entertainment areas of town and city centres the most common location for violent offending (Allen, Nicholas, Salisbury & Wood, 2003). A majority of hotspots for aggression and public disorder are located in the entertainment areas of towns and cities as these have high concentrations of licensed premises. Increases in the number of licensed premises, and the capacity of these premises, is often accompanied by rises in assaults and public disorder (IAS, 2006a). Violence in the night-time economy is concentrated on weekend nights (Allen et al., 2003; Marsh & Kibby, 1992). The 2001/2 BCS found that 44% of violent incidents occurred between 6pm Friday and 6am Monday (Allen et al., 2003). These incidences coincide with busy trading hours in the night-time economy and closing times of licensed premises.

2.3.6. Alcohol, Physical Aggression and Injury

Alcohol-related aggression is more strongly associated with physical than with verbal aggression (Wells, Graham & West, 2000). The most common type of force in alcohol-related aggression stems from the use of parts of the body, such as fists or feet (Budd, 2003; Hutchinson, Magennis, Shepherd, & Brown, 1998). Combined findings from the British Crime Surveys of 1998 and 2000 showed that two-thirds of incidents involving strangers, and over half involving acquaintances, involved punching or slapping. Grabbing and pushing was also a common use of force in a substantial proportion of incidents, followed by kicking to a lesser extent. (Budd, 2003). Weapons are sometimes involved in incidences of alcohol-related aggression. In one fifth of reported incidents taken from the 1998 and 2000 British Crime Surveys, the attacker was in possession of a weapon which they threatened to use. Drinking glasses and glass bottles were reported as the most frequently used weapon (i.e.

extraneous tool) (Budd, 2003; Shepherd, 1994b): out of 0.8% of incidents involving the use of a weapon, 0.3% involved the threat or use of a bottle and 0.2% involved threat or use of glass. It is important however to distinguish between the use of a weapon as a threat or as an actual weapon, given that the British Crime Surveys findings indicate that weapons are often used as a threat, rather than as an actual type of force. Notably, none of the incidents reported in the BCS (1999) involved a victim actually being hit with a weapon. Furthermore most assaults, whether involving the use of weapons or not, typically carry little or no injury (Maguire & Nettleton, 2003).

When injuries do occur, they are predominantly facial (Finney, 2004). 85% of men and women taken to A&E with assault-related injuries during weekend night had some form of facial injury (Shepherd & Brickley, 1996). Alcohol is associated with more serious facial injuries, including those that occur as a result of an assault. A quarter of facial injuries are directly linked to alcohol consumption, with the most common cause of these being as a result of falls (40%), followed by assaults (25%), (Hutchinson, Magennis, Shepherd, & Brown, 1998). Glasses or bottles are reported to have been used in 8% of assaults that result in facial injuries, with 62% of assaults with a glass or bottle occurring in bars (Hutchinson et al., 1998). However, research conducted by the SIRC (2002) indicates that A&E consultants vary greatly in their estimates of alcohol-related injuries. Although the typical estimate of alcohol-related injuries is 70%-80%, this is frequently a subjective judgement, and consultants rarely have objective data to back these figures up. Where objective data is available, the figure is substantially lower.

Bars and pubs do seem to be hotspots for incidences of aggression. The Portman Group (1998) (MCM research – conflict and violence in pubs) reported that 36% of pubs experience troublesome arguments on a monthly basis, with fights breaking out in 6% of pubs every week. These incidences of aggression were not confined to pub clientele and bar staff were in no way immune, with 5% of pub managers on average being assaulted every month. However, there is some evidence to suggest that bar staff, including bouncers, may contribute to levels of aggression within pubs. Graham, Bernards, Osgood, Homel, and Purcell (2005) identify two types of staff aggressiveness: that which is directed at non-aggressive clientele, through the enforcement of restrictions or ejection techniques and which is likely to stem from employing aggressive staff members; and that which is used as a response to, or a way of controlling, high levels of clientele aggression.

While there is no doubt that alcohol contributes to anti-social behaviour in the night-time economy, the true scale of the problem is unclear. We are bombarded with a wealth of facts and figures highlighting the extent of alcohol-related aggression in today's society, statistics that enter the public consciousness through the media reporting of such. However, as Coussins (2002) states, 'we cannot be sure that everyone is defining and measuring the problem in the same way. With no agreed protocol, it could be that the statistics quoted are misleading and that comparisons, whether between areas and/or across time, are invalid. This could mean that many of today's attempts to measure the effectiveness of different crime-reduction initiatives are fundamentally flawed'(p. 5).

For example, the 2003 Crime and Justice Survey reported that 5% of assaults without injury and 10% of assaults with injury were committed while the offender was drunk. The British Crime Survey, on the other hand, which collects data from the victims of crime, suggests that around half of assaults are alcohol-related. This disparity may be accounted for due to the fact that the Crime and Justice Survey included assaults against children in their data (IAS, 2006a). When this data is excluded, 30% of

assaults reported in the Crime and Justice Survey were alcohol-related. SIRC (2002) noted that there was also a disparity between, and within, sources of data (e.g. the definition of 'alcohol-related'), which may have skewed the results. For instance, police officers differ widely in what they term as 'alcohol-related', with some believing the term should only be used if 'relevant' to the offence, others applying it to all crimes where alcohol was consumed by either perpetrator or victim, and still others applying it only when an offence is committed by someone who is drunk. There is also little agreement in hospitals' Accident and Emergency departments as to what constitutes alcohol-related injuries: some departments insist it can only be established via objective measures of alcohol consumption, others look at the location where the injury occurred (e.g. classing an injury as 'alcohol-related' if it occurred in or near licensed premises), whilst other departments dismissed such approaches as 'quite mad', presumably because of the inherent error in the latter two methods of defining 'alcohol related'.

Breakdown of data for alcohol-related violent incidents in the UK

The following data is calculated from Budd (2003) report on the BCS (2000) and it involves estimating societal figures from the population sample surveyed (19,411).

- 1) There were: 1.2 million incidents of alcohol-related violence in the UK.
 - 1a) Approximately $\frac{1}{4}$ of these were domestic violence and a further 5% were muggings/theft.
- 2) Thus, approximately 792,000 were categorised as stranger / acquaintance alcohol-related violence (and which did not fit into the above categories).
- 3) Of these, approximately half of these incidents took place in or around pubs, clubs or discos (396,000).
 - 3a) Of these 396,000 incidents, approximately half (198,000) resulted in an injury.
 - 3b) In a fifth of these 396,000 incidents, the perpetrator had a weapon which they threatened to use (79,200 incidents).

2.3.7. Society and Drinking Behaviours

In Britain, as with many other northern European countries, there exists a drinking culture consisting of heavy sessional drinking and drinking to get drunk, which has been traced back at least as far as the Vikings (IAS, 2006b). This is in contrast to Mediterranean and Southern European drinking cultures, which is more civilised and relaxed (Measham & Brain, 2005). The main differences between the drinking cultures are the types of beverage consumed, and drinking patterns, both of which are closely linked. Wine is the dominant alcoholic beverage consumed in Mediterranean cultures, where it is a regular, daily accompaniment to meals. 80% of alcohol in Southern European cultures occurs at meal times, compared to 50% in Britain (IAS, 2006b). In Northern European cultures beer and spirits dominate, and although drinking here is perhaps less frequent it is much heavier when it does occur, and hence alcohol consumption as a whole is highest in Northern European countries (IAS, 2006b). These cultural differences in drinking patterns clearly contribute to

differences in drinking behaviours. In the Mediterranean, the drinking culture means that alcohol is often consumed within a family setting, around a table at mealtimes, where it is unlikely that antisocial behaviour as a result of alcohol intoxication would be tolerated. By contrast, in Northern European countries, where drunken behaviour is much more tolerated, and even expected, alcohol is more frequently consumed away from a family setting, and hence away from the table and not in conjunction with food. Indeed, this may well be the point of the drinking culture here – as an escape from the family. As the IAS (2006b) note, “In Britain, the pattern developed of drinking being very pub-centred – pubs being places where predominantly men went to drink beer as an activity in its own right, often away from their families and with pub visiting and hence drinking tending to be concentrated around evenings and weekends”.

Excessive alcohol consumption away from the family home is not limited to men seeking an escape from family life: University students have been found to consume more alcohol in bars and clubs during term-time, when they are away from home, than during vacations, when they return home (Demers, Kairouz, Adalf, Gliksman, Newton-Taylor, & Marchand, 2002); Teenagers are more likely to get drunk in locations where adult supervision is unlikely, such as licensed venues, than in locations where adult supervision is likely, such as at home (Forsyth & Barnard, 2000); Young people tend to drink less when with family than with their peers (Demers et al., 2002; Mayer, Forster, Murray & Wagenaar, 1998).

Societal rules contribute to the occurrence of alcohol-related aggression. People may use alcohol as a way of excusing their behaviour, especially behaviour normally viewed as being socially unacceptable, or use alcohol as an excuse to commit an offence (McCord, 1993; Sumner & Parker, 1994). There is also a great deal of variation between cultures in the extent to which alcohol-related aggression occurs, with some cultures showing little or no evidence of increases in aggression as a result of alcohol consumption (MacAndrew & Edgerton, 1969). Cultural expectations about drinking also seem to underpin these differences, with a higher rate of alcohol-related aggression being seen in cultures that view drinking occasions as “time out” (MacAndrew & Edgerton, 1969).

The drinking environment is a key factor that can contribute to a higher likelihood of aggression. Violent incidents in public drinking settings are exacerbated by noisiness, crowding, poorly maintained or unclean conditions, dim lighting, poor bar layout and traffic flow, inadequate seating and door policy, and irresponsible serving practices (Engineer et al., 2003; Graham, LaRocque, Yetman, Ross, & Guistra, 1980; Homel, McIlwain & Carbolth, 2001; IAS, 2006a). For example, crowded conditions can lead to inefficient service resulting in frustration and impatience, as well as increased physical contact. Given that some people have a strong sense of their personal space, such crowded conditions can make them more easily provoked (Engineer et al., 2003; Macintyre & Homel, 1997). The availability of food has also been associated with a reduction in aggressive behaviour (Graham, 1985). However, many establishments stop serving food mid-evening well before the busiest trading hours and closing times of licensed premises commence, times when the highest incidences of alcohol-related aggression occur (Allen et al., 2003). Additionally, with the abolishment of fixed closing times, people are going out later and so may not start their night out until well after food has stopped being served.

Many of these situational factors are aspects of drinking situations that would be expected to increase the likelihood of aggressive behaviour regardless of any effects of alcohol (Graham et al., 2000). It would seem that some of these environmental factors play a specific role in certain incidences of

alcohol-related aggression rather than a general role, with other factors such as certain effects of alcohol and certain attributes of the environment being of more central importance (Graham et al., 2000). However, Graham et al. (2000) suggest that explanations relating to the effects of alcohol are more relevant for severe incidences of physical aggression, whilst environmental explanations tend to be more relevant to general incidences of physical aggression.

2.3.8. Alcohol-related Aggression and Location/Setting

The setting in which one drinks, and not just the amount of alcohol consumed is clearly important. While findings from the British Crime Survey of 2000 indicated that regular drinkers (i.e. those who on average drank on three or four days a week), were involved in more incidences of alcohol-related aggression than those who drank infrequently (on average less than once a month), frequent drinkers (those who drank on an almost daily basis) had below average rates of alcohol-related aggression (Budd, 2003). It is suggested that this may be because these people, despite being frequent drinkers, are moderate drinkers, perhaps consuming alcohol at home and/or with a meal.

