

Alcohol-Related Collateral Harm, the unseen dimension?

Study of students aged 16-24 in Southern England

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ABSTRACT

Aim: To ascertain and characterise young adults' experience of alcohol-related collateral harm (ARC harm) by collecting and interpreting empirical evidence and reflecting on its aetiology.

Methods: An on-line survey collected quantitative and qualitative data from college and university students aged 16-24 in Southern England (N=450). Semi-structured interviews collected predominantly qualitative data from a purposive sample of the survey participants (N=25). Questions, and analyses of the evidence collected, focused on harms participants had experienced as a result of alcohol consumption by other people in their family and social circle.

Findings: 64% of survey participants experienced ARC harm, including 50% of non-drinkers. In logistic regression analysis, no significant associations were found with high or low self-reported levels of alcohol consumption. ARC harms were associated with being female (OR=1.62, 95% CI 1.01-2.62), having family members who drank every day (OR=2.65, 95% CI 1.49-4.69), being influenced by others' drinking (OR=2.03, 95% CI 1.32-3.10) and being over eighteen (OR=2.61 95% CI 1.57-4.34). Using qualitative descriptors, the ARC harms reported were classified in a novel taxonomy of eight categories, briefly: nuisance; tolerance; pressure into unwanted situations; unsought responsibility; psychological harm; physical harm; relationship harm and undisclosed harm. In thematic analysis of the interview data, environmental themes described certain physical settings and psychological contexts as key risk factors for ARC harm, notably: nightclubs, being in the vicinity of a drunk driver, the life stage of individuation, the university milieu and young adults' perceptions of alcohol. Ten superordinate themes were developed to explain how and why ARC harms remain unseen.

Conclusions: A high level of ARC harm was reported and experience of ARC harm was linked to several predictors. Risk factors included immutable individual characteristics, e.g. age and gender, and ecological factors arising from exposure to normative environments that permitted, encouraged, legitimated or reinforced irresponsible behaviours by drinkers.

THE STUDY OBJECTIVES

Objectives Phase I

To use an on-line questionnaire to collect empirical quantitative and qualitative data from college and university students aged 16-24 on their experiences of ARC harm.

To collect demographic information and information on lifestyle behaviours around alcohol and other public health lifestyle factors as context for the ARC harm experiences reported.

To use descriptive and inferential statistical analyses to examine and interpret the quantitative data collected.

To use systematic coding and categorisation to develop qualitative descriptors for ARC harm from the qualitative data collected and to create a novel taxonomy of ARC harms.

To use historical and theoretical analyses of alcohol-related harm as a societal and public health issue to explain how and why the perception of ARC harm has changed over time.

Objectives Phase II

To use audio recorded semi-structured interviews with a purposive sample of survey participants to collect in-depth qualitative data on young adults' experiences of ARC harm

To use thematic analysis to identify and code the types of ARC harm from the qualitative data collected and to develop semantic themes to characterise ARC harm

To consider the domains of influence bearing on the participants' ARC harm experiences and their potential relevance as risk factors for ARC harms to young adults.

To use thematic analysis to draw out superordinate themes to describe and explain how and why ARC harm remains largely unseen within the totality of alcohol-related harm.

To triangulate the quantitative and qualitative data analyses from both phases of the study to characterise ARC harm and to consider its aetiology and impact.

Broader study objectives

To advance evidence to broaden the current conception of the totality of alcohol-related harm by demonstrating the existence and significance of the element of ARC harm within it and to invite reappraisal of the established paradigms of alcohol-related harm.

To consider the relevance of the study findings on ARC harm as a public health issue and to generate information to inform policy.

To promote further work to validate the study findings and to raise awareness of ARC harm.

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CHAPTER 1: INTRODUCTION

BACKGROUND TO THE STUDY

Summary of chapter

This chapter establishes the thesis of the study and why this research is needed. It sets the context by addressing the current understanding of alcohol-related harm and introduces the concept of *Alcohol-Related Collateral Harm*. The approach taken in the study is outlined together with the reasons for the study focus on sample populations of young adult students. Relevant background information is presented on the issue of alcohol as a public health challenge and perceptions of the nature of alcohol harm by the public and policy makers are considered. Matters pursued in the chapters ahead are then introduced at the end of the chapter.

1.1 Introductory outline of the study

The term *Alcohol-Related Collateral Harm* (ARC harm) is used in this study to describe the harms caused by drinkers that impact on other people. ‘ARC harm’ provides a useful portmanteau acronym and a metaphor for the circle around the drinker in which the ARC harms occur. ‘ARC harm’ also retains the link to the more familiar term *alcohol-related harm* that is used for the totality of alcohol harm, but distinguishes ARC harm from it.

This study explores the phenomenon of alcohol-related collateral harm (ARC harm) as experienced by a population of young adult university and college students in the United Kingdom. Its central hypothesis is that there is currently a dimension within the totality of alcohol-related harm that remains largely unseen and unacknowledged, both by the public and by policy makers. This unseen dimension comprises the harms that drinkers cause to the people

around them. The study argues that this largely unseen and poorly characterised dimension of harm is significant and warrants greater attention. The study further argues that, although alcohol-related harm is an acknowledged public health challenge, the current failure to recognise the harms that drinkers do to other people limits the public and policy conception of the totality of the harm caused by alcohol. This limited view in turn skews and constrains the policies that are developed to prevent and address the totality of alcohol harm effectively.

The study's central hypothesis was pursued through the collection and analysis of data on the harms from other peoples' drinking as experienced by a sample of young adult students. These data were collected with relevant data on the participants' knowledge, attitudes and behaviours around alcohol and other key aspects of public health. A pragmatic mixed-methods approach was used comprising two phases of data collection and analysis; the first drawing on an electronic survey and the second based on a series of one-to-one semi-structured interviews.

A review of the history of alcohol-related harm in the UK and the Government response to it sets the scene for this study of ARC harm. This context brings together relevant existing knowledge on alcohol consumption and alcohol-related harm and shows that the current covert nature of ARC harm is a relatively recent construct. Relevant theoretical ideas on public health, alcohol addiction in the family and ecological systems were also examined. Ideas on personal liberty and responsibility to others were also considered in the light of the UK Government's established public health message to '*drink responsibly*'.

In Phase 1 of the study an on-line survey was used to collect empirical data from a sample of 450 college and university students. The types of ARC harms experienced by the participants were identified, subjected to statistical analyses and categorised to characterise ARC harm and

to ascertain the extent of the impact of ARC harm on the lives of these young adults. Statistically valid findings were generated using descriptive and inferential statistical analyses, and a taxonomy of ARC harms was determined for this young adult population group. Phase II followed up a purposive sample of the Phase I participants using semi-structured interviews to examine their experiences of harms caused by other peoples' drinking in much greater depth. The ARC harms reported were coded and categorised systematically using Thematic Analysis to complement the Phase 1 findings. Themes were developed to explain the environmental risk factors for ARC harm, the ways that young adults coped with ARC harm and how and why the ARC harms they experienced remained unseen.

In identifying and characterising the ARC harms experienced by a sample of young adult students and through assessing their impact, the study has sought to raise the profile of the harms caused by drinkers to the other people around them. Through raising the profile in this way, ARC harm may be better recognised as a significant element within the totality of alcohol-related harm. Ultimately, the study has sought to deliver findings that challenge the current established conception of the totality of alcohol-related harm so that the component of ARC harm within it can be acknowledged and targeted appropriately as a public health concern.

1.2 Recognition of Alcohol-Related Collateral Harm

Grouping together the harms that drinkers do to the people around them is a relatively recent development in public health circles and determining an agreed composition for these harms remains a work in progress. However, the combined harms that drinkers do to others have now been considered by the World Health Organization (WHO, 2009; 2011). Since then, WHO has identified *Harm from Others' Drinking* as a key element of its *Research Initiative on Alcohol, Health and Development* that features in its Global Status reports (WHO, 2014).

To date, naming and characterising this group of harms as a discrete part of alcohol-related harm has not proved straightforward. Several different approaches and terms have been used in relevant research to try to identify and conceptualise these harms around the drinker. Klingemann and Gmel, (2001) described all the non-health harms caused by alcohol as *Social Consequences*. Since then, there have been several different interpretations of the concept of the harm caused by drinkers to society in both policy documents and in the academic literature. The Cabinet Office (2003) used the term *Negative Externalities* as a social and macroeconomic indicator to describe the gross costs to society and to public finance from alcohol misuse. The terms *Negative consequences* (Rossow and Hauge, 2004) and *Externalities* (Greenfield et al., 2009) have been used since to describe the more intangible personal costs and the policy implications that these harms represent. Other descriptions, such as *Passive Drinking* (Donaldson, 2009b) and *Second-hand Drinking*, (Greenfield et al., 2014) owe their derivation and interpretation to equivalent terms from the domain of tobacco-related harm around smokers. In other relevant research, the phenomenon has been described in a variety of ways including as *Collateral Damage* (Giesbrecht et al., 2010) *Collateral Harm* (Seid et al., 2015) and *Alcohol's Harm To Others* (Room et al., 2010); definitions that emphasise the direct impact on other people caused by drinkers' irresponsible behaviours.