Thus, alcohol-related aggression is more likely to occur away from the home, in situations where excessive drinking is accepted and expected, and where norms relating to socially appropriate behaviour are less likely to be enforced (Wells, Graham, Speechly, & Koval, 2005). For example, Wells et al. (2005) found that young people drinking away from home were far more likely to report incidences of alcohol-related aggression, as were those who drank with peers rather than family. The greatest risk of incidences of alcohol-related aggression for males was amongst those who drank frequently outside the home.

There does seem to be a tolerance or expectation of alcohol-related aggression in certain venues. A survey of young adults found that they are aware of known trouble spots in their town/city, places where they expect there to be fighting (Engineer et al., 2003). Such expectations mean that people may behave in certain ways within these settings in order to fit in or to advance socially, or may purposely seek out such venues in order to release frustration or anger in a setting deemed to be permissive of such acts (Raistrick, Hodgson, & Ritson, 1999). An observational study of alcohol-related aggression in bars found that a permissive environment and the expectation that aggressive behaviour will be tolerated were key factors in most incidences observed (Graham et al., 2000).

Certain drinking venues are conducive to aggression in that they foster a 'macho' atmosphere. In some drinking situations or settings, such as "fighting bars" and "sporting events", aggression is expected and socially accepted (Roth, 1994, cited in Boles & Miotto, 2003). Graham et al. (2000) suggest that the presence of prominent symbols of aggression, such as large screen TVs showing violent sports, or indeed dedicated "sports bars", may set up these expectations that aggressive behaviour is expected and will be tolerated. Expectations about the environment in which one is drinking, and the acceptance of aggressive behaviour therein, are more relevant to male-only incidences than mixed-sex incidences (Graham et al., 2000). Macho settings bring with them macho explanations for people's aggressive behaviour: macho concerns with a focus on male honour and face-saving (Graham et al., 2000).

Drinking is also heavier in groups, especially amongst men. Aitken (1985) observed that groups of males drink more heavily than groups of females, who in turn drink more heavily than females in mixed company. Some women admit to the same drinking patterns and behaviour as men,

associating this with a 'ladette' culture (Engineer et al., 2003). The 'ladette' culture can be traced to a culture of binge-drinking that has emerged in young adults in recent years, and which is part of a wider drinking culture in the UK (Engineer, Phillips, Thompson, & Nicholls, 2003).

2.3.9. Binge Drinking

In Britain, more so than many other Northern European countries, there is a growing 'culture of intoxication', with young people adopting a hedonistic approach to alcohol consumption that represents their search for 'time out' where they seek a lack of inhibition and control (Measham & Brain, 2005). This need has been responded to by the UK alcohol industry, in terms of producers and drinking establishments, with the use of promotions such as 'happy hours' and 'speed-drinking bars', where unlimited alcohol is offered in exchange for an entrance fee, and well as the growing prevalence of venues offering 'shots' 'aftershoots' or 'shooters', drinks that are designed for rapid consumption – and rapid intoxication. 'Shots' in particular are becoming an integral part of a weekend night out, with the main motivation behind their increasing popularity being to get drunk, to get drunk quicker, and to treat friends (Measham & Brain, 2005).

While there is no universally agreed definition of binge drinking (Murgraff, Parrott, & Bennett, 1999), Engineer et al. (2003) state that "a 'binge' can be understood as a pattern of drinking that involves high consumption levels over a short time period" (p.3). In addition, Alcohol Concern report that the defining guidelines of binge drinking are that it is drinking that is 'twice the daily recommended number of units in one session – i.e. 8 units for a man and 6 units for a woman' (Alcohol Concern, 2005).

Young adults, aged between 18 and 24 years, are more likely to binge drink than older adults (Moore, Smith, & Catford, 1994), with overall alcohol consumption and binge-drinking increasing among young adults in the UK (Harnett, Thom, Herring, & Kelly, 2000; Webb, Ashton, Kelly, & Kamali, 1996). 39% of 18-24-year-olds can be classified as 'binge-drinkers', with men being more likely to binge-drink than women (Richardson & Budd, 2003). These young adults enjoy having a drink, and enjoy being drunk, with this being an integral part of their social scene (Engineer et al., 2003). This is linked to a broader attitudinal change in terms of what is a culturally acceptable, and indeed desirable, state of intoxication (Measham & Brain, 2005). In support of this attitudinal change, Measham and Brain (2005) cite the 2004 UK's National Alcohol Strategy Unit statement that 'for many people in England today, going out to get drunk has become part of "a good night out"...Drinking is often viewed as an end to itself, and public drunkenness is socially accepted, if not expected' (p.28).

Conforming to the expectations of one's peer group is a major impetus in promoting excessive drinking, with binge-drinking being perceived as the 'done thing' amongst this age group (Engineer et al., 2003). More general societal rules filter down to these young people, such as the notion that being drunk excuses certain behaviours and mitigates individual responsibility.

Unfortunately, fights after consuming alcohol are seen as a given by many young people (Engineer et al., 2003), with this being more common among frequent drinkers, especially binge-drinkers (Richardson & Budd, 2003; Wells et al., 2005). 60% of binge-drinkers admitted involvement in alcohol-related criminal or disorderly behaviour, compared to 25% of regular drinkers, with young males being more likely to be involved, and 69% of this group reporting such behaviour (Richardson & Budd, 2003). Engineer et al. (2003) identified a number of factors relating to the expectation that

fight follow on from alcohol consumption. Confrontations may be hard to avoid when people are drunk and with or around others who are determined to fight; in addition, the effects of alcohol may influence people's judgements (as they may become more aggressive, reckless, overconfident, or have false or exaggerated perceptions of violence). Fights can be sparked by a perceived need to stand up for oneself, or those close to you. Engineer et al. (2003) found that many young people were alert to the possibility of confrontation, to such an extent that some were even prepared to pre-empt fights from perceived necessity to avoid being victimised. Social identities sometimes become salient, which can influence expectations about where to expect trouble, and from whom, which can aggravate confrontational situations. For instance, drunken violence is often blamed on certain social groups. Fights are also more common on streets after closing time, in known trouble spots, and crowded venues. These factors are not mutually exclusive and an interaction between certain factors is evident. For example, barging into someone in a crowded venue (drinking environment), combined with aggression (effects of alcohol), and the perceived obligation to stand up for oneself (social norms), encourages fighting.

Although binge-drinking and its associated problems are prevalent in the public's moral consciousness today, such concerns are not new. As Measham and Brain (2005) note, 'Historically, public concerns about excessive alcohol consumption and the related 'binge and brawl' phenomenon are nothing new. From the relationship between gin and 'debauchery' in 18th-century England to the apparent materialization of the late 1980s 'lager lout', the link between drink, drunkenness and disorder has been a recurring concern' (p. 263).

Indeed, a report by the European Commission, published in 2006, epitomises the panic about binge drinking; however, it is questionable as to whether or not the panic (and ensuing headlines) are disproportionate to the scale of the problem. The report highlights the fact that overall drinking levels in the UK are on a par with the rest of the EU – what happens is that more of the drinking is done in bursts (and by this, it cites 5 drinks a night = binge drinking). Although the report states that 115,000 deaths per year are due to alcohol, this is, in fact, only 2.5% of all deaths in the EU per year. Whilst it is important to warn people of the problem involved, it is also important not to over-estimate the dangers.

2.3.10. Happy Hours (and other special drinks offers)

One problem which has been related to excessive alcohol consumption is the practice of 'Happy Hours' and other reduced price drinking offers. Despite national initiatives on behalf of the drinks industry to avoid such initiatives, they remain relatively widespread. A recent survey by Alcohol Concern (2006) reported that Happy Hours and other drinks offers were still common throughout the UK. Srabani Sen, Alcohol Concern's Chief Executive, made the following statement with regard to this issue, and the conclusions of their research in the area: "Our survey has barely scratched the surface of the problem, yet we have easily found irresponsible drinks promotions in major cities across the country, including 2-for-1 offers, and shots of spirits on sale for as little as fifty pence. We are keen to work with the drinks trade in partnership to put an end to these irresponsible promotions". The survey, which was conducted at nine cities in the UK, reported the following 'happy hour' drinks promotions: "Birmingham – Snobs nightclub – shots 50p until midnight; London – the Boardwalk – 2-for-1 on wine, spirits and cocktails; Leeds – Flares – £1.25 for pints of lager, shots or bottled drinks; Wolverhampton – the Fox and Goose – doubles from £1.54; Coventry – the Colosseum – all drinks for 50p; Brighton – Casablanca Jazz Club – tequila for £1; Sheffield – the Hare and Hounds – spirits

for £1; Hull – Spiders – shots of spirits for 60p; Liverpool – Liverpool Guild of Students – selected beers and doubles spirits for £1”(Alcohol Concern, 2006).

Of course, the main users of Happy Hours and other such ‘initiatives’ are the student population – and these, and their non-studying equivalents in the working population – are the very people who are most prone to binge drinking in any case. Thus, there is an inherent bias within the populations attracted to these cheap drinking incentives.

2.3.11. Current Interventions to Reduce Alcohol-related Aggression

IAS (2006a) summarised current strategies aimed at tackling alcohol-related aggression in and around licensed premises. Such strategies include: *recommending changes in criminal justice policies* (through, for example, heavier penalties for breaches of licensing laws; alcohol education schemes; monitoring of ‘problems/violent’ premises); *manipulation of the physical environment of pubs/clubs* (through, for example, paying attention to spacing of furniture to avoid crowding.); *controlling the social atmosphere* (through, for example, attractive, well-maintained premises; reduction of excessively loud music); *alcohol control* (through, for example, avoiding drinks promotions, such as Happy Hours; serving hot food and soft drinks); *the control of drinkers themselves* (through, for example, controls over the number of people entering premises; well trained and socially skilled bar and door staff experienced with dealing with aggressive customers; refusal of alcohol to already intoxicated customers; ‘Pubwatch’ schemes; staggered closing times to avoid large numbers of individuals gathering in same area together) and *injury reduction* (through, for example, the use of toughened glass or plastic cups; the banning of bottle-served alcohol; swift removal of any glassware used; weapons searches on entry to pubs/clubs).

Some of the key intervention strategies are discussed in more detail below.

2.3.11.1. Extended Opening Hours

Of course, one of the major changes has been the radical shake-up in licensing laws in an attempt to reduce binge-drinking. By abolishing fixed closing times, the Government hopes that consumers will slow their rate of consumption of alcohol, since they should not now feel the need to ‘cram in’ drinks, or drink up whatever remaining drinks they have at closing time. These changes were aimed at creating a more continental-style drinking culture, and moving the emphasis away from simply getting drunk (BBC News, 24/10/03). But, is it working? IAS (2006b) reports that there is little evidence to support this so far, and that, moreover, the rate of consumption may not necessarily indicate how drunk someone will become. Chikritzhs and Stockwell (2002) reflected that in Australia, which has a similar drinking culture to the UK, extended drinking hours led to increases in binge-drinking and drunkenness rather than less. However, the UK Drinks Industry attitude and help in reducing binge drinking may make a significant difference in the outcome here in the UK. Another study (Vingilis, McLeod, Seeley, Mann, Stoduto, Compton & Beirness, 2005) based in Ontario examined the effects on road accident rates of extending opening hours from 1am to 2am – unfortunately, these increased following the relaxation in licensing hours. However, in this instance, since the extended opening hours were only increased from 1am to 2am, restrictions were still in operation (perhaps even more so) and the scheme may simply have exacerbated a problem that already existed. Certainly, it is clear that a multitude of factors and different tensions need to be considered when considering the optimal way of dealing with binge drinking.

2.3.11.2 Pubwatch schemes

A number of successful initiatives to tackle the problem of alcohol-related violence have been implemented around the country. The most effective schemes employ a multi-agency approach (Deehan, 1999). For example, Pubwatch schemes, which essentially involve a message-passing link between the police and licensees in order to combat anti-social behaviour in licensed premises, and in particular, incidences of aggression, are highly effective - police statistics show a significant decrease in violent offenders in pubs where Pubwatch is in operation (Metropolitan Police, 2006). Similarly, within the Bedford borough, violent crime in the night-time economy has seen a reduction of over 10% since the introduction of the BAND scheme, where pubs and clubs operate a 'banned from one, banned from all' approach. The key to the success of such approaches is the co-operation of licensees. Licensees have also been targeted recently in Nottingham, where the already successful Best Bar None Awards scheme has been introduced in 2006. This scheme was originally launched in Manchester in 2003, and has now been adopted in more than 30 cities nationwide. The Best Bar None Awards scheme puts the onus on the licensee to manage and operate their establishment responsibly, which they are rewarded for if successful. Such measures ultimately create a safe and enjoyable environment for customers to drink in, as well as reducing alcohol-related crime. According to Deehan (1999) the key elements of sustaining successful alcohol-related crime-reduction initiatives include maintaining partnerships within the scheme via regular contact, and also fostering a good working relationship with the police, constant monitoring and evaluation of the scheme, involving the local community in the schemes success, retention of profitability and strong leadership. Additionally Deehan suggests a wider encompassing approach to tackle the problem long-term, highlighting an alcohol strategy that includes a need for education, a reduction in the availability of alcohol to underage drinkers, and improved control of the licensed environment.

2.3.11.3. Toughened Glass and Plastic Drinking Containers

In 2005, the Glasgow Licensing Board adopted a policy reflecting their intention to replace 95% of glasses and bottles in city's nightclubs with plastic/toughened glass. They consequently announced a restriction on the use of conventional glasses as drinking containers in pubs and premises with entertainment licenses, albeit with the following exemption: 'The terms of this policy shall not apply to licensed premises operated exclusively as a restaurant, or any part of licensed premises which is set aside permanently and exclusively for use as a restaurant, in which the sale or supply of alcohol is solely to the persons taking table meals there, or as an ancillary to the table meals. Where this exemption applies to part only of the licensed premises, the licensee shall ensure that no alcohol is taken from the restaurant area to other parts of the premises unless the alcohol is contained in plastic or toughened glassware'. The logistics of such an exemption are problematic, and, as Mr. Lowe, the head of one of Edinburgh's main pub and club operators (a city also considering the introduction of the ban) points out, the boundaries between bars and nightclubs are becoming increasingly blurred, and it would be impractical to changeover from glass to plastic mid-evening (Scotsman.com, 2006).

In addition, Rebecca Cocking of the British Glass Industry asserts that the problems associated with plastic containers are similar to those highlighted regarding glass e.g. breakages on dance floors, containers being kicked around the dance floor. She states that the same will occur with plastics, plastic drinking glasses will split rather than shatter and can cause cuts, and plastic (PET) bottles will also roll around the floor. PET bottles may also be used as missiles and cause injury either on initial impact or as a result of igniting tensions between people (2006).

2.3.12. British Beer and Pub Association

Whilst exploring intervention strategies in the UK, the work of the British Beer and Pub Association should be noted. The BBPA, with the support of the Home Office, launched a Partnerships Initiative in March 2000. The aim was 'to help ensure that the environment in which we enjoy their services and in which 500,000 people are employed, is safe and secure' (BBPA, 2001). This partnership actively explores ways of reducing alcohol-related crime and examples of the kind of intervention strategies they have suggested include the need for more responsible management of drinks promotions, the staggering of closing times for pubs within the same area and changes to the transport system to facilitate people leaving drinking locations and minimising potential problems with pedestrians spilling out over the roads following the closing of drinking venues.

2.4. Drinking Containers

2.4.1. Material Type and Functions of Packaging

Drinking containers may be a temporary vessel for the beverage inside, or they may be part of the product itself. In the latter instance, the container must fulfil all the requisite functions of secondary packaging, namely: to protect the product from the environment; to protect the environment from the product; to maintain the product in the state that it was produced until the end user can use it; to form a suitable sales unit; to safely transport the product through the distribution chain; to identify the brand; to sell the product to the consumer; to inform the consumer of use; to warn the consumer of dangers; to attain and maintain a cost effective unit; to protect the consumer (Theobald, 2006).

Drinking containers may comprise a range of materials, including: glass, plastic, metal, pottery, card or a mixture of several of these materials. The materials that are most frequently used are glass, plastics, and toughened glass.

2.4.1.1. Glass

Glass-making is said to have begun as early as 7000 B.C. and was first industrialised in Egypt in 1500 B.C.. Glass is probably the second oldest form of packaging ever to be used (the oldest form of packaging being pottery!). Glass is made by melting three naturally occurring base materials (silica, limestone and ash), which are then moulded while hot.

Glass packaging is particularly well suited to modern living. As a pure and natural form of packaging it is ideally suited for packaging food and drink, Glass is made from natural minerals - sand and limestone. It is inert, so when it comes into contact with food, drinks, medicines or cosmetics they remain untainted

These qualities are reflected in consumers' preference for glass. A survey of 1,000 adults conducted by the British Glass Industry revealed that an overwhelming 74 per cent of consumers believed that glass was the most natural form of packaging. Moreover, sixty nine percent of consumers associated glass with quality, stating that quality products were packaged in glass, whilst 66 percent thought that food and drink tasted better out of glass

2.4.1.2. Toughened Glass

Max Perez, director of Alphabar, a major supplier of toughened glass products based in Warrington, has argued that a move to toughened glass could prevent serious injury resulting from alcohol-related violence. According to Perez, the key difference between toughened and non-toughened (annealed) glass is in the manufacturing process. Toughened glass is slowly heated and then quickly cooled, at

least once, to provide it with extra strength and durability. This strengthening is said to increase the impact resistance of toughened glass by more than five times as well as eliminating stress points. Because of the way in which it is manufactured, it is claimed that toughened glass breaks in a different way to non-toughened glass: toughened glass will shatter into tiny pieces, whereas annealed glass leaves large, pointed edges which, it is argued, can be used as a weapon. Toughened glass is widely used in France, where it is considered to be more durable by bar owners – its lifespan is said to be five times longer than conventional glass, thus offsetting the higher initial cost of the product. In terms of design, Perez states that the only visible difference is that toughened glass is slightly more opaque than traditional glass.

However, Rebecca Cocking of the British Glass Industry, has affirmed that 'toughened glass is inherently stronger when new but if damaged can break quite easily into small pieces. It can also shatter spontaneously if damaged' (2006).

2.4.1.3. Plastic

Campaigners for the prevention of glass injury in licensed venues suggest that plastic products can be used as an alternative to toughened glass products. Plastic is an extremely versatile and durable material, a fact that was recognised in the UK early on, with it becoming one of the first countries to exploit these properties to the stretch-blow moulding process for the manufacture of PET. Plastic can be moulded or blown into any shape, following three key stages of processing: heating, shaping and cooling (British Plastics Federation, 2006). Thermoplastic materials are solid when at room temperature, and so they first need heating in order to shape them. Once molten they can be manipulated into the desired shape, which must then be cooled to solidify the object into its new shape. Although considered a product of recent times, the first plastic bottle was actually blown in 1942 and has seen an increase in popularity ever since (Plastic Bottle Corporation, 1996). Professor Jonathan Shepherd has argued that by selling drinks in pubs and clubs in plastic rather than glass bottles would prevent thousands of woundings annually (BBC News, 2003). The reasoning behind this is that plastic bottles do not break, and hence cannot be used as weapons in the same way that glass bottles can. Similarly, plastic glasses do not break into sharp pieces in the way that non-toughened glass can, and indicating that it is unlikely to be turned into a weapon.

2.5. Research Questions

The research questions addressed by this study are: what factors can be identified as catalysing violent or aggressive incidents in pubs and other late night venues in the UK? What is the nature of any interaction between drinking container and anti-social behaviour in such establishments?

Section 3: Methods

3.1. Design

The research comprised two types of study; an interview study and three correlational surveys.

3.2. Participants

3.2.1. Interview Study

This project utilised a purposive sample of 50 individuals who had either been involved in an aggressive / violent altercation in a pub, bar or other late night drinking venue in the last 3 years, or who had first hand experience of the same.

Participants were recruited by a range of methods: through internet/email requests for participants; through flyers distributed in appropriate drinking establishments; through flyers and other advertisements in targeted locations, such as job centres and welfare clubs and through snowball sampling of other participants. Participants were recruited from a number of UK cities, including Birmingham, Wolverhampton, Sheffield, Nottingham and city locations in Scotland.

3.2.2. Questionnaire Studies

Three separate online surveys were carried out utilising an opportunistic / snowball sample of students and others, with initial requests for participation circulated via email.

3.3. Materials

3.3.1. Interview Study

A Sony digital dictaphone was used to record each interview and the data was uploaded to the researchers' PCs.

3.3.2. Questionnaire Studies

For the online studies, *surveymonkey* software was used to create each of the three separate online questionnaires. In all of the surveys, participants were asked to give their sex, age and an indication of how frequently, on a scale of 1-10, they went out drinking; these items made up section A of each questionnaire. Section B of each survey comprised different items and these are outlined below.

3.3.2.1. Survey I (witnessing aggressive / violent incidents)

Section B of this survey comprised items asking participants the frequency with which they had witnessed violent or aggressive incidents in pubs and other late night drinking venues.

3.3.2.2. Survey II (perceived efficacy of intervention strategies)

Section B of this survey comprised items probing the perceived efficacy of various intervention strategies currently.

3.3.2.3. Survey III (successful strategies for reducing aggression)

Section B of this survey comprised suggestions about the kinds of strategies that might help to reduce aggressive/violent incidents in pubs and other late night venues.

3.4. Procedure

3.4.1. Interview Study

Participants were interviewed using a semi-structured questionnaire (see Appendix 1 for final interview schedule). The interview schedule was piloted before the main research commenced, allowing the format to be refined and improved. Participants were firstly given the information sheet to read and asked to sign the consent form (Appendix 2) if they were still happy to participate in the study. The consent form informed potential participants, *inter alia*, that the data they provided would not be confidential (since their words may be quoted verbatim in the report) but that the data would be anonymised and no identifying information would be made available, in any format, to anyone other than the research team.

Once the interviews were completed, participants were thanked for their help, given a debrief sheet to read (Appendix 3) and any further questions they may have had were answered. All interviews were recorded with the written consent of participants and were conducted either in a public place, in a university building, or, at the request of the participant, via telephone.

3.4.1.1. Interview Schedule

Interviews lasted, on average, 15 minutes. Interviews followed a semi-structured interview schedule discussing drinking behaviours and incidences of alcohol-related aggression. All questions specified in the schedule were covered, but the schedule did not have a fixed question order and it also allowed participants to expand on issues that were particularly salient to them. Before the interview, participants were assured of anonymity, and it was emphasised that they could refuse to answer any question they felt uncomfortable with and could withdraw from the study at any time.