Recognition by WHO in 2009 prompted additional research into the harms that drinkers do to other people and, internationally, there has been a growing body of research in recent years. The academic literature reveals particular centres of interest and well-established geographical research bases in Australasia (e.g. Room et al., 2010, Laslett et al., 2010, Casswell et al., 2011, Callinan, 2014), in Northern Europe (e.g. Hutanen and Tigerstedt, 2012, Hope, 2014, 2016, Moan et al., 2015), and in the USA (e.g. Greenfield et al., 2009, Greenfield et al., 2014, Greenfield et al., 2015, Seid et al., 2015). However, to date, different interpretations of the

composition of these harms and the variety of research methodologies adopted to study them have hindered the development of comparative data and a cohesive representation of the topic in the literature. Nevertheless, a common theme in the research literature is the concern for greater attention in public health policy circles to the negative impacts of these harms.

In Australia, a key study, Laslett et al. (2010) has provided an overview of problems in the country caused by the drinking of others. The study reported findings gleaned from government databases on health, crime and welfare together with empirical findings from a targeted survey of 2,600 adults aged over 18. The former highlighted the magnitude of some of the recognised individual harms, including alcohol-related assault and hospitalisations resulting from other peoples' drinking. The survey questioned participants on the negative consequences of other peoples' drinking. Its findings showed that "*almost three quarters of the adult Australian population report having been affected in the last year as a result of someone else's drinking.*"

A key study in the USA, Greenfield (2009), reported on *externalities* experienced by a sample of 2,550 adults responding to six questions in the USA's national alcohol survey. Participants were asked whether they had experienced each of six specified types of harm from others' drinking. The study then reported an overall prevalence of harm from others' drinking (around 60%), a hierarchy for the six specified harms and relevant associations with demographic factors. A key study in Northern Europe (Hope, 2014) examined harms from others drinking in the general population, in the workplace and to children in families in Ireland and compared the findings with similar international surveys. The study reported an overall prevalence of 28%, based on five specified harms that are included in the Irish national drinking survey.

In the UK, alcohol-related harms to other people were raised as an issue by the Chief Medical Officer (CMO) in England in 2009 (Donaldson, 2009b). However, the issue was not pursued by the Government. In the absence of national data collections on these harms, what is known about their prevalence in the UK was described for the first time in the academic literature by the research report *Alcohol's Harm to Others* (Gell et al., 2015) reporting on data from Scotland (1,007 participants aged 16 and over) and the North West of England (1,020 participants aged 18 and older). The study findings were synthesised from two different methods of data collection and based on two overlapping sets of specified types of harm (16 in Scotland and 20 in the North West). The findings showed prevalence levels of 51.4% and 78.9% respectively. Balance North East (2016) subsequently surveyed 1,300 adults in the North East and reported a prevalence of 57% based on a set of 30 different specified types of harm. These reports illustrate the considerable scope for further development in the UK.

Internationally, the recent academic literature reports on research that begins to address and reconcile the disparate methodologies and interpretations used in the study of alcohol-related harms to other people. In Northern Europe, researchers have undertaken a comparative study of findings in six countries (Ramstedt et al., 2015). In Australia and New Zealand, a collaborative project has been established to incorporate findings from seven other countries with their own (Callinan et al., 2016) and the Global Drug Survey (Bellis et al., 2015) has pooled relevant data from 21 countries. In addition, the Kettil Bruun Society has sought to bring international research together, through an international thematic conference on this issue *Alcohol's Harm to Others – perceptions, policies and approaches* in Helsinki in 2015, followed by a themed issue of *Drugs: Education, Prevention and Practice* on this topic (Holmila and Thom, 2017).

The published academic literature is increasing what is known. Nevertheless, beyond such academic research circles, conceptualisation and recognition of the harms that drinkers do to other people is limited and the dimension of alcohol-related harm represented by these harms in the arc around the drinker warrants much greater attention.

1.3 Reasons for the study focus on young adults

This study approaches ARC harm as a population issue, with young adult students aged 16-24 as its designated target population. This is partly as recent research in other countries suggests that younger age groups may be at greater risk from others' drinking (e.g. Laslett et al., 2011; Hutanen and Tigerstedt, 2012; Moan et al., 2015). Three further reasons account for the focus on this young-adult group: the high levels of alcohol-related harms they experience, the current policy emphasis on harms to drinkers, and thus on older adults, and the influences around alcohol that bear disproportionately on young adults' socio-demographic environment.

Young adults experience high levels of alcohol-related harms

The Government's current *Alcohol Strategy* (Home Office, 2012) includes express allusions to young adults and to their drinking behaviours, e.g. "*We want to do all we can to ensure that we are not bringing up a generation who believe that you can't have fun without alcohol*" (Home Office 2012, p. 23). The Strategy also identifies a need to target student populations:

"We expect universities to play a key role in helping students to understand and act on the risks of excessive alcohol consumption and ensure that an environment of subsidised bars does not unduly promote drinking" (Home Office 2012, p. 23).

It also identifies young adults as the population group most likely to experience acute harms as a result of binge-drinking:

“More people under the age of 25 report getting very drunk than any other adult age group and around 50% of students drink more than the lower-risk guidelines” (Home Office, 2012, p. 23).

Yet, the Strategy then targets the chronic health harms that affect older adults, whereas the harms associated with alcohol for the young adult population group tend to be acute harms associated with heavy episodic drinking and alcohol poisoning. These tend to be characterised lightly in terms of drunken accidents, misadventure or hangover and are often disregarded or dismissed, but they are significant. Alcohol has been identified as the single most acute area of lifestyle risk and the leading cause of death for young adults. The former North West Public Health Observatory calculations of alcohol attributable mortality attributed almost a quarter (23%) of all the deaths of 16-24-year-olds to alcohol, compared with just 3% of deaths caused by alcohol for all adults. For 16-24-year olds, almost 27% of male deaths and almost 15% of female deaths were attributed to alcohol (Jones et al., 2008).

Recent research has also identified heavy, episodic drinking by students as especially problematic (e.g. O'Neill et al., 2015) and the drinking behaviours of students remain an ongoing issue. In addition, although recent national estimates show a decline in self-reported binge-drinking among young adults and an increase in the proportion of abstainers in this age group, 18% reported bingeing in the last week and 13% reported drinking more than three times the daily guidance maximum on at least one day in the last week (ONS, 2015b). This is higher than for any other population group.

Turning attention to experiences of ARC harm, little is known about young adults' experiences. This is not least as the national data sources available tend to focus on harms to children and

on child protection, and the CMO for England has remarked on the information gap for older young adults (Donaldson, 2009a). There have been studies on the effects of parental alcohol misuse on the under 18s (e.g. Bremner et al., 2011; Adamson and Templeton, 2012). These studies highlight the gap in knowledge for young adults, since the scope of such family-based studies is limited to children and young people aged under 18. Bremner et al. (2011) identified the critical role played by family and friends in developing young people's drinking habits. Adamson and Templeton (2012) suggested that parental alcohol misuse is a predictor of child underperformance in education and that alcohol dependence often has its roots in childhood. Both these studies reported an urgent need for additional research into alcohol-related harms to children and young people and the impact of family and friends drinking.

What is known is that alcohol misuse and drunkenness draw young adults into risky behaviours that are potentially harmful to other young adults, besides the drinker (DH, 2016a). Behaviours such as unprotected sex cause sexually transmitted diseases and unwanted pregnancy for other young adults. Drink driving harms any friends or family travelling with the driver and strangers are also injured or killed in resulting traffic accidents. In addition, alcohol draws young adults into crimes such as disorderly conduct and street fighting. Consequently, young adults are regularly represented disproportionately in reports of street violence and crime. In 2013/14, 25% of young people aged 16-24 had been a victim of crime at least once in the past year; a higher percentage than for any of the older age groups (ONS, 2015a). In 53% of such violent incidents, the victim believed the offender to be under the influence of alcohol (ONS, 2015a). In such instances, the offender may be harmed, but, by their nature, these crimes are also ARC harms perpetrated on the victims of the crimes.

Prevention policy focuses on harms to the drinker

The study's focus on young adults also stems from Government policy and interventions to reduce alcohol-related harms. These emphasise and target health harms to the drinker, rather than the broader societal concerns for other people that are posed by ARC harm (Donaldson, 2009a; DH, 2012; Home Office, 2012; DH, 2016c). The great majority and most recognised of these alcohol-related harms to the drinker are chronic and cumulative and they tend not to manifest until middle age (e.g. hypertension, heart disease, liver disease, cancers). These chronic harms are thus associated with older age groups, and not with young adults.