Interviews began with questions about the participant and their drinking habits. These initial questions covered age, location, typical drinking behaviours, and drinking establishments they frequented. Subsequent questions asked specifically for descriptions, and opinions, of any incidences of alcohol-related aggression the participant had been involved in or witness to. The interview schedule included questions concerning the following issues: where and when did the incident happen; what was the scene when the incident occurred and who was involved; what happened, including the reason for the incident; how did the incident end; opinions on why the incident escalated. Interviews were taped and transcribed verbatim, with the participants' permission.

3.4.2. Questionnaire Studies

Three separate surveys were conducted (see Appendix 4), with potential participants contacted by email. The email briefly explained the purpose and nature of the survey and provided a link to an online questionnaire. The internet-based surveys gave potential participants further details about the study and explained issues of confidentiality, anonymity and rights to withdraw from the study. As each survey was offering a £20 incentive to one participant, selected at random from all those completing the survey, respondents were asked to give a contact telephone number or email (in case they won the prize). All participants were assured that this information would be deleted as soon as the prize winner had been selected.

It was considered appropriate to conduct the surveys separately as, despite their brevity, some of the

items and/or respondents' potential answers to items may have affected their responses to other questions. Since survey I included items about witnessing aggressive/violent incidents, a victim support helpline was included at the end of the questionnaire for the benefit of any participants who may have become distressed while recalling such episodes.

Section 4: Results

4.1. Overview of Analyses

Interviews were analysed using thematic analysis. TA involves the organisation and understanding of material in a coherent manner and is conducted in relation to specific research questions. Thus, the themes derived from the interview data are created with direct reference to the research questions involved and, thus, to the focus of the researchers.

Survey data was imported into SPSS v12.0.1 and analysed using a range of statistical procedures, as appropriate.

4.2. Interview Study

4.2.1. Overview of Interview Participants

Of the 50 participants who agreed to be interviewed about their experiences of incidences of aggression, and in particular, alcohol-related aggression, 18 were male and 32 were female. Participants were selected for inclusion in the interviews on the basis of their being involved in or witness to incident(s) of alcohol-related aggression in or around a bar, pub or club within approximately the last three years. Participants were recruited from a variety of locations around the UK, including Aberdeen, Birmingham, Cardiff, Leicester, London, Nottingham, Taunton, and Wolverhampton, thus representing a diverse cross-section of UK locations. Ages ranged from 19 to 49 ($M = 26$).

4.2.2. Thematic Analysis of Interview Data

Before turning to the thematic analysis a few important issues need to be addressed which have a bearing upon the interpretation of the results. Firstly, the recruitment process involved asking participants whether they had been witness to or involved in any aggressive incidents. During the course of the interview schedule it became apparent that the distinction between victim and perpetrator of an aggressive act can be blurred. Some participants presented themselves as victims of aggression, even though they could be construed as the perpetrator in some instances. For instance, P18 was involved in a dispute over seating which soon got out of hand:

I was sat on same sofa as this guy, chatting [her other friends had gone to get some food but were expected to return]. Then a girl looked and said 'is anyone sitting there?'. So I said 'oh, yeah, my friends sitting there'. She went 'oh, ok', but was a bit snotty with me and walked off. About 5 minutes later, she came back over and sat down and said 'you [...] lying bitch'...she was swearing things across and I was trying to ignore her. Then next thing she gobbled across at me. I was furious, and thought what am I going to do? I looked across at her and said 'don't do that again, just leave it will you' and I just wiped it off and carried on talking. Next thing she'd fallen across the table at me, and she's then leaning over at me. And I'm sat down, and she's really close to me, her nose was literally touching mine, and she was like 'yeah, what are you [...] going to do about it then', and I was just 'can you go away please'. I was livid,

shaking, and she says 'go on, do it, do it', and so I head-butted her.

P19 also sees herself as the victim even though, 'I punched her in the face'. The reason for this, she says, was self-defence because, 'by throwing the drink over me, she assaulted me first. It's not like I was just being aggressive towards her'. The belief that one is acting in self-defence allows participants to paint themselves as victims. Furthermore, another person's aggressive actions can be taken as a means of justifying one's own aggressive response: 'I know I shouldn't have done it, but she was touching me, and to me I was just protecting my own space' (P18). For these two participants at least there is a certain element of denial in their actions. There is also clearly a fine line between victim and perpetrator, and someone may be both in one incident – the victim and the perpetrator. This is evident from the outcome of the incident P19 was involved in: 'I got a caution, but I then pressed charges against her'. Similarly for P18 the blame is placed on the other person; 'the bouncers came over and pulled her off and pulling me out. We got chucked out, and I was like, 'What do you mean, chucked out?. Such examples illustrate how recruiting participants fulfilling certain criteria (e.g. perpetrator of an aggressive act) can be problematic, and the question of whether one is a victim or a perpetrator of aggression largely depends upon how the participant frames the event. As P6 notes, 'there was nothing too aggressive from us, although I'm probably being biased'.

Secondly, in all of the incidents described by participants alcohol was involved, and hence this is undoubtedly the major factor that leads to violent or aggressive incidents in pubs and other late night venues (e.g. P1: *'it's usually towards end of night when people have had a lot to drink, and tempers flare.'*). There is a certain expectation and acceptance of anti-social behaviour caused by excessive drinking (e.g. P23: *'it was just drunken student behaviour – it was a really cheap drinks night'*, and P20: *'you do things when you're drunk and then you wake up in the morning and just think, 'why didn't I let just it go?'. You're acting on impulse rather than thinking about the consequences.'*). However, not everyone who drinks alcohol, or drinks alcohol excessively, becomes aggressive as a result of this, nor do people who have shown alcohol-related aggression in one instance always become aggressive after consuming alcohol. Hence other factors must interact with alcohol to trigger such behaviour, and these are the focus of the thematic analysis.

Five themes were identified from the interviews: 'rivalry', 'crowding', 'staff', 'glass and accidental injury' and 'glass as a weapon?' Each of these themes will be considered in turn. Examples from transcripts are included in the results to allow the reader to assess the interpretations.

Theme 1: Rivalry

Many situations of conflict within pubs and clubs evolve from some sort of social tension frequently when different groups meet, be it rival sporting supporters, tension between students and locals or other students, or 'romantic' rivalry.

Rivalry following sports events, especially football, were frequently mentioned by participants as being a breeding ground for aggression. The combination of football rivalry and alcohol can be explosive. For example, P6 put the aggression he observed between two groups down to, *'alcohol and supporting different football teams was the main reason. I don't think it would happen if they were sober'*. P21 agrees: *'[it was the] combination of football match, mixed with drink, and the fact that there were people of the other team there, and perhaps a bit of banter which just escalated when we least expected it'*. However, P21 suggested that once such problems arise, supporting the same side

does not make you immune: *'it was crazy because people [supporting] the same team were hitting each other'*.

Participants were firmly of the opinion that it is the culture surrounding football that leads to aggression. P26 highlights the difference between sports:

There's always rivalry between teams – any sport, but football worst, followed by rugby. You don't get it with cricket. It's because of whole culture that follows football – you have a few pints before the match, and then you have more after, especially if you've won, or if you've lost drowning your sorrows. And there's also the 'hard-core fans' – they're not there for the football, just for the aggression.

P1 agrees that part of the problem is the drinking culture surrounding football:

You get a lot of blokes in, all cheering one team, drinking a lot. They forget their manners and can a bit rude. Football usually means that they've been drinking all day. If it's an early kick off, they sometimes start in pub, go to match and then come back after match. Leads into early evening, when you've got another crowd of people coming in who haven't been drinking all day. Sober people and then drunk people as well, it can create conflict.

The account given by P1 indicates that it is not just football that creates conflict. Instead any difference can spark aggression, such as groups of sober and drunk people meeting.

There is also a certain territorial element in some situations. As P1 notes, *'the problem with pubs is that you sometimes get the usual crowd coming in and then you get outsiders coming in too'*. P3 makes a similar observation, *'normally you go into a pub that's not your local, but there's a group a lads whose it is and they don't seem to like it much. Especially in [city], because I'm not from there they hear my accent and don't like that.'*

P4 has first-hand experience of territorial rivalry:

I'd never been to [town] before and never seen these guys and they kept staring me whole time I was in there. When someone keeps staring at you the whole time you usually just have to go up to them and ask them what their problem is. And it is a bit stupid, and I should've left it, but when you've had a few too many you go and see what their problem is

However, P4 shows some level of acceptance for this behaviour; *'these guys are from [town], and it's their local club so they weren't really going to, you know, be polite so it was, basically I wanted to find out what they were looking at'*.

This territorial element is evident within, and not just between, towns too. Many participants were aware of antagonism towards students from locals, antagonism that can lead to aggressive incidents. According to P16, *'In [town] there's definitely a 'town versus gown' thing going on because they really don't like the students and once they realise that you're a student they can get quite aggressive'*. The participants who mentioned the problems between students and locals all believed that it was the locals who started any incidents that occurred. For example, P25 said, *'from what I can gather, it's*

the locals that cause the trouble', whereas according to P11, *'there's also tension between locals and students, on the part of the locals. I've come out of clubs and seen locals waiting outside, waiting to start fight with students'*.

P7 was also witness to an incident between students and locals:

A group of people from college, they were quite loud when they came in but weren't drunk, but starting getting drunk extremely quickly. Then some local people, who don't belong to the college came in. I got the impression that it was their corner that the group were seated in, and because of this the locals had to stand. Then [the locals] started an argument because they were drunk when they came in, then they went away again. Both groups got drunker and drunker. Then they went back again, the [local] girls started shouting at the [student] girls...then the guys got involved and had a fight.

A number of reasons for this hostility towards students were suggested by the participants. P16 says that, *'when students are out in big groups, they're a huge pain and play drinking games, making them extremely drunk. Then if a large group of them goes into the pub you can't get served. So there's a general feeling of hostility'*. P25 offered a similar explanation:

The students come in, get really drunk and generally just have their fun, but then the locals might come in, and there's been lots of trouble between locals and students. People get lary at the students because they sometimes dress up, and then things like that escalate. Not sure if it is because they're students, or just because they're different.

P27 is more specific in her reasoning for student/local tensions: *'There's hostility towards students, especially in that area. They've taken over and there's no families there anymore. It's an issue, especially for housing'*. From this explanation it is clear that the resentment can stem from social issues, and perhaps the frustration that these cause manifests as aggression for some people.

However, not all incidents involving students were due to student/local rivalry. Tensions between different universities also occur, especially when more than one university shares the same town/city:

P11: there had been a bit of tension in the club because from what I've heard there's always tension between different unis, and I think there was a whole group of lads from another uni. Bouncers had been quite aware that night that something was going on [...] it had been building up all evening. I don't think it was so much the alcohol that contributed, more that guys in clubs sometimes tend to show off and there's rivalry between unis. I've been told that it happens a lot – the tension between unis.

As with football, this seems to stem from a certain desire to associate oneself with an identity, an identity that must be defended. Associating oneself with a football team or a university allows such an identity to be formed. This can give people common ground when they are on the same side, but it can lead to conflict and resentment when they are not.

Many participants put incidents down to 'romantic rivalry'. For some, this was due to issues from the past that had resurfaced, as was the case with P10, *'I'd recently started going out with someone at*

the uni. Towards the end of the night...this guy threatened to beat me up because I was seeing a girl who used to be this guy's girlfriend'; P13, '[this girl's] boyfriend, and her cousin's friend had gone out with the same girl in past. Both being drunk and not having seen each other for while the past got brought up'; and also P36: 'I think they were fighting over some sort of past relationship, over a girl my friend had previously dated and this other guy was now dating'. P4 had a similar experience:

'My friend knew this guy from somewhere – I don't know how he knew them but he obviously didn't get on with him. Basically we came out of club and it kicked off from there. I think my friend had got with one of these guy's girlfriends at some point, that's what provoked it'.

While P4, P13 and P36's explanations are largely conjecture, P10 had confirmation that romantic rivalry mixed with alcohol, was to blame:

It was definitely alcohol fuelled, as the next day the person who'd started it apologised for his behaviour. He wasn't sure what had exactly happened, as he couldn't recall much of the previous night, and he stood by the fact that he wasn't happy that I was seeing his ex, but he did apologise for how he dealt with it.

The experiences of these three participants suggest that alcohol brought on heightened emotions about past relationships, which perhaps had not been resolved or had ended badly, hence leading to conflict as these emotions eventually spilled over.

Conflict as a result of romantic rivalry is not limited to past relationships. Participants noted incidents arising from desired relationships (e.g. P28: *Generally people fight over nothing when drinking. Usually talking about women; 'does she like me, doesn't she' but then someone else likes her, or spoke to her last week.*) and, more commonly, jealousy within existing relationships. As P25 notes, *'there's been so many times when there's a guy at the bar, and so is his girlfriend, and the boyfriend's been off talking to someone and turns around and there's someone talking to his girlfriend, so he'll start shoving him and hitting him'*. Participants indicated two reasons for why this occurs. Firstly, it was felt that men feel the need to defend their partners. For example, P7: *'it started with women being verbally abusive then men getting physically aggressive. One guy said to one girl, 'don't talk to my girlfriend like that' and then another guy said "don't talk to my girlfriend like that' too';* and P33: *'[it] was in a club, where a guy had lifted up a girls' skirt. She went and told her boyfriend and then it escalated into a fight'*. Secondly, one person may purposely be trying to make their partner jealous, but the combination with alcohol can make such tactics get out of hand. For P34, it was a combination of these factors - alcohol, defending one's partner, and jealousy – that caused her to be assaulted:

We were stood at bar in a quite classy bar, next to another couple. My boyfriend went to the toilet, and at pretty much same time the girlfriend of the other couple did. During this time, the boyfriend [of the other couple] came over to me and started chatting me up, and asked me for my phone number. While this was going on the girlfriend came back, saw her boyfriend talking to me and asked me what I was doing. Then she slapped me in the face. He denied he'd been chatting me up. Then my boyfriend came back from toilet, saw what was going on and got involved...The other couple were quite drunk and out of order. I think that they'd been having a fight before hand, which is what caused him to start chatting me up - maybe to upset his girlfriend.

Thus, the issue of rivalry seems to occur in specific environments where tension is created, such as when a football match is on, or when students from different universities meet. In both of these situations, members of staff seem to be aware of potential problems that may occur and so are more vigilant in looking for signs of aggression. However, in other situations, such as when romantic rivalry is involved, it is not so easy to predict where and when problems will occur. Indeed, many participants felt that alcohol-related aggression is simply part of today's society, with people purposely going out looking for trouble (e.g. P15: *'This guy looked like he was spoiling for a fight'*; P12: *'they were spoiling for a fight with someone...you usually get these people who get drunk and have a fight'*; P6; *'I think they'd probably caused trouble for other people in there, they were in that sort of mood'*). Consequently, there was the opinion that fights are now simply part of a night out. For example, P34 observes that, *'having a brawl is part of a night out – you hear them on the bus talking about their evenings and bragging about fighting'*, while P26 goes on to say, *'Fights depend on the person. Some people just need a little click, then they'll fight for England. It's part and parcel of a night out'*.

P21 believed that people seek trouble, and that they are doing this at a young age:

One pub is renowned for having underage drinkers. People who aren't old enough to get into either pub, or choose not to, now come up and hang around outside. Don't know if it's to watch it or provoke it. You see them hanging around on their bikes waiting for the trouble to start.... They're very aggressive and male-like when they're not drinking, but drinking just escalates it all a lot.

The notion that people were deliberately seeking out fights to assert their macho-ness was a common one. This suggestion could partly contribute to the aggression associated with football - a very male orientated sport – as well as the perceived need to defend one's girlfriend in some of the reported instances.

P11 emphasised the notion of macho-ness: *'I don't know why it started, but guys can provoke you to that, just for a bit of trouble, because if they haven't had enough fun they have to show their "macho-ness"'*. P26 agreed with this observation: *'It's sometimes as if they're trying to be clever, showing off in front of their friends. Trying to look macho, "got to be part of the boys"'*. P30 further adds to this:

'There's also an element of bravado – some people feel they have to sustain a certain image, keep up their macho-ness in front of their mates, especially after a beer or two. For some people there is certainly this notion that having a fight is part and parcel of a night out.

While most of the participants interviewed discussed the readiness of a fight in relation to men, this is not to say that such behaviour is confined to men. According to P18: *'You could tell that she was out for causing trouble. I think the more she had to drink made her braver and more obnoxious'*. P17 has also seen similar behaviour in women: *'Wherever you get alcohol it seems to heighten emotions and bring out certain aspects in people, and certainly on the Sunday night, when it was full of bravado, even for the ladies'*. Hence, it would seem that some people possess a certain temperament that makes them more confrontational, and perhaps a desire to assert one's position in society.

Theme 2: Crowding

Participants were very alert to the issue of crowding in pubs and clubs, which can be due to bad management practices, as P15 noted *'It was very crowded, and we'd actually been having discussion saying that they'd let too many people in there'*. Over-crowding is a situation that participants thought should be avoided as this can foster an aggressive situation. P26 observes: *'it's always busy, I've never seen a fight when it's empty'*. Part of the reason for this is a feeling of frustration and discomfort as a result of over-crowding. Bar staff in particular were aware of this occurring around the bar area: *'people can get a bit annoyed when you're waiting a long time to get served'* (P1); *'people waiting, that's when the aggro starts because people are literally in front of people, and some are getting served before others'* (P25). Although bar staff do their best to serve people quickly and efficiently, this is not always possible, as P25 explains, *'you lose track of who you're serving, so sometimes you'll serve someone who's just got there'*. However, *'people do get aggressive if you serve them out of turn, so you tell them you won't serve them, then they get more abusive and leave.'*

P28 elaborated on why crowding can lead to aggression:

People can get frustrated if not getting served, or if tables aren't cleared and you start sitting uncomfortably, I don't know how it happens but you see customers become agitated. You get in a tight situation, it's getting a bit warmer and you've haven't got the space to breathe at the bar, and you feel like you've been waiting extra time.

P15 adds that when it is crowded *'you [get] your personal space invaded.'* Some people accept that having one's personal space invaded is unavoidable when it is crowded, whereas other people are less tolerant, as P20 discovered:

We were on dance-floor. With it being so crowded you just bump into people, but most of them let it go. I bumped into one man and he turned around and pushed my girlfriend over. So I picked her up and starting calling him everything under the sun, then I got set upon by five or six lads, and got my jaw broken.

Bar staff can also get frustrated when it is crowded. For example, where P25 works gets particularly crowded at weekends and, *'I've walked past glass-collecting and it gets annoying after a while because no-one moves out of the way'*. However, her own feelings of frustration have not stopped her being on the receiving end of other peoples' frustration: *'I actually knocked into this girl, and she turned around and grabbed my arm and pinched it. I kept saying excuse me, but because of the music no-one can hear so you have to just barge past'*. P25 thinks that part of the problem is the layout of venues:

There's one part of the bar that's worse, and that's where you get a lot of the trouble. It's particularly crowded, it's nearest to the entrance so people come in and go straight to that side and people just get really aggressive.

Other participants agree. Unfortunately for P3, a crowded pub with a bad layout led to an attack: *'I just bumped into someone on way to the loo and got head-butted. It was very packed'*. Other factors were involved however; *'they'd been in the pub all day [and were] rowdy so we'd moved away from them anyway but still had to get past them on way to use toilets.'*

Many participants shared this opinion that crowding and bad layout were not enough to cause frustration to lead to aggression. For P43, it is the combination of frustration with alcohol that is the trigger to aggression:

Working in a bar, you can see people's attitudes change as they have more to drink. A common issue is accidentally knocking into someone on the dance-floor. Early on they might get knocked by someone and be quite pleasant about it, but as the night goes on, and they drink more, they don't take it so well, and that's when fights start.

P40 certainly thinks it was the combination of crowding and alcohol that led to her friend being attacked:

[We were in a venue] which gets really busy. My friend had tried to get drink, stepped back onto someone's toe, and the girl went mental at her ...she kicked my friend in the leg. My friend was quite drunk, but it was because it was so busy at the bar that it started. She didn't do it on purpose, and she had apologised, so she did everything she could to diffuse it. I don't think the same thing would've happened if the other people hadn't been drinking.

Similarly P6 said, *'I accidentally knocked into a group of guys and they started on me. They were drunk – I was quite drunk as well – and they started to argue with me, saying what did you do that for, and then pushed me back, and then I got punched to the floor'*. Both P40 and P6 acknowledge that it was not just the attackers that were drunk. In doing so they appear to be taking some blame for what happened, almost justifying the attacks, which resulted from their own, or their friend's, drunken errors. P38 also appears to share the blame for an incident outside a night-club:

[My friend] bumped into a girl who then started shouting at him and slapped him, then he walked off, and the guy who was with the girl, presumably his girlfriend, followed him up the street, and proceeded to hit all of us...the guy who attacked us was drunk, but probably not as drunk as they were. I think my friend's inability to apologise for bumping into guy's girlfriend didn't help.

From these participants' accounts, it would seem that there is some level of acceptance, if not expectation, for their attackers' behaviour. As P3, who was head-butted in a crowded pub, said, *'It's one of those things that happens, you see everyday normally'*.

Theme 3: Staff

From the interviews, it became evident that aggressive incidents were not confined to the clientele of pubs and clubs, and could also involve members of staff. A number of participants worked in licensed premises and had been victims of aggression, usually as a result of trying to enforce sensible serving practices. This can put staff in a very difficult position, as P25 notes: *'it's law, but they get aggressive if you try and enforce it'*. More often than not this resulted in verbal aggression directed at the staff. For example, P26 notes; *'As a member of bar staff, people can get tetchy if you refuse to serve them. I had to ask one group to leave because they were drunk and starting getting really loud, shouting. It got worse when they were asked to leave'*. It may be that individual's own perceptions of their level of drunkenness are different to how other people perceive them, and it is the accusation of being drunk that offends some people. As P28 observes, *'if you tell someone they've had too much to drink they*

become very volatile'. Verbal aggression directed at staff does sometimes turn into physical aggression:

P25: There has been aggression off people because I wouldn't serve them – they call you slag and bitch because of that. One guy tried to grab a girl across the bar and tried to get at her, just because she said she wouldn't serve him because he was too drunk.

Enforcing sensible serving practices is made even more difficult because bar staff do not always feel supported by other staff members. For instance, where P25 works, *'there's bouncers around, but nothing around the bar, and we don't have any buttons to press, so unless there's a manager around, they can get them out, but they're usually upstairs or something, so you're helpless'*. Such feelings may make bar staff reluctant to enforce the law in order to protect themselves. However, in doing so excessive drinking is tolerated and accepted.

It is not just bar staff who feel unsupported by other staff. Bouncers came in for particular criticism for their refusal to deal with some situations:

P33: The one group started kicking the crap out of the one lad. [We] started shouting at the bouncers to come and help, or to call the police but they wouldn't do anything because it was outside of the club, therefore not on their premises and so not their responsibility.