As above, the harms experienced by young adult drinkers tend to be acute harms, which are considered less serious, frequently lampooned by the media or at best dismissed as rites of passage (Hughes et al., 2008). Consequently, the policy focus on harms to the drinker effectively marginalises the young adult population group because the harms to the drinker that are recognised and targeted in current policies and interventions are not germane to their lives. Also, as above, young adults are known to experience more harms caused by other drinkers than any of the older age groups as the victims of crimes like alcohol-related street violence and drink driving. Patently, a policy focus on harms to the drinker does not address such harms, as they are caused by the drinker: they are ARC harms.

Socio-demographic influences on young adults

Young adults are at risk from their susceptibility to external influences in their environment. Socio-demographic factors affecting the lives of young adults influence their behaviours around alcohol and the alcohol-related harms they experience. Such influences might come from parents, other family members or peers or from social media and advertising.

For younger adults aged 16 or 17, opportunities for parental or older-peer influence on their behaviour around alcohol have increased since the legal age of 18 for purchasing alcohol has been enforced more rigidly. Few 16 or 17 year olds now try to buy alcohol from licensed premises, where proof of age is required, and parents and older friends have become the dominant source of alcohol (HSCIC, 2014b). This has increased the potential for parents' and older friends' norms to influence younger adults' drinking behaviour. For the 19 to 24 age group, the potential for influence from parents and other family members has also increased. This is because the number living at home with parents has grown since the 2008 recession. While the proportion of 16-18-year olds living in the parental home has remained fairly steady at around 91%, the proportion of those aged 19-24 living with parents has increased from around 46% to 51% (ONS, 2016c).

Social media use and the proliferation of smart phones have also created new opportunities for influencing today's young adults, not least for the alcohol industry to market alcohol products and alcohol-centred lifestyles. The alcohol industry has developed a highly interactive and high-profile on-line marketing presence on social media platforms over recent years. Drawing on Nicholls (2012) and Winpenny et al. (2014), Atkinson et al. (2014) conclude:

“Social Networking Sites (SNS) provide a new marketing opportunity for the alcohol industry to engage with potential customers” (Atkinson et al., 2014, p. 53).

Young adults are disproportionately exposed, as social media are an integral part of this generation's social lives where friendship groups form and bond and on-line identities are created and polished. Interactive on-line drinking narratives created by the industry associate alcohol consumption with having fun and relentlessly target young people (Barry et al., 2016). Some on-line drinking 'games' encourage extreme risk-taking behaviour that has led to deaths,

e.g. *Neknominate* (Zonfrillo et al., 2014) where a person posts video of themselves rapidly consuming a quantity of alcohol and nominates another person to match or exceed this. In sum, the social media marketing of alcohol and alcohol personas has been noted as a powerful contemporary influence on young adults' norms, influencing their drinking behaviours and their expectations of socialising with alcohol:

“SNS are an important part of the multi-platform marketing of alcohol. A variety of distinct techniques are used to make brands relevant and appealing to potential consumers and to encourage interaction and viral marketing” (Alcohol Research UK, 2015).

1.4 Identifying ARC harm as a public health issue

On the world stage, alcohol-related harm is widely recognised as major public health challenge. The World Health Organization has estimated that in the UK the harmful use of alcohol is second only to tobacco harm in its top ten risk factors for death and disability (WHO, 2009). For the health risks to individuals alone, alcohol-related harm has been placed higher than better-recognised health risk factors such as hypertension, high cholesterol, diabetes or obesity.

Any panorama of alcohol misuse reveals that people who drink too much often harm others, as well as themselves (Klingemann and Gmel, 2001; Gmel and Rehm, 2003; Karlsson et al., 2010). Yet, while the alcohol-related harms to drinkers who misuse alcohol are universally recognised as a public health issue in the UK, and statistics on drinkers are reported routinely (e.g. HSCIC, 2015a) the alcohol-related collateral harms to the people around the drinker are largely unrecognised. In England, the Government regularly collects and publishes data on alcohol consumption and alcohol-related harms to track trends and monitor areas like alcohol-related mortality and morbidity (e.g. ONS, 2013b; ONS, 2017a). Yet, this routine monitoring is in terms of the harms to the drinker and not the harms that the drinkers visit on others.

For ARC harm, in comparison, the paucity of information and poor characterisation of the harms that drinkers do to others contribute to the current lack of recognition of ARC harm as a discrete collective phenomenon. In addition, the variety of contexts in which ARC harms occur to people around the drinker, and their many different manifestations, militate against the characterisation of ARC harm as a single, recognisable phenomenon. Such factors also confound attempts to quantify the extent of the public health burden that ARC harm may represent. Potential environments for ARC harms range from the family home and social settings to the local community, to broader society and to the macroeconomic sphere. Manifestations of ARC harm may be borne directly by families, by friends, by partners, by workmates or by strangers, and indirectly by organisations, like the NHS, and at one further remove by society as a whole as economic and social impacts.

The sum of these ARC harms in terms of a total burden on society is not easily estimated. A recent report to the House of Lord's European Union Committee concluded that:

The negative effect of alcohol abuse on the wider European economy—death, injury, effects on health of the drinker, effects on others including unborn children, effects on productivity, and many other matters—is almost impossible to quantify (Parliament House of Lords, 2015a, p. 17).

At this macroeconomic level, the Cabinet Office first commissioned an attempt to estimate the burden of alcohol-related harm to the UK economy in 2003 (Cabinet Office, 2003). More recently, this burden has been estimated conservatively at some £21 billion per annum (Home Office, 2012); (IAS, 2013). However, there is a shortage of reliable data on which to base such estimates and their meaning and use are hotly contested (e.g. Snowden, 2015). Quantifying financial elements like costs to the NHS is, however, less problematic than identifying and

attributing a notional cost to the actual physical and psychological harms experienced in the family and social arena.

The UK Government recognises a few harms to people other than the drinker individually. Foetal Alcohol Syndrome (FAS) is an example. This DNA damage to a foetus from drinking in pregnancy is acknowledged (e.g. Hopkins, 2011) and pregnant women are now advised not to drink alcohol at all (DH, 2016c). For strategic policy purposes, this ARC harm is recognised and addressed as a separate entity, with an individualised prescription for action in the Government's Alcohol Strategy (Home Office, 2012). However, although alcohol is the leading known cause of non-heritable genetic developmental disability and birth defects, even here there are no reliable data on the prevalence of FAS on which to base a reliable estimate of the extent of harm entailed.

Research has also often focused on just one constituent part of ARC harm, such as alcohol-related violence (Cherpitel et al., 2012; Hughes et al., 2008) and some long-standing in-depth research in the area has addressed aspects such as alcohol addiction and the family over several years (Velleman and Orford, 1999; Orford, 2001; Orford et al., 2005; Orford et al., 2010). In this way, certain aspects of ARC harm are recognised, and these may be addressed piecemeal in public health initiatives. However, much remains unknown and the picture is incomplete and unrepresentative of the whole of ARC harm. While the perception of ARC harm continues to be limited and fragmented in this way, the extent of its impact and its potential relevance as a public health issue will remain unknown.

1.5 The current political and societal context for alcohol-related harm

The UK Government and the general public are aware of alcohol-related harm, and alcohol consumption is well known as one of the four key lifestyle risk factors, alongside smoking, diet and exercise. However, for the public in the UK, alcohol has become increasingly established as ‘*our favourite drug*’ since the phrase was coined a generation ago by the Royal College of Psychiatrists (RCP, 1986). The use of alcohol has become normalised by the 79% of the population who consume it (ONS, 2015b) and who now treat it as an ‘*ordinary commodity*’ (Babor et al., 2010). Government and public attitudes to alcohol-related harm reflect this position and the Royal College of Psychiatrists long ago concluded that “*Our society has chosen to co-exist with a potentially dangerous and addictive drug*” (RCP, 1986, p. 187).

An issue for public health in seeking to address and reduce alcohol-related harm is that no-one wants to see their own alcohol use curbed. Neither the UK Government nor the Public is wedded to the need for any direct intervention, save for heavy drinkers and those at the extreme, alcoholic, end of the spectrum. Rose challenges this viewpoint as ‘convenient’ and states that “*prevention calls for acceptance of a collective responsibility*” (Rose, 1992, p. 130). The use of alcohol is also accepted, and its misuse is widely tolerated, even by the non-drinking members of the public; the common perception being that alcohol harm does not affect them because they do not drink themselves. In addition, Eurobarometer (2010) reporting on *Citizen’s attitudes towards alcohol*, singled out the position in the UK within the EU for attention. It reported that while EU citizens were generally wholly supportive of government intervention on alcohol, the public in the UK was less open to interventions to reduce alcohol-related harm than other European countries and amongst the least supportive.

The UK Government also has other issues to consider on alcohol besides harm, not least the receipts from alcohol duties. In 20015/16, the UK Government generated almost £534 million in receipts from alcohol duties comprising some 2% of the Government's total revenue from taxation (HMRC, 2017). This is not an insignificant consideration, although alcohol duties have represented a higher percentage of taxation in the past; running at around 4% until the mid-1980s (HMRC, 2017). As the House of Lord's Home Affairs, Health and Education Sub-Committee of the European Union Committee observed, "*There is a positive economic effect which should not be overlooked*" (Parliament, House of Lords, 2015a, p. 17).

In addition, the alcohol industry exerts a powerful lobbying influence on Government to protect its shareholder interests, and supermarket chains with vested interests in alcohol sales add their weight to this lobby. In such an environment, it is unremarkable that potential policies to address alcohol-related harm that are soundly based are not taken up, while others, where evidence of effectiveness is weak or lacking are pursued (McCambridge et al., 2013).

In their written evidence to the Committee, the British Beer & Pub Association, the leading body representing Britain's brewers and pub companies, stressed that their members owned around half of the nation's 49,500 pubs, and that, in the UK overall, pubs and brewing supported over 900,000 jobs and contributed around £22 billion to the UK economy annually (Parliament, House of Lords, 2015b). The Committee's report also notes the written evidence from the Scotch Whisky Association:

"The Scotch Whisky Association told us that the industry supported around 40,000 jobs across the UK, and that the value of Scotch whisky exports in 2013 was £4.3 billion, accounting for nearly 25% of the UK's total food and drink exports" (Parliament, House of Lords, 2015c).

Whether the existing level of recognition of alcohol-related harm translates into effective evidence-based action to counteract it, at either state or personal level, is a matter of some debate and remains an open question. In its focus on ARC harm, this study contributes new evidence to that debate. It brings to the fore an additional element of alcohol-related harm for consideration that is currently largely unacknowledged by the UK Government and the alcohol industry, and largely unknown to the public.

1.6 Alcohol and tobacco, disparity of interventions

The risks to public health from alcohol have been reported by WHO as second only to those for tobacco (WHO, 2009). In England, fewer than one in five people smokes (ONS, 2016a) and almost four in five drink alcohol (ONS, 2015b). However, the interventions introduced by the UK government to address alcohol-related harm differ markedly from those brought to bear on tobacco-related harm.

Over recent years, a succession of uncompromising interventions has been introduced for smoking, including price increases, health warnings, plain paper packaging and bans on advertising, display and sports' sponsorship. No equivalent measures for any of these have been introduced for alcohol. For tobacco, all product packets carry bold health warnings and graphic pictures about the health consequences of smoking, e.g. "*Smoking kills*" and "*Cigarettes kill over 50 people an hour*". There are no equivalent health warnings on alcohol packaging. The expert committee for the new guidelines on alcohol consumption has recommended these, although earlier petitions of a similar nature from equally august sources have not borne fruit:

"We recommend that health warnings and consistent messaging appear on all alcohol advertising, products, and sponsorship" (DH, 2016a, p. 7).

For tobacco, several price increases have been introduced in recent years to discourage smoking on health grounds and ample research suggests this would be effective for alcohol (McCambridge et al., 2013). However, for alcohol, the proposed policy to introduce Minimum Unit Pricing (MUP) in England (to set a floor price for one unit of alcohol) announced in *The Government's Alcohol Strategy* (Home Office, 2012) was subsequently downgraded to a ban on selling alcohol as a loss-leader below the cost of production (Home Office, 2013). In Scotland, where public health is a devolved issue, the Scottish Government's intention to implement MUP has been blocked since July 2012 by a legal challenge from the Scotch Whisky Association (2012). In addition, the former mechanism, the 'alcohol duty escalator', which increased duty on alcohol gradually above inflation each year (and thereby increased the price) has been abandoned. The 2013 Budget announced the end of the beer duty escalator (HM Treasury, 2013), the 2014 Budget announced the end of the wine, cider and spirits duty escalators (HM Treasury, 2014) and the 2015 Budget then reduced duty on beer, cider and spirits, thus lowering the price of alcohol (HM Treasury, 2015).

The public and media response to interventions on tobacco and on alcohol also differs greatly. For alcohol, vehement abreaactions against interventions that might affect consumption in the name of public health are the norm. The UK CMOs' new guidelines (DH, 2016c) made it clear for the first time that there is no safe amount for alcohol consumption. However, these evidence-based guidelines were initially issued tentatively as a consultation document (DH, 2016b). They were met, nevertheless, by public dismay and a media storm, despite the highly-respected committee of experts in the field who examined the evidence and made the recommendations to the CMOs (DH, 2016a). In comparison, when far reaching, society-level interventions on smoking are introduced, there is little media demur.

Passive smoking and ARC harm

In the context of harms to other people, there are many similarities in the harms from passive exposure to tobacco smoke and collateral harms from alcohol. For both, there are health risks for children from direct exposure, including to babies in utero and during breastfeeding. There are also harms to children from negligence by parents who are drunk or smoke in the home or who drive the family in a car when smoking or after drinking. In 2007, public health guidance was considered inadequate to reduce harm from passive smoking and the Smoke-free (Premises and Enforcement) Regulations (2006) brought into force in England protected children and other people. Geometric mean nicotine levels for male non-smokers then fell from 0.20ng/ml to 0.14ng/ml and equivalent estimates for female non-smokers were 0.19ng/ml and 0.13ng/ml respectively. No national interventions for alcohol compare with this, nor with the later intervention to stop smoking in motor vehicles when children are present (DH, 2015).

A paradigm shift has occurred in the perception of collateral harm from tobacco smoking. As Zerubavel (2015) observed: “*only a few decades ago smoking was still considered a mere ‘background’ (and thus often unnoticed) activity*” (Zerubavel, 2015, p. 58). This shift has not been matched, nor is it yet contemplated, for the collateral harm from alcohol consumption. Currently, in the UK, ‘*active disattention*’ (Zerubavel, 2015) by the Government, by the alcohol industry and by the public is still operative for the dimension of alcohol-related harm that is ARC harm.

1.7 The concept of ‘Responsible drinking’: How is it understood and applied?

The central public health message for alcohol harm is to ‘*drink responsibly*’ and the Government’s express wish is for that message to become a reality:

“The drinks industry, supermarkets, pubs and clubs need to work with government so that responsible drinking becomes a reality and not just a slogan” (Prime Minister’s Office, 2012).

However, the notion of responsibility in the alcohol sphere is tightly defined and controlled in its use in Government statements. For example, *“The majority of people who drink do so in an entirely responsible way”* (Home Office, 2012, p. 3) divides drinkers into those who do, and those who, apparently, do not, need to concern themselves about alcohol-related harm. The target recipients for any interventions are thus the *‘irresponsible minority’* (Home Office, 2012). The *‘responsible majority’* are invited not to worry. The harms from alcohol are attributed to, and seen as experienced by, only the irresponsible minority. Use of this attribution persists, oddly even in statements that detail specific quantified harms like costs to the NHS that affect the whole population, and not a minority of drinkers:

“The NHS is having to pick up an ever-growing bill - £2.7bn a year, including £1bn on accident and emergency services alone. That’s money we have to spend because of the reckless behaviour of an irresponsible minority” (Prime Minister’s Office, 2012).

The message advanced that the *‘responsible majority’* of drinkers should not be *‘punished’* for the *‘irresponsible minority’* who exceed the guidelines has become normative through frequent repetition and is entrenched in the popular consciousness of UK citizens. This notion of punishment persists, even where population-level interventions to counter alcohol-related harm are ostensibly supported, for example in an article in the Daily Telegraph: *“Punishing the majority for the sake of the few -Targeting the entire population rather than just those at risk can benefit all”* (Le Fanu, 2014).

Currently, the public underestimates the degree of alcohol-related harm and, consequently, similarly underestimates any need for action to counteract it. Unseen ARC harms contribute to that underestimate. People also tend to perceive themselves as moderate drinkers, to distance themselves from alcohol *'misusers'* and to identify themselves as part of the *'responsible majority'*. A survey conducted in north-east England (Balance North East, 2016) found that the majority of adult at-risk drinkers (i.e. those whose consumption exceeded the guidelines) regarded their own consumption as *'moderate'*. Moreover, drinking to intoxication was considered, typically, as an essential component of a good night out. For these *'moderate'* drinkers, alcohol was used liberally as social lubricant, a means to celebrate when things went well, to commiserate when things went badly, to relax when off duty and generally to have fun, *"Few of us regard ourselves as big 'boozers'"* (Alcohol Concern, 2015, p. 1).