It may be understandable in that situation that the bouncers felt they could not intervene – perhaps issues of insurance and liability were involved. However, such reluctance to deal with situation happens inside venues as well: *'[the incident] was mentioned to bouncers, but they just said 'you should've told us at the time'. But I don't know if they'd done anything anyway as it was a busy weekend and they were outside on the door'* (P40). P42 suggests that; 'it would be better if you had bouncers patrolling indoors as well as outside. They're often unwilling to sort trouble out if they've not seen it, which they're unlikely to if they're on the door.

Bouncers came in for further criticism from the participants as it was felt that they were sometimes to blame for incidents becoming aggressive. P9 recounts an incident she was witness to in a night-club:

It was in the stairwell, and involved two bouncers and lad who'd been inside the club. He'd been ejected from club, but I don't know why. The bouncers were trying to get him out, and he was arguing his case in a drunken, very finger pointing sort of way. The bouncers ended up pushing him down stairs and kicking him out on to street. I was really shocked at how rough they were being with him – I don't think bouncers should behave in such a way. It didn't need that level of violence because there were two of them and one of him and from what I could see he wasn't being aggressive towards them.

Similarly P15 believes that bouncers take situations too far. Recalling an incident where a client's threats led to their being put in a coma by the bouncer she says, *'I think [kicking the client] was uncalled for as [the bouncer] wasn't under the influence of alcohol'*.

P14 was also critical of how bouncers handled the situation she saw:

The doormen insisted that some men couldn't come into club without female companions, but men were very insistent otherwise, asking what the problem was. It became very heated. The men had had a few drinks - you could smell it on them – and were persistent but so were bouncers. The bouncers were quite aggressive though as well [and] I don't think the bouncers communicated the reasons why they were refused entry very well.

There does seem to be a certain perception of bouncers and their temperament. For example, in one city location P21 has, *'heard a few stories of bouncers getting over aggressive towards people who've caused a bit of drunken trouble. I think the bouncers here are renowned for being a bit over-violent'*. This perception of the bouncers' temperament can however be a reality too. Former bar manager P28 says, *'I've had to sack bouncers too because they were bullies and would just intimidate people, leading to more trouble'*. Clearly then there are certain staffing issues that can be addressed by management that can reduce the amount, and severity, of aggressive incidents within their venues.

Theme 4: Glass and accidental injury

All the participants said that drinks were served in glass bottles and/or decanted into a glass a majority of the time, with decanting being optional rather than compulsory. On the few occasions that the use of plastic glasses/bottles was noted, these were limited to certain venues or events, most commonly football (e.g. P1: *'it depends on football days, places put drinks in plastic glasses then'*; P3: *'if the football's on, they'll use plastic'*; P41: *'you get given glass, unless the football's on – then it's plastic'*). Hence it would seem that venues impose self-management of glass drinking containers at times when anti-social behaviour could be more likely. Furthermore, it would seem that venues are aware of the risk of accidental harm from glass, especially to areas where children may be present, and take the relevant precautions to minimise harm. For example, some participants mentioned the use of plastic glasses in beer gardens and at venues on sea fronts.

Accidental injuries from glass do still occasionally occur. Night club dance-floors seem to be a particular risk, as P19 found out, *'I was in the dance-floor and someone dropped a glass on my foot. I've got a small scar'* (P19). P21 adds: *'glass breakages do tend to be accidental, but it gets to the point at the end of the night, because people finish their drinks and put them on the floor, that you're dancing on a layer of glass'*. P34 elaborates on the issue of accidental injury:

[Her friend] was in a night club and a bottle came from higher up and hit her on her head. The problem in clubs over a number of floors is that they often have a balcony on which there's a bit of a shelf. People will perch their drinks on there, and so they're easy to knock off, especially if you're a bit drunk.

These participants' experiences suggest that accidental injuries caused by glass are very localised, and are most likely to occur in certain areas of a night club, such as the dance-floor. Thus, more efficient house-keeping of these areas by staff, such as the regular removal of empty glasses from and around the dance-floor, would minimise the risk of accidental injury.

Theme 5: Glass as a weapon?

Unfortunately it is impossible to manage and prevent harm in every situation, and glass/glass bottles are sometimes used as deliberate weapons. P35 recounts a particularly horrific incident:

Three or four skinheads came in and were standing near the bar drinking bottles of [beer]. Suddenly they grabbed their bottles, smashed them on the table, and ran at a guy...he got glassed in the face and was scarred. Then they went upstairs, where a band was playing...I didn't see what happened but I saw the aftermath. The bar was covered in glass and another guy had been glassed in the head.

Whether this incident could have been prevented is another matter. P35 goes on to say:

It was a very targeted attack as there'd been problems before in that pub with skinhead coming along and starting fights. There's problems like that in the area, and has been for years with the BNP and so on. They didn't like the sort of people who went in there and so used to go along and cause trouble.

P43 was also witness to a glassing:

[The interviewee's friend] was trying to stop a fight happening because the bouncers were also friends of hers. She tried to shut the door on these people and ended up with a glass bottle in the eye. She has a big scar around her eye and was affected quite badly – she ended up moving away from the area.

As with P35, P43 says that it was known trouble makers responsible. P17 backs this issue up. As a night club worker, he was witness to a series of aggressive incidents involving glass in the space of a few weeks:

A member of staff had a glass thrown at her because she'd cleared away some empty glasses off the top [of the bar], but a woman on the other side of the bar, who was trying to get a free drink, said her drink had been taken, and so she picked up a bottle from elsewhere and threw it at the member of staff.

The same participant recalled an incident in the same venue the previous week: *'Four ambulances were called in 30 minutes. People were throwing glass bottles onto the stage. It seemed completely indiscriminate who they were throwing at'*. While this is undoubtedly a serious incident, the presence of glassware seems does not seem to be the catalyst in such incidents. P17 explains:

There were three main problems – alcohol, drugs and gangs. Everyone had been drinking heavily...[but] if there was one night where you'd expect drugs to be involved it was that one, [there is also] the gang element on that night. You always knew there'd be trouble because of the people we got in, who were attracted by the music...there was much more trouble on that night of the week than any of the others, including with women'.

P17 said that the club shut that particular night down after this spate of incidents, which resolved the problem. Evidently then there are known trouble spots and known trouble makers that are responsible for such incidences, and effective action, such as that noted by P17, clearly targets the problem.

Although the incidents that P17, P35, and P43 were witness to were particularly severe, they are exceptions to the norm. Indeed, given that a majority of pubs/late night entertainment venues mentioned by participants do extensively use glasses and/or glass bottles in which to serve drinks, the actual incidences of alcohol-related aggression in which glass is used is rare. *'People do use chairs and bottles [as weapons], but it's really rare. Usually people use their fists'* (P25).

It does seem that most glass injuries are unintentional, either because they are not intended for the person who ultimately gets harmed, or more likely because the glass was not intended as a weapon in the first place. P42 was aware that the incident she was involved in was not aimed at her: *'At a bar, a couple started fighting. The girl threw a glass but it didn't go on [the girl's boyfriend], it landed near me and my friend. The drink spilt all down me, and my friend got cut on the shoulder'*. It may be that the glass was not even intended as a weapon in this incidence. This is certainly the opinion of witnesses to other incidents. Although P5 saw someone get hit around the head with a pint glass, he was unsure as to whether this was a deliberate act:

The person involved was known in the area for having an aggressive temperament. He was very drunk and went to punch [the victim] but still had a pint glass in his hand. It wasn't that he went to pick up a pint glass to smash him with - he still had beer in the glass.

P16 also believes that glasses are not necessarily used with intent: *'Men did pick glasses up, I think they were just trying to throw their pints over each other, but the glasses went as well'*.

While the British Crime Survey reports glasses and glass bottles as being the most frequently used weapon in incidences of alcohol-related aggression, they are more likely to be used as a threat rather than an actual weapon. However, from the experiences of the participants interviewed, this can be a catalyst for an aggressive response from the recipient of such threats, with the person threatening violence becoming the victim. The consequences are often severe, as was the case in an altercation between a client and a bouncer witnessed by P15: *[The bouncer] wasn't glassed, but threatened. The bouncer retaliated and the guy went on to the floor where he was kicked...he went to hospital and was in a coma for a few weeks*. In this instance the client's threat certainly seemed to be a one-off incident. P15 notes that the client, *'had some kind of condition and so shouldn't have been drinking. His perception was made a lot worse – he actually said that himself'*.

How an incident is perceived, by both the 'perpetrator' and 'victim', is important as to how that incident folds out. P19 describes the lead up to an incident in a night club:

I would never have gone to hit her, but she chucked a drink over me, and that was an action, and I'd not done anything wrong. I would never go and cause any trouble. If it had just been verbal I would've just laughed it off. But she raised the glass in her hand and I thought she was going to hit me with it. Who knows what she could've done, because I don't know why she chucked a drink over me. I just tried to get my space and get out of the environment and just hit out.

When people use threats, there follows a certain expectation of how other people are going to act. P19 defends her actions by saying: *'The girl had raised the glass, but there was no water left in it, so I thought, what are you going to do with it'*. This may be a reflection of today's society, with there being such an expectation of confrontation that many people are prepared to pre-empt such a situation to

avoid being the victim. P19 goes on to say: *'I was scared as well and you do hear of things like that happening. Not that violence is the answer, but if you become threatened or don't feel safe, you do what you have to do to get out of the situation'*. As a former bar manager, P28 certainly believes this to be the case:

You see two people talking together and then one person has used whatever they're drinking to hit the other person, but you don't know why because you can't hear the conversation. I think weapons are used due to fear. People are nowadays going out expecting trouble.

The result of such expectations confirm that the boundaries between victim and perpetrator are becoming increasingly blurred. Aggressive actions are viewed as self-defence, and individuals retaliating to threats, perceived or actual, still view themselves as the victim. However, threats do not necessarily lead to action, and such reactions may be uncalled for:

P28: If someone starts threatening you, generally you know they're not going to do anything about it because they're talking about it. Someone who's going to do it isn't going to talk to me about it. If someone's going to hit you, they're going to do it straight away.

These views suggest that the interaction between drinking container and anti-social behaviour is not straightforward. More often than not, injuries caused by glass are accidental rather than intentional, or as a result of an unintended action. Many establishments already seem aware of the potential dangers of glass at certain times and in certain places, and take action accordingly.

4.3. Quantitative Analysis of Survey Data

For each of the surveys, the data was imported into SPSS v12.0.1.

4.3.1. Survey I (witnessing aggressive / violent incidents)

This short online survey explored experiences of aggressive incidents in nightclubs and pubs. There were 30 respondents: 43% male (n = 12), 57% female (n = 16). The majority of the sample (72%) visited a pub or nightclub at least once a week and so it was felt that, despite the small sample size, respondents' experiences were relevant to the topic.

Respondent were asked whether they had witnessed violent incidents. No participants had experience of seeing these occur frequently in either pubs or nightclubs, however 21% reported seeing such incidences occasionally in nightclubs and 28% reported seeing such incidences occasionally in pubs. The majority of respondents reported that in both locations violent or aggressive incidents were rare occurrences. Figures were slightly higher however when asked about incidents outside these locations with 34% of respondents reporting they had occasionally witnessed violent incidents outside pubs and 31% reporting they had occasionally witnessed such incidents outside nightclubs. A further 7% reported that they had often seen such incidents outside nightclubs. When questioned about the use of weapons the majority (86%) reported that they had never seen this in pubs or in nightclubs (82%). There were however a small number who had witnessed the use of weapons on rare occasions in both pubs (14%) and nightclubs (18%), and a further 4% who had occasionally seen this in nightclubs.