The current policy emphasis on the drinker, and on *responsible* and *irresponsible* drinkers, invites the perception that any intervention to curb consumption is an unwarranted infringement of personal liberty and a *'nanny state'* intrusion into consumers' freedom to choose. This perception is particularly apparent for population-level interventions that impact on all drinkers, such as the CMOs' new alcohol guidelines that now state that all men and women should limit their intake to no more than 14 units a week. An example of the popular media coverage of the new guidelines for alcohol consumption from the Daily Mail in January 2016, illustrates this:

"'Just ONE drink a day is too much - have a Friday night cup of tea instead': Health chief attacked over 'nanny state' alcohol guide that says a single glass of wine a day raises cancer risk" (Borland and Pickles, 2016).

The attackers' views on the proposed guidelines are quoted as follows:

“The real danger is they will be used to justify more nanny state policies, from higher prices and alarmist health warnings to further restrictions on the sale of alcohol” (Borland and Pickles, 2016).

Such abreactions are premised on the assumption that alcohol-related harm affects the drinker alone and that is the sole concern. Within such a conceit, it is likely that any interventions by the state will be viewed as intrusive and unnecessary, and as impinging inappropriately on personal liberty. This stance has been adopted and pursued over recent times in political and policy circles as justification for weak control measures by Government and for not introducing evidence-based society level interventions to address alcohol-related harm:

“In Britain in the middle to late 20th, alcohol problems have been seen largely in individual terms, and control at the community level has been missing” (Orford, 2001, p. 18).

It is against this backdrop that research into ARC harm as an unseen dimension of alcohol-related harm must register. Viewing alcohol in terms of the individual drinker and weak control at the centre do not come together by accident. The emphasis on harms to the drinker, and particularly on the ‘irresponsible’ drinker, as opposed to harms to the people around drinkers and to wider society, allows responsibility issues to be limited to the self alone.

This study raises questions on the nature and locus of personal liberty and responsibility in the context of ARC harm. J. S. Mill (1859) developed the concept of personal liberty and the freedom of the individual and used it to address the issue of unlimited control over people's lives by the state. Mill (1859) opines that personal liberty does not apply to an individual's actions if those actions harm, or put at risk, another individual or the public at large. In other

words, each individual should be free to do as his or her conscience dictates, provided that this does not harm other people. It is pertinent for alcohol harm that Mill extends the concept to permit an individual the liberty to harm himself or herself, but, again, provided that this is not to the detriment of others. Mill also applies his theory to alcohol consumption and restates his general principle on liberty explicitly in this context:

“...neither one person nor a number of persons, is warranted in saying to another human creature of ripe years that he shall not do with his life for his own benefit what he chooses to do with it.... No person ought to be punished simply for being drunk”
(Mill, 1859, p. 86).

At face value, this might be interpreted as justification for opposing ‘nanny-state’ interventions to control alcohol use, were it not for the remainder of Mill’s argument here, which, rather, puts the case for intervention where the drinker harms other people:

“Whenever, in short, there is definite damage, or a definite risk of damage, either to an individual or to the public, the case is taken out of the province of liberty and placed in that of morality or law” (Mill, 1859, p. 93).

While one might, ostensibly, argue that alcohol-related harm to oneself as a drinker is a private lifestyle choice, to accept Mill’s theory, and to apply it to the current advice to *drink responsibly*, is to conclude that liberty for the self entails responsibility to others. That is, it entails a responsibility not to harm other people whilst pursuing one’s own drinking interests. Moreover, following Mill’s reasoning, where there are alcohol-related harms to other people, those harms and any policies to address them are the legitimate province of state intervention.

1.8 Addressing the totality of alcohol-related harm

ARC harm is an important, but little known, poorly understood and under-researched aspect of alcohol-related harm. If public health policy is to evolve to address the totality of alcohol-related harm it is essential to understand the composition of ARC harm and its impact. This study examines the little-known landscape of ARC harm and provides new information to fill gaps in the current recognition and understanding of the character and extent of ARC harm.

In financial terms, the latest estimate for the impact of the totality of alcohol-related harm in England is some £21 billion, comprising £11 billion for alcohol-related crime, £7 billion in lost productivity and £3.5 billion in costs to the NHS. (Public Health England, 2016). Such estimates aim to represent a macroeconomic costing of alcohol-related harm as it impacts on society as a whole. That is, not just on the harmful drinkers and the people who are addicted to alcohol, but the impact on the whole population, i.e. including ARC harm. This was clear in the first formal estimate of these alcohol-related costs commissioned by the Cabinet Office as the *gross negative externalities* associated with alcohol consumption (Cabinet Office, 2003). Such estimates represent the costs to government, in the form of the actual fiscal resources spent and the opportunity costs of the loss of those resources. However, they also represent the financial, emotional and physical costs for all the people in society, whether they are drinkers or non-drinkers.

The alcohol-related costs to drinkers can be characterised in terms of morbidity and death. However, estimating the costs to all the other people affected by drinkers' alcohol consumption remains problematic as these ARC harms are diverse and poorly characterised currently. As the costs of such harms are much more difficult to estimate, they are too easily overlooked. For all practical purposes, they remain largely undetected or inadequately represented. It is

this last, largely unknown element that currently presents an intractable obstacle. This study addresses that gap by contributing new information on ARC harm to extend the existing understanding of the totality of alcohol-related harm.

The study helps to characterise ARC harm by examining it in a specific population group and by demonstrating its significance in the lives of a sample of well-educated young adults. It considers the environments in which ARC harm occurs, the potential predisposing risk factors for it and the degree to which ARC harms increase the overall level of alcohol-related harm for young adults. It also considers potential practical applications for the study findings on the ARC harms that are specific to these young adults and the way that they themselves perceive them. These might be used to frame preventive interventions for ARC harm attuned to the lives of young adults. They might be deployed to supplement public health induction provisions for students entering university to alert them to the risks of ARC harm and provide ammunition to help mitigate those risks.

The study also considers the extent to which the political and commercial climate and the lack of public appetite for action on alcohol are limiting factors on the perception of ARC harm. The findings indicate a need for greater public and policy recognition of the phenomenon of ARC harm as a discrete, identifiable phenomenon and a public health issue in its own right. The study insights inform and challenge the established paradigms of the overall composition of alcohol-related harm. The findings invite a review of the way policy to address alcohol-related harm is developed and delivered, advocating an approach that takes greater account of the drinker's impact on other people and on society as a whole.

1.9 Outline content of later chapters

Chapter 2 reviews the historical context for ARC harm, addressing the periods of the eighteenth-century Gin Acts and the nineteenth-century Temperance Movement as well as more recent history. The chapter also reviews the theoretical constructs applied in the study.

Chapter 3, describes the mixed methods used in Phase I and Phase II of the study. These include the means of determining the purposive sample for Phase II from the Phase I sample and the way that relevant ethical issues were addressed.

Chapter 4 presents the demographic profile of the study's two participant samples, including health profiles in the four key areas of public health lifestyle risk (alcohol, smoking, diet and exercise) and how these were used in the context of ARC harm.

Chapter 5 presents the quantitative and qualitative analyses and findings from Phase I of the study. Risk factors significantly associated with the experience of ARC harm are identified and a novel taxonomy of ARC harm for young adults is developed.

Chapter 6 presents the first stages of triangulating the findings from Phase I and Phase II of the study. Semantic themes explain the physical and psychological experiences of ARC harm reported in Phase II and some descriptive statistics of categorical data are also presented.

Chapter 7 begins the process of exploring the domains of influence that bear on the study participants' experiences of ARC harm through assessing the roles played by environmental factors in precipitating the ARC harms experienced.

Chapter 8 develops themes on environmental risk factors for ARC harm for the physical settings and the psychological contexts where it occurred for the study sample. Relevant data extracts from the Phase II participants are used illustratively in the analyses.

Chapter 9 explores how young adults cope with ARC harm through the ways they respond to the perpetrators and excuse ARC harms. It shows how victims of ARC harm may also be perpetrators and how this affects the perception of the ARC harms experienced.

Chapter 10 develops ten themes to capture how and why ARC harm remains unseen. It also considers how the invisibility of ARC harm might be addressed to bring ARC harm into the open and to heighten government and public perception of it.

Chapter 11 presents the key findings of the study and summarises their significance. The study limitations are set out and the potential for generalizing the findings is considered. Finally, recommendations are made for further research to augment the study findings.

CHAPTER 2: INTRODUCTORY REVIEWS

HISTORICAL AND THEORETICAL CONTEXT

Summary of chapter

This chapter sets out an historical perspective for ARC harm. Changing perceptions of alcohol are considered in the context of an historical overview of alcohol-related harm in the UK and the Government's responses to it. Theoretical constructs relevant to the methods used and to the themes developed in this study are introduced in the second half of the chapter.

HISTORICAL OVERVIEW

2.1 What the Government and the Public allow

Any overview of alcohol through history reveals that the harms that drinkers do to other people are not recent manifestations. Indeed, the first national perceptions of alcohol-related harm as an issue began when mass drunkenness was seen to impact at the societal level. In other words, all alcohol-related harm was seen initially in terms of ARC harm. Alcohol licensing to protect society and the national economy, for example, dates back to at least Henry VII:

“English monarchs from Henry VII onwards enacted licensing legislation to promote public order and conserve grain” (Harrison, 1994, p. 88).

That being so, the phenomenon of ARC harm was recognised, if not named as such, for some five hundred years. The current preoccupation with alcohol-related harms to the individual drinker and the medicalisation of alcohol-related lifestyle harms have only become the predominant orthodoxy relatively recently, since the last two decades of the twentieth century.

Levels of consumption and harm, and the tide of state and public attitudes to the drinking of alcohol, have ebbed and flowed through history. The level of government reward or censure, that encouraged or discouraged alcohol consumption, has responded in concert with that tide, as demonstrated through fashions in licensing, taxation and the creation of criminal offences. The state response to alcohol-related harm has sometimes been punitive, sometimes liberal. It has aligned with the role the state has cast for itself at each point in history and with the prevailing social mores of the public, with both tempered by the dictates of vested interests.

“... Englishmen will never be slaves: they are free to do whatever the Government and public opinion allow them to do” (Shaw, 1903).

Through history, the taxation and licensing of alcohol have had many practical and ideological uses, not least as revenue streams. However, an abiding purpose of the taxation and licensing of alcohol has been to counteract ARC harm, that is, the negative impact of drinkers on other people in the shape of the social disorder and damage to the economy that they cause.

Two well-documented periods in UK history are noted for strong government reactions against alcohol. Both were well before the concept of public health in terms of health harm to the individual drinker had been conceived. The first was the period leading up to the eighteenth-century Gin Acts, the second was the time of the nineteenth-century Temperance Movement. Both periods of reaction were precipitated largely by the social pressures and the prevailing levels of crime and disorder in society that were attributed to heavy consumption of alcohol by the poor. Both periods saw a range of government interventions that had profound effects on the price and availability of alcoholic beverages. In both cases the alcohol-related harms that concerned the government were not the harms to drinkers, but the harms the drinkers caused

to other people in society and to social order. In both periods, therefore, these harms were ARC harms, and the government interventions at the time were to counteract ARC harms.

2.2 The Eighteenth-Century Gin Acts

At the end of the seventeenth century, being then at odds with much of continental Europe, the English government introduced heavy taxation on imported spirits such as French brandy. This measure encouraged domestic production of spirits from grain, initially to supply the deficit. Gin production soared and people began to embrace the new trend enthusiastically. The low duty on domestic gin made it cheaper than beer and it became the drink of choice of the lower classes and of the poor generally. By 1729, the greatly increased level of gin production and consumption, and the consequent social disorder, triggered the first of five Gin Acts. The 1729 Act radically increased the price of gin and the 1736 Act radically increased duty and the cost of licensing for gin. Both were enacted in an attempt to control what was seen as gin's severely deleterious effect on the fabric of society; that is, to reduce ARC harm at the societal level. However, both Acts were poorly conceived and largely ineffective in that goal. The 1736 Act, in particular, had unintended consequences by introducing disproportionately high taxes on production and licensed sale. It achieved the intended effect of putting legitimate producers and retailers out of business, but, unfortunately, that drove gin production underground, thereby exacerbating the problem. Further Acts followed in 1743 and 1747 that amended and repealed earlier provisions, but achieved little. It was not until the 1751 Gin Act (Sale of Spirits Act, 1750) that a viable combination of licensing, duty and control of retail was achieved which decreased consumption:

“Consumption fell from 8.5 million gallons in 1751 to 5.9 million in 1752, falling to 2.1 million by 1760” (Hanham, 2016).

The Act was preceded by the propaganda coup of Hogarth's *Gin Lane* and *Beer Street* etchings which were distributed widely. *Beer Street* advocates beer consumption as beer was then low in alcohol and considered a wholesome drink and a social lubricant. *Gin Lane* in comparison graphically depicts gin as responsible for extensive harms to society.



Figure 2.1 *Gin Lane* etching, William Hogarth, 1697-1764 (Hogarth, 1751))

The 1750 Act, Hogarth's illustrated advocacy and a fall in the price of beer brought gin consumption and the associated social disorder under a level of control. Thereafter tea drinking was also encouraged and alcohol consumption generally began to be less fashionable.

Alcohol became “*by no means the vice of people of fashion*” (Smith, 1776, p. 307). This too added a measure of downward pressure on consumption. Thus, the eighteenth century demonstrates an early manifestation of ARC harm, where state action was prompted by harms to society rather than by concerns for the individual drinker. However, trade in alcohol was also recognised as part of the fabric of that society and weaker alcoholic drinks were encouraged. ARC harm and reactions to it were already a complex function of state, trade and public exigencies. Concerns for ‘drunkards’ wives and children came later, with the many other welfare reforms of the nineteenth century.

2.3 The Nineteenth Century Temperance Movement

The Temperance Movement began in the UK in the early 1830s, with some fifty years of proactive campaigning and recruitment before its heyday between 1872 and 1914 after the 1872 Licensing Act was passed (Licensing Act, 1872). The Temperance movement began after reductions in the price of both beer and gin in the 1820s and 1830s while, at the same time, few recreational activities were available to the urban poor other than drink shops:

“In the 1820s and 1830s governments reduced the price of beer and gin, rejected radical demands for opening museums on Sundays as counter attractions to the drinking place and covered the country with beershops. It looked like a plot to make virtue difficult for the poor” (Harrison, 1994, p. 369).

Historians like Harrison (1994) have noted the social and recreational outlet that drink shops gave the poor. In the absence of alternatives, they offered a place of respite from the kind of grinding poverty that it is now hard to conceive. In such circumstances, neither the role of the drink shops, nor that of the alcohol they sold was unambiguous:

“... the drink seller was no parasitic villain: he responded to a genuine human need and was a popular and respected provider of recreation and comfort to a world which would have been intolerably drab without him” (Harrison, 1994, p. 48).

The Temperance Movement began on a small scale. The leaders of the movement hailed from the church and upper classes and they enrolled a middle-class membership. The movement was highly moral and judgemental in its nature. The objective at first was abstention only from spirits. Here, although alcohol-related harms were still seen in societal terms, the individual drinker moves on to the stage. Alcohol was cast as a tempting evil, and it was for man to exert his free will to resist it. That being so, calls for total abstinence then required additional moral willpower. As described by Dingle (1980), from 1853 onwards, the newly-established *United Kingdom Alliance for the Suppression of the Traffic in all Intoxicating Liquors* sought legislation to bring in prohibition, in emulation of a movement in the American state of Maine, with a view to removing temptation altogether.

The Temperance Movement subsequently became a political movement of the working-class elite which supported the advancement and enfranchisement of the working poor as well as temperance. These working-class activists sought to establish an image of themselves as respectable and responsible members of society and to distinguish themselves from the prevailing image of the poor as drunken and feckless. However, the strength of the movement as a political device ensured that upper and middle-class benevolence and paternalism towards the poor continued to play a large part. Livesey, writing in the *Preston Guardian* (Livesey, 1873) accused the 1872 Act of being “*a flagrant piece of class legislation*” because it impacted disproportionately on the drink shops and thence on the working classes and dispossessed poor.

Drinking in gentlemen's clubs, for example, was unaffected and such accusations were effectively ceded at the time by supposed rebuttals:

"The Times protested that the drinking habits of rich men did not result in breaches of the Queen's peace" (The Times, 1872, cited in Yeomans, 2014, p. 76).

Class-bound targeting notwithstanding, the 1872 Act demonstrated an approach that addressed the wide-ranging social harms (that is, the ARC harms) attributed to alcohol, albeit only in one sector of the population. The Act's modern legacy is examined later in the chapter. It was, however, something of a compromise between competing political and commercial factions.

"By far the most common representation of the Licensing Act 1872 was as a balancing act. Temperance groups calling for prohibition, as well as the drinks industry representatives who insisted on the maintenance of their commercial freedoms, were both heavily active in lobbying" (Yeomans, 2014, p. 75).

The commercial leitmotif observed by Yeomans remains relevant today, and Knai et al. (2015) have described the Government's *Responsibility Deal* with the alcohol industry as subject to similar limitations:

"The most effective strategies to reduce alcohol-related harm are not consistently reflected in the RD alcohol pledges. The alcohol pledges are unlikely to affect consumption. In order to reduce the negative impact of alcohol consumption on public health the RD pledges should propose effective interventions, notably those which change the market environment to make alcohol less available and more expensive" (Knai et al., 2015, p. 1242).