As well as being asked about their experiences of witnessing violent incidents respondents were asked about their perceptions of these incidents. There was evidence that some did feel such incidents were on the rise. More of the sample felt this was an issue outside (14%) rather than inside the venues (24%).

4.3.2. Survey II (perceived efficacy of intervention strategies)

This short online survey explored the perceived efficacy of various intervention strategies currently available in nightclubs and bars to reduce the likelihood of violent or aggressive incidents. There were 32 respondents: 6% male (n = 2) and 94% female (n = 30). The age range of respondents was 18-24 with an average age of 20.7 years. Nearly two thirds of the sample (63%) reported that they visited a bar, pub or nightclub at least twice a week, indicating that despite the small sample size, respondents' experiences were relevant to the topic.

The 15 items included in this survey comprised items relating to bar/club door policies at opening and closing times (4 items), management expertise and intervention policies (3 items), banning of certain types of dress (3 items), internal environment (3 items) and the use of glass bottles and drinking vessels (2 items).

For **door policies** at opening times 91% respondents reported that the presence of bouncers on the doors reduced the likelihood of violent or aggressive incidents and 79% respondents reported that having a weapons search on the door is likely to reduce the incidence of these kinds of events. Preventing overcrowded areas (88% agreement) and having staggered closing times for bars/clubs in the same area (66% agreement) were also seen as likely to reduce the incidence of violent or aggressive events.

In terms of **management expertise and intervention strategies**, 72% respondents agreed that having an experienced manager in place is likely to reduce violent or aggressive incidents, as is prompt intervention by bar staff (85% agreement) and refusal to serve customers who are already drunk (74% agreement).

For **dress policies**, whereas 59% respondents agreed that the banning of football shirts is likely to reduce violent or aggressive incidents in bars and pubs, only 14% respondents thought that banning rugby shirts and 3% respondents that banning cricket 'whites' would have a similar effect. Instead, the majority of respondents disagreed with the statement that the banning of rugby shirts or cricket attire would contribute to the incidence of violent or aggressive events (59% and 75% respectively).

Sixty-five percent of respondents agreed that the rapid clearing up of empty glasses would be likely to reduce the likelihood of violent or aggressive incidents. In other aspects of **internal environment**, only 31% respondents agreed that maintaining music at a low volume would reduce the likelihood of violent or aggressive events and only 25% respondents thought that the presence of pool tables would have the same effect.

Finally, 59% respondents agreed that the banning of **glass** drinking vessels would reduce the likelihood of violent or aggressive incidents and 50% respondents stated that the banning of glass bottles would have the same effect. An interesting point to note here is that whereas 40% respondents *disagreed* that the banning of *glass bottles* would increase the likelihood of violent or aggressive events, only 27% thought the same would be true of *glass drinking containers* (i.e. *glasses*).

4.3.3. Survey III (successful strategies for reducing aggression)

There were 165 respondents to this survey, of whom 77.9% were female. The mean age was 28.22 SD (11.19). The remainder of the survey questions are detailed below, together with accompanying descriptive statistics.

4. This question relates to how much, on average, you drink 'out'. Drinking 'out' means drinking anywhere outside your own home. Please indicate which of these statements is generally most true for you.

Statement	Frequency	Percent	Valid Percent	Cumulative Percent
I generally drink 'out' every day	0	0	0	0
I would say that I probably drink 'out' every day	0	0	0	0
I drink 'out' most days	2	1.2	1.2	1.2
I drink 'out' several times a week	16	9.7	9.7	10.9
I drink 'out' a few times a week	9	5.5	5.5	16.4
I drink 'out' a couple of times a week	37	22.4	22.4	38.8
I drink 'out' several times a month	25	15.2	15.2	53.9
I drink 'out' a few times a month	33	20.0	20.0	73.9
I probably only drink 'out' once a month or so	24	14.5	14.5	88.5
I rarely, if ever, drink 'out'	13	7.9	7.9	96.4
Do not wish to answer	6	3.6	3.6	100.0

Other (please specify):

Once a week

On holiday only

Don't drink

I do not drink alcohol

At home I rarely drink out, at uni I drink out 2-3 times a week

Once a week

5. Please indicate the extent to which you agree or disagree with each of the following statements.

The incidence of violence and aggression in pubs would be decreased by:

	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree	Don't know
Increasing	2% (4)	18% (30)	9% (15)	23%	20%	18%	5% (8)	4%

the frequency of glass collection by bar staff				(38)	(33)	(30)		(6)
Prompt action taken by bouncers or bar staff when aggression is seen or reported	2% (4)	1% (2)	1% (2)	1% (2)	8% (13)	42% (69)	42% (69)	2% (3)
Tighter policies on barring aggressive customers	2% (3)	1% (1)	1% (1)	3% (5)	9% (14)	39% (63)	45% (73)	2% (3)
Creating a relaxed atmosphere via lighting and music choice	4% (6)	10% (17)	9% (14)	10% (17)	28% (46)	27% (44)	10% (17)	2% (3)
Banning glass drinking vessels	4% (7)	21% (35)	15% (25)	20% (33)	15% (25)	11% (18)	7% (12)	5% (9)
Re-introduction of limited opening hours	9% (15)	23% (38)	16% (27)	16% (27)	9% (14)	14% (23)	8% (13)	4% (7)

6. Now please rate the measures in order of usefulness in reducing aggression in pubs

	1st	2nd	3rd	4th	5th	6th
Prompt action by bouncers/bar staff	36% (59)	39% (64)	14% (23)	8% (13)	1% (1)	2% (4)
More frequent collection of glasses	0% (0)	1% (2)	13% (21)	31% (50)	32% (51)	23% (37)
Banning use of glass vessels	1% (1)	5% (8)	16% (26)	19% (31)	36% (59)	23% (38)
Creation of a relaxed atmosphere	13% (22)	9% (14)	34% (55)	16% (26)	12% (19)	17% (27)
More stringent policy to bar aggressive individuals	45% (73)	41% (67)	10% (16)	3% (5)	2% (3)	0% (0)
Re-introduction	5% (8)	4% (7)	14% (23)	23% (38)	19% (30)	35% (56)

of limited opening hours						
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Qualitative Analysis of Data

When asked if the respondents had anything they wished to add, there were three main distinct themes identified in the responses: Considering the causes of aggressive behaviour, Methods to address aggressive behaviour and the Impact of the drinking vessel.

Considering the causes of aggressive behaviour there were some suggestions put forward by respondents as to the causes of these. These include the amount of alcohol consumed, overcrowding in the pubs, televising sports events, attitudes, culture and acceptance of binge drinking, promotional offers and happy hours and the non-management of the queue for the bar.

Respondents also suggested methods that they feel would address these events. These include bar staff having greater powers and training to refuse service to intoxicated customers and extending licensing hours. However some respondents felt that extending licensing hours would not make any difference to the amount of aggression shown by individuals.

Regarding the vessels drinks are served in, there was a re-occurring theme that aggressive customers would probably use other objects in a conflict, if they did not have a glass in their hand at that time. Conversely to this, there was a theme suggesting that if glass was replaced with plastic then there would be less damage caused. However participants mostly followed this suggestion with the theory that if plastic vessels were only used, they would use another object (e.g. ashtray) in any aggressive conflict.

Overall therefore the analysis suggests that respondents feel there are many causes of aggressive behaviours and that glass vessels are not responsible. If they were replaced with plastic vessels, then the aggressors would replace them with another implement.

Section 5: Discussion and Conclusions

5.1. Discussion

Fagan (1990) postulates that most alcohol use occurs amongst people who are not violent and, despite the fact that alcohol may be present in both offenders and victims in many violent events and has been associated with violent behaviour for many decades (Boles & Miotto, 2003), there has been a paucity of research which has managed to document causal links between the two (see, for example, Allen, Moeller, Rhoades & Cherek, 1997; Paglia & Room, 1998). This is probably, primarily, due to the multiple, and confounding, variables that are involved in situations where violence occurs. It is therefore imperative that the complex processes that link alcohol use / abuse and violence, and the network of factors and variables associated with either, are analysed carefully –and that sensible decisions are made based on available data, rather than a clumsy blanket approach, which may simply change the nature of the violence, rather than reduce it. As Boles and Miotto (2003) state “the use of substances occurs in environmental, social, situational, and cultural contexts that influence the potential for violent outcomes (Fagan, 1993b). The presence of alcohol or drugs in violent events does not necessarily imply that these substances affected the behaviour of either the perpetrator or victim (as cited in Fagan, 1993a). Further, different substances affect individuals differently, based on their physiology, psychology, history, gender, and other personal and cultural factors (Collins, 1993; Reiss & Roth, 1993)”.

In addition, the writings of Fox (2004) should be mentioned. Fox looks at (as she represents it) ‘the rules of drunkenness’ and notes that ‘in some societies (such as the UK, the US, Australia and parts of Scandinavia), drinking is associated with aggression, violence and anti-social behaviour, while in others (such as Latin/Mediterranean cultures) drinking behaviour is largely peaceful and harmonious. This variation cannot be attributed to different levels of consumption or genetic differences, but is clearly related to different cultural beliefs about alcohol, different expectations regarding the effects of alcohol and different social norms regarding drunken comportment” (p. 261).

5.1.1. The link between drinking containers and violence

A number of debates exist with regard to the optimal drinking container. Many of these are around safety (accidents/injuries, possibility of people tampering with drinks), whilst others are around environmental issues and the aesthetics of drinking from particular containers. The main areas of debate centre around toughened glass versus normal glass and plastic versus glass.

Glass v Toughened Glass

Warburton and Shepherd (2000), in a study of 1229 bar workers over a six month period reported that toughened glassware significantly increased the number of injuries suffered by bar staff. The authors therefore advocate stricter quality control in the manufacture of toughened glass. Interestingly, their study reported only one instance of an injury through assault; the study data showed that over 99% of bar staff injuries were not related to incidents of violence or aggression.

British Glass (2006) assert that the term ‘toughened glass’ is in itself misleading, and toughened glass is not actually tough. ‘A better description would be ‘brittle glass’ because toughened glass breaks into little pieces when impacted or scratched’.

Plastic v Glass

Professor Jonathan Shepherd (2003) heavily advocates the removal of traditional/annealed glass, and a shift towards all drinks being sold in plastic bottles, as a strategy to reduce alcohol-related injuries. Speaking to the BBC News he said, 'Plastic bottles won't break – it's when a bottle is used as a club and it breaks that injuries are caused'.

The British Beer and Pub Association have argued against such plans. Their director of pubs and leisure, Dr Martin Rawlings (2003) has stated that, 'If changing all our glass was the solution to the problem, we would do it tomorrow, but it won't....If people want to fight, they will find a weapon – or bring it with them'.

The Scottish Beer and Pub Association (SBBA) also oppose a blanket ban on glass products. Writing to the Edinburgh Evening News, Patrick Browne, CEO of the SBBA, outlines the environmental impact such a move would have:

'The fact is that plastic bottles are non-biodegradable and cause significant levels of pollution in their disposal. By choosing to produce plastic bottles rather than glass, toxic emissions are increased by a factor of 100. This year, more than 1.2 million glass bottles will be used in Scotland's pubs and clubs. More than 1,192,000 pints of beer alone are served in glasses every day in Scotland - which is more than 435,000,000 a year - an indicator for the number of plastic glasses that would have to be produced and disposed of annually'.