2.4 Temperance and Victorian Liberalism: J. S. Mill and T. H. Green

Mid-Victorian Liberalism took up the temperance cause, with Liberals like John Stuart Mill (1859) and Thomas Hill Green (1888) espousing a wish to see drunkenness eliminated from society, albeit disagreeing on the need for prohibition to achieve that objective. Both Green and Mill sought to protect other people from drinkers' excesses. As such, they drew attention to ARC harm as an issue for the people in a drinker's immediate circle and for wider society. Green sought, additionally, to protect drinkers from harm through advocating teetotalism and prohibition to remove temptation. In contrast, on the matter of alcohol consumption, as elsewhere, Mill held to the philosophical principle that people were responsible to society, but only insofar as their conduct harmed others:

"The only purpose for which power can rightfully be exercised over any member of a civilised community, against his will, is to prevent harm to others. ... To justify that, the conduct from which it is desired to deter him must be calculated to produce evil to someone else. The only part of the conduct of anyone for which he is amenable to society is that which concerns others" (Mill, 1859, p. 16).

Green favoured action to counteract the harms that a drunkard might visit on his wife and family and to prevent harm to others whom he might draw into the same pattern of drinking. (The Victorian focus was on the drunken *man*. Women and children were typically cast as the drunkards' victims):

"It used to be the fashion to look on drunkenness as a vice which was the concern only of the person who fell into it, so long as it did not lead him to commit an assault on his neighbours. No thoughtful man any longer looks at it in this way. We know that, however decently carried on, the excessive drinking of one man means an injury to others in health, purse, and capability to which no limits can be placed. Drunkenness

in the head of a family means, as a rule, the impoverishment and degradation of all members of the family; and the presence of a drink shop at the corner of the street means, as a rule, the drunkenness of a certain number of heads of families in that street” (Green, 1888, pp. 383-384).

Green supported prohibition as he considered that the measures of licensing and restricting hours of access alone did not limit the availability of alcohol sufficiently in the absence of limitations on the number and placing of outlets:

“Indeed, the principle on which licences have been generally given has been avowedly to make it easy to get drink. ... it remains the case that everyone who has a weakness for drink has the temptation staring him in the face during all hours but those when he ought to be in bed” (Green, 1888, p. 83).

It should be noted, without dwelling further on the detail, that Temperance was not a movement of harmony and concord and that such disagreements as those between the positions adopted by Mill and Green were commonplace:

“Victorians were obsessed with alcohol. Among the literate and the articulate, the proper place of drink in society was debated with an intensity and an exhaustiveness which is now difficult for us to comprehend” (Dingle, 1980, p. 8).

The irreconcilable tension between the ideals to which Mill and Green adhered still poses a fundamental question when ARC harm is considered to this day. That is, how to balance individual freedom and autonomy to drink against protection of the innocent who are adversely affected by the operation of that autonomy. Moreover, if there is an innocent victim, how is guilt to be determined and apportioned? The ‘innocent’ victim of a drinker might be a foetus

or a child or an adult spouse, friend or stranger who might also be drunk. Does a drinker become psychologically unaccountable through loss of agency, and, if so, is their right to autonomy surrendered? Such questions remain relevant in the light of the current Government admonition to *drink responsibly*.

2.5 The End of Temperance

Towards the end of the nineteenth century and into the twentieth, determinism began to play a larger part in evaluating the ‘drink problem’ and began to displace the temperance mantra of resisting alcohol as a moral act of free will. Researchers began to promulgate more enlightened views on the causes of disease, poverty and deprivation among the poor. This in turn called into question the temperance view that alcohol, in combination with weak morals, was the main cause of social harms:

“Charles Booth helpfully undermined the case for ascribing poverty to drink; only 13% of the poor and 14% of the very poor in his sample owed their misfortunes directly to drink. Questions of illness, employment and family size were, he concluded, far more important” (Harrison, 1994, p. 382).

This dawning realisation had been there in the 1872 Act, albeit not explicitly acknowledged and disguised under the explicit moral imperative of self-improvement:

“In a sense, restrictions on the drinks industry engendered by the licensing Act 1872 implicitly attributed some causal importance to the external environment. But in terms of solving the problem of ‘our national drunkenness’, the dominant position reflected the belief that the individual should be the primary unit of social change. ... As in moral suasionism, behavioural reform was therefore achieved by fostering ethical self-reformation” (Yeomans, 2014, p. 84).

Temperance became discredited and the movement lost impetus as its moral capital declined. Neither the state nor the public then subscribed to the moral view held in the Temperance Movement that alcohol was wholly evil and thus to be resisted by all people of good character:

“Instead of concentrating on morally defective individuals, the shift towards more social and environmental understandings of how individuals were constituted led to the concentration of regulation on both problem populations and the population at large” (Yeomans, 2014, p. 99).

Nonetheless, Temperance had turned the tide of rising consumption in the nineteenth century:

“Levels [of consumption] rose again in the mid-nineteenth century, but fell rapidly and significantly later in the century. They reached low levels in the interwar years and remained low until the 1960s” (Parliament, House of Commons, 2010, p. 14).

After the First World War, there was a decline in drunkenness as people and the economy recuperated from the ravages of war and Spanish flu. The effects of drunkenness became a residual concern and wider approaches to social reform gained purchase:

“Critics began to suspect the whole notion of isolating ‘the drink problem’ from related social questions” (Harrison, 1994, p. 382-3).

Alcohol-related harm as an issue of concern for society had subsided and it remained relatively quiescent in the UK for the next fifty years.

2.6 Recent History - The Twentieth and Twenty-First Centuries

Alcohol consumption started to increase again after the UK began to recover from the Second World War, and in the 1960s widespread public disquiet about drunken behaviour resurfaced.

By this time, the terminology had changed and references to ‘the poor’ had been replaced by ‘ordinary people’. It was also at this time that concerns first took hold about the alcohol consumption of young adults and the associated social disorder among youth cultures. Paradoxically, given the focus on drinking by the poor in previous centuries, it was the relative prosperity of these ‘ordinary’ and young people that supported this upward trend in alcohol consumption in the 1960s.

“Prosperity increased the leisure opportunities of ordinary people in the 1960s but also exposed them to temptation that, it was widely believed, they struggled to resist”
(Yeomans, 2014, p. 149).

However, just as in the eighteenth and nineteenth centuries, the people expressing concern about alcohol-related harms were simultaneously and meticulously distancing themselves from the consumption of alcohol by a population group other than their own. This legacy of Victorian moral judgement by one part of society over another in relation to alcohol consumption remains to this day. It is there today in the many distasteful depictions of young adults’ drinking habits in the popular media and in the paternalistic middle-class preoccupation with the effect of alcohol on deprived populations.

2.7 Alcohol-related harm is transformed into a health issue

By the 1980s, the diminished threat from many infectious diseases, and the increasing threat posed by chronic diseases, modified the focus of public health policy. There then began a shift of attention towards prevention of the most prevalent of those chronic diseases and the trend for health promotion that targeted people’s lifestyles. This move was led chiefly by the World Health Organization setting out an agenda for health for all (WHO, 1981). Building on this in England, ‘*The Health of the Nation*’ White Paper (DH, 1992) was the first national prevention

strategy. It considered the harms to be addressed at the population level and also, significantly, in the individual. The Government's primary focus was on the 'lifestyle diseases' such as coronary heart disease (CHD), stroke and cancers:

"Coronary heart disease and strokes are the biggest causes of premature death and disability in this country. We have made considerable progress, but there is scope for more. Cancers account for a quarter of all deaths. Many of them can be prevented" (Bottomley, Secretary of State for Health, 1992).

In this White Paper (DH, 1992) it was clear that the, then Conservative, Government believed it had a strategic role to play. However, this differed from the agenda set out by the WHO in that its focus was on clinical issues relating to health, rather than on the WHO's proposals to address the inequality and other wider socioeconomic problems that gave rise to ill health in the population. This fact was not wasted on the Labour Opposition of the time:

"A White Paper which does not propose a single measure to combat poverty, homelessness or unemployment is not a White Paper which offers better health to all" (Cook, MP, 1992).

The White Paper (DH, 1992) introduced medicalised lifestyle interventions in England. The conception of alcohol and the 'drink problem' as an acknowledged adverse influence on society in its own right became diverted and diluted in the process. This medical view of alcohol was not entirely new, since doctors had begun to advocate sobriety to their patients for health reasons by the late eighteenth century. What was new was that the consumption of alcohol, and harm from alcohol became subsumed into the ideology of disease prevention. Alcohol was now a contributory factor in CHD, stroke and other chronic lifestyle diseases, alongside smoking, diet and exercise. Alcohol had lost none of its power to harm people other than the

drinkers at risk of chronic disease or to cause wider harms to society. However, these ARC harms were displaced by the medical focus. ARC harms had begun to be hidden in plain sight.