From Scottish Camra website (<http://www.glasgowcamra.org.uk/page14.html>)

'Plastic tumblers taint the taste of the beer. The drinkers least affected by introducing plastic containers will be the ones who drink to get drunk and don't care about quality. As this is the group that is responsible for almost all pub related violence it means that the licensing board policy isn't just punishing the innocent along with the guilty, it is punishing the innocent instead of the guilty'.

Moreover, there is another factor to consider – treat people as if they cannot be trusted, and you may end up looking at a self-fulfilling prophecy. To some extent, we adopt the roles that are expected of us and, by giving people plastic containers to drink from, we are also telling them that they cannot be trusted, that they are inherently violent, that they cannot handle alcohol responsibly. This may unintentionally influence behaviour in the wrong way!

In addition, the findings of our research indicate that the problem with glass drinking containers in late night venues is not as severe as it is represented as being in the media. Given that our interviewees were recruited on the basis of their being witness to aggression, (and there would be expected to be a higher number of cases of 'glassings' mentioned), nevertheless, only 6% of the interviewees who were witness to violent incidents reported seeing deliberate acts of glassing. Given the purposive sampling strategy, this figure is unexpectedly low.

5.1.2. Identifying salient factors leading to violent incidents in pubs and other late night venues in the UK

From the qualitative interviews, three themes, or factors, were identified as being salient factors leading to violent or aggressive incidents in pubs and other late night venues on the UK, namely: rivalry, crowding and attitudes / behaviours of staff.

Key aspects relating to the theme of *rivalry* were: sporting rivalry, local or territorial rivalry, and romantic rivalry. In the case of the first two aspects, aggression evolved from social tensions created when different groups met, such as rival football supporters or groups of students and locals. However, there was a clear consensus that staff in venues were aware of these factors as potential sources of aggression and already take necessary steps to avoid conflict. The latter was much more unpredictable, and predicting where and when such aggression would occur appears to be more problematic.

The key factors within the theme of *crowding* were: bad management practices, poor design, and frustration. Participants were critical of venues that allowed in more clients than they could comfortably accommodate, especially in venues where the layout meant bumping into people at peak times was inevitable. Such factors link into the issue of frustration, as overcrowding can lead to increased waiting times to get served, and invasion of personal space.

Criticism of how venues were managed continued into the theme of *staff*. Participants highlighted the fact that it was not always the clientele of pubs that were fully to blame when aggressive incidents escalated, with door staff being criticised for a lack of intervention, or too much intervention, in that they were deemed to be excessively aggressive. However, staff themselves also commented that aggressive behaviour sometimes arose when they were trying to enforce sensible serving practices.

Data from the correlational surveys suggested that the most effective form of intervention in terms of reducing accidents and injuries would be a more stringent policy to bar aggressive individuals and prompt action by bouncers / bar staff to deal with potential trouble. Banning the use of glass vessels was not seen as a useful strategy in reducing aggression in pubs.

Additional qualitative comments from the largest survey (n = 165) were further analysed and three main distinct themes identified in the responses: *Considering the causes of aggressive behaviour*, *Methods to address aggressive behaviour* and the *Impact of the drinking vessel*.

Considering the causes of aggressive behaviour there were some suggestions put forward by respondents as to the causes of these, including: the amount of alcohol consumed; overcrowding; televising sports events; attitudes, culture and acceptance of binge drinking; promotional offers and happy hours and the non-management of the queue for the bar.

Regarding the vessels drinks are served in, there was a re-occurring theme that aggressive customers would probably use other objects in a conflict, if they did not have a glass in their hand at that time. Conversely to this, there was a theme suggesting that if glass was replaced with plastic then there would be less damage caused. However participants mostly followed this suggestion with the theory that if plastic vessels were only used, they would use another object (e.g. ashtray) in any aggressive conflict.

Overall therefore the research suggests that people are aware that there are many causes of aggressive behaviour, but that they do not think that glass vessels are responsible for such incidents. Respondents clearly believed that, if glass drinking containers were replaced with plastic ones, then violent / aggressive incidents would still take place, but via another implement.

5.2. Limitations of Research

There were some difficulties in making contact with the perpetrators of violent incidents; however, as the interviews progressed, it became apparent that part of this problem was an issue of self-labelling. Thus, a number of the interviewees, who initially volunteered to be interviewed as the 'victims' of violent incidents, in reality admitted to initiating the violence (although they were, in general, quick to point out that it was verbal aggression, on behalf of the other party, that led to the violent or aggressive altercation).

In addition, participant numbers for the three correlational surveys were lower than expected (n=30, n=32, n=165). The surveys were conducted via the internet at the end of July, and to a mainly student/academic-focused sample. Since all the students are on holiday at this time, this would account for the low response rate.

5.3. Conclusions and Recommendations

Following this research, and the review of available literature, a number of recommendations were formulated for safe drinking environments, and to aid better understanding of the interaction between alcohol, drinking containers and violent altercations in late night drinking venues:

- Bar staff should be aware of when violent / aggressive incidents are more likely to occur (for example, when there is rivalry or crowding) and act quickly if there are signs of trouble.
- The attitudes and behaviours of bar / door staff are vital in reducing and eliminating violent / aggressive incidents in pubs and other late night venues. Training should be given to all staff to raise awareness of the importance of their responses in reducing and preventing violent incidents.
- More attention should be paid to the efficient housekeeping of venues selling alcohol in bottles or glasses. Many injuries caused by glass are accidental and occur in localised areas, such as on the dance-floor of a club. Regular removal of empty glasses/bottles from and around these areas, would minimise the risk of accidental injury. Similarly, measures to minimise the build up of empty glasses/bottles in any area of a venue should be taken especially at busy times.
- Reinforcement of the message that anti-social behaviour is not tolerated within an establishment as a way of decreasing the notion that such behaviour is acceptable. For example, posters in strategic positions outlining the establishments policy on how anti-social behaviour is dealt with would help reinforce this message (although this is double-edged as having posters up may give the impression that the pub has had problems before and may be seen as that sort of environment - risks becoming a self-fulfilling prophecy!).
- More widespread and active participation in PubWatch or similar schemes to identify, and remove from the drinking environment, known trouble-makers, and to identify potential trouble-makers.
- Given that a majority of aggressive incidences in the night-time economy involve 16 - 24 year olds, there needs to be more efficient enforcement of underage drinking laws, and some venues may consider restricting entry to over 21 year olds only. In general there also needs to

be more responsible serving practices enforced, and co-operation between staff to assist in the effectiveness of such a strategy.

- More work should be done both on reducing binge-drinking incentives and promoting safer drinking options.
- There are instances when it is more appropriate to use plastic containers. Such instances include: 'outside' venues, such as sports stadiums, specific establishments in which there is known to be problems with violence (and thus locations in which people seeking to take part in violent altercations may be drawn to; specific evenings on which events (such as a prominent football match) is taking place or when hygiene dictates (for example, the magnitude of customers means that glass washing cannot take place rapidly enough).
- Thought should be put into creating more relaxing and friendly atmospheres in venues where the onus isn't on getting drunk, but rather is on socialising. This may include venues where, for example, there is low level or no music - certainly not loud music where you cannot hold a conversation and so have no alternative but to drink. Moreover, more spacious areas/better laid out venues would be preferable - where the possibility of bumping into someone accidentally is reduced. This also creates more female friendly environments.
- The introduction of table service in more venues would help to alleviate issues of crowding and frustration at/around the bar area, although this may not be possible at some venues to the extra expense involved (in terms of staff time).
- Quality controls are needed for toughened glass. Currently, the toughened glass may be of variable quality, thus research in this area is impossible to generalise.
- Rather than taking control from the consumers (by only allowing plastic drinking containers), the government and late night venues should look at giving consumers back control. For example, recycling bins for bottles could be available in establishments and there could be customer incentives to hand back bottles.

Section 6: References

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Section 7: Appendices

Appendix 1: Final Interview Schedule

- 1) Sex of participant
- 2) Age of participant
- 3) Location participant lives in – as well as location(s) participant usually drinks in. [Location here refers to towns/cities]
- 4) Ask participant about their drinking behaviours. [Do they stay in one place or go from place to place; what makes them move location (e.g. do they move because of crowding); how do they choose where to move to (e.g. next pub along); do their drinking patterns differ depending who they are with; who do they normally drink with].
- 5) List of bars / pubs / clubs participant tends to frequent. [Please ask for a brief description of each; name of each; description of clientele; times they visit and days (e.g. weekends / Thursday evenings); how long they spend there; do they stand at the bar or sit down; are they inside or outside; any restriction on entry; do places serve food (what sort of food); are there bouncers (who gets refused, have they ever seen anyone refused entry); are glass bottles served or are drinks decanted into glasses / plastic glasses; is there a garden or play area; are under 18s allowed in].
- 6) Thinking back over (approximately) the last three years, have they encountered or participated in any violent / aggressive incidents at a bar / pub / club?
- 7) For each and every incident recalled, ask the following information:
 - a) Where and when did incident happen? [time; day; month; location of pub / club; inside or outside; small or large pub; rural; city centre; trendy; suburban or traditional pub?]
 - b) Describe the scene and the people involved [crowded, loud music, TV screens; were many people standing at bar, seated, eating; was a sports event taking place, were people wearing football shirts, smart clothes, hoodies etc]
 - c) What happened? [include lead-up to and reason for incident, injuries caused, weapons used (including e.g. fists, kicking)]
 - d) How did incident end [was there any intervention by bar staff or others, were police called, what was reaction of others around]
 - e) In your opinion, did anything in particular cause the incident to escalate into a violent one [or did anyone do anything which reduced the amount / possibility of violence etc]
- 8) Any other comments?

Appendix 2: Participant Information Sheet and Consent Form for Interviews

You have been asked to take part in an interview regarding your drinking behaviour. This is part of a research project being conducted by researchers at Nottingham Trent University (Dr. Belinda Winder and Caroline Wesson). The interview will focus on establishing your drinking habits, in terms of where, when and with whom you drink, as well as asking for descriptions of the types of establishment you drink in. You will also be asked about any incidences of aggression or violence, including potential violence, that you have been witness to, or part if, over the past few years.

With your consent, the interview shall be recorded. Please note that some of the information you give may be used in a final written report. However, all information you give shall remain anonymous, and should any direction quotations resulting from your interview be used, you will be identified only by a participant number.

You have a right to withdraw from the study at any time without penalty, and to refuse to answer any questions you feel uncomfortable with.

In signing this consent form you are giving permission for the interview to be recorded and the subsequent information that you provide to be used by the researchers in their research in any way they deem appropriate, under the express condition that all given information will remain anonymous, other than to the researchers.

I agree to the above terms:

Print Name:

Signature:

Date:

Appendix 3: Interview Debriefing Sheet

Thank you for taking part in this interview. During the interview you were asked to provide information relating to your drinking habits, and involvement in any incidences of aggression/violence, either as a witness or as a perpetrator, within/outside the establishments you have frequented over the past three years.

The purpose of these interviews is to explore people's behaviours with drinking containers in pubs and other late night venues, and to identify the factors that contribute to the occurrence of violence within the said venues.

You are reminded that the information that you have provided will only be presented in an anonymised format. Should you have any questions about the study, please direct them to the researchers below.

We have included helpline numbers for anyone who needs to talk about violence or aggression.

Regards,

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