The Health of the Nation (1992) was not a document aimed directly at a public audience. Rather, it underlined the importance of primary care in delivering its preventive agenda across the country. Accordingly, the Chief Medical Officer of the Department of Health joined with the General Medical Services Committee (GMSC) and the Royal College of General Practitioners (RCGP) to address the key priority areas like CHD and stroke. Their guidance, *Better Living Better Life* was issued jointly to general practitioners in England in December of the same year (Calman, Bogle and Waine, 1992). It was strongly influenced by research carried out in the USA by the US Preventive Services Task Force (1989). This USA research comprised a wide-ranging evaluation of international scientific literature on lifestyle interventions. It graded interventions on smoking, physical activity and diet for efficacy and recommended that drinkers be advised of the potential dangers and to limit intake. The CMO, GMSC and RCGP guidance used the evidence of efficacy available at the time to frame advice on 'smoking cessation', 'physical activity', 'healthy eating' and 'sensible drinking'. 'Sensible' rather than 'responsible' drinking was then the term of art, defined as no more than 14 and 21 units per week for women and men respectively.

In establishing the importance of prevention, the guidance took cognisance of the harms to the whole of society, not just to the sick or those most at risk. It did so by citing the harms of these lifestyle diseases to society in terms of their financial cost and loss to the economy as well as in terms of premature disease and death to the individual. In 1991, stroke caused more than one in ten deaths, CHD caused more than one in four and accounted for 2.5% of the total NHS expenditure and 35 million working days were lost per annum (Calman, Bogle and Waine,

1992). Public health prevention interventions on ‘smoking cessation’, ‘physical activity’, ‘healthy eating’ and ‘sensible drinking’ were presented as an investment in the future. That necessarily prompted the question of whom to target in the present within a finite resource. For alcohol, unlike the historical interventions of licensing and taxation, this medicalised approach to prompt desired lifestyle behaviours necessarily entailed substantial resourcing. Nevertheless, the CMO, GMSC and RCGP focus at that time was not solely targeted on an ‘irresponsible minority’ and GPs were advised accordingly.

“In population terms, it is not necessarily the alcohol-dependent and heavy drinkers who are at greatest risk from alcohol – more problems are created by the many moderate drinkers, because there are more of them” (Calman, Bogle and Waine, 1992, Section 5, ‘Sensible Drinking’, p. 1).

At the same time, Geoffrey Rose was undertaking research and developing theory on effective targeting of public health interventions (Rose, 1992). His work is addressed later in the chapter.

2.8 The Legacy of the 1872 Licensing Act

Given the sea change in the perception of alcohol in the last 25 years or so that began with *The Health of the Nation* (DH, 1992), what became of the ARC harm credentials of the 1872 Act? The efficacy and motivations behind licensing and alcohol duty have often been questioned as a means of reducing alcohol-related harm. What is the purpose of alcohol duty? Is it solely one of revenue-raising for the Treasury, or is it relevant as a tool to promote public health? What did licensing hours achieve? Did they restrict access to alcohol effectively? Green (1888) thought them insufficient to the purpose. Yet, as the *Explanatory Note* to the Licensing Act 2003 shows, the Government considered any limitation to the hours of access unnecessary:

“In contrast to the existing law, the Act does not prescribe the days or the opening hours when alcohol may be sold by retail for consumption on or off premises. Nor does it specify when other licensable activities may be carried on” (Licensing Act, 2003).

Nevertheless, for criminal offences against other people caused by alcohol consumption, the 1872 Act laid foundations that have carried forward to the present day. For example, the essential provisions of Section 12 of the 1872 Act, *Penalty on persons found drunk*, relating to drunkenness in public and drunk driving have not been repealed and remain in force today:

“Every person found drunk in any highway or other public place, whether a building or not, or on any licensed premises, shall be liable to a penalty... Every person who in any highway or other public place, whether a building or not, is guilty while drunk of riotous or disorderly behaviour, or who is drunk while in charge on any highway or other public place of any carriage, horse, cattle, or steam engine... may be apprehended, and shall be liable to a penalty... or in the discretion of the court to imprisonment with or without hard labour” (Licensing Act, 1872).

The 1872 Act is also responsible for making available some of the few reliable sources of data on ARC harms that are still collected regularly. These data on instances of crimes of drunk-driving and of street and domestic violence come to us courtesy of the 1872 Act and through the criminal justice system. They come forward from that time when alcohol’s effect on the whole of society, and on public health in a much broader sense, was more keenly observed and critiqued than it is now within the medicalised system of public health:

“The discourse of the temperance movement legitimated a higher level of state intervention in the drinks trade and, by 1872, the law reflected this” (Yeomans, 2014, p. 75).

The current crime data also bring forward the nineteenth-century notions of autonomy and personal responsibility, not only for oneself, but for the impact of one's actions on other people. What the state and public have allowed thereafter has this legacy. However, as seen in Chapter 1, the governance of alcohol is now, once again, laissez-faire. An illustration of this lies in the progressive repudiation of even the modest control measures that were previously in place on price. The Budgets of 2013 and 2014 eroded the incremental increases in price previously brought about by the alcohol escalator that had raised alcohol duty by 2% above Retail Price Inflation each year. Thereafter, the Budgets of 2015 and 2016 began effectively reducing the price of alcohol (HM Treasury, 2013; 2014; 2015; 2016). Although cash receipts from alcohol duty continue to rise, reflecting increased consumption, alcohol duty receipts have been allowed to fall significantly as a percentage of GDP since the 1980s. (See Figure 2.2 *Alcohol duty receipts as a proportion of GDP 1980/81-2015/16*).

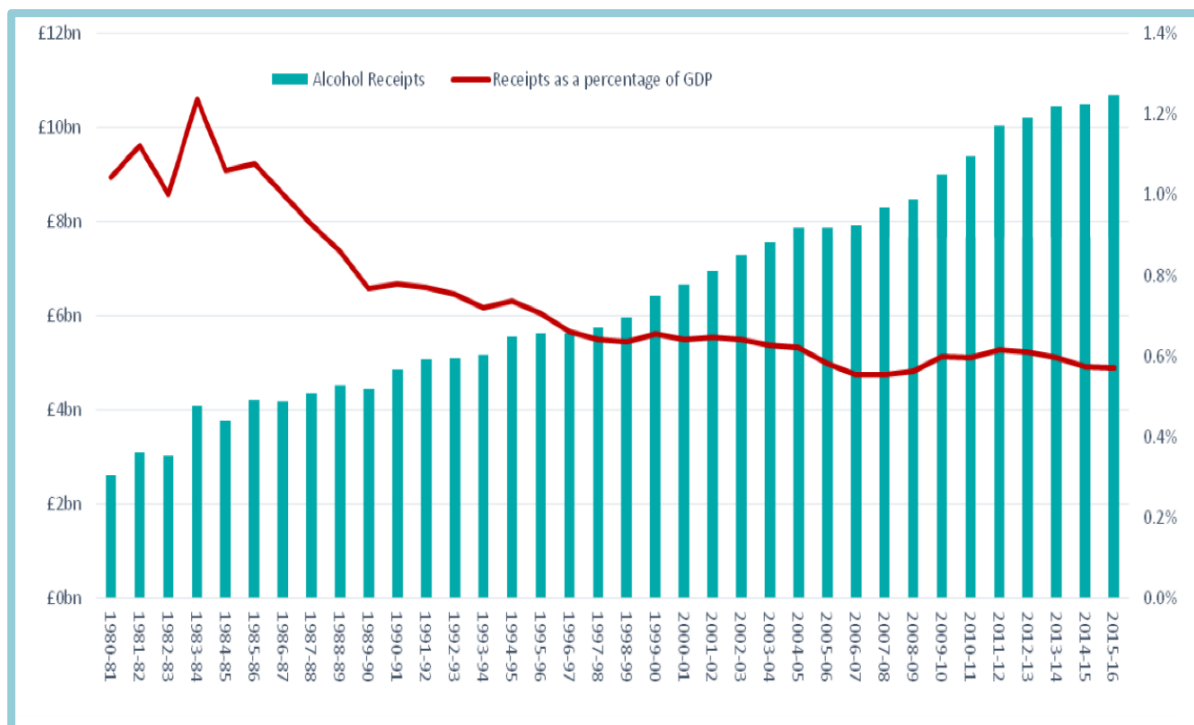


Figure 2.2 Alcohol duty receipts as a proportion of GDP 1980/81-2015/16

(HM Revenue and Customs, 2017)

Further, an ambitious policy to enact legislation to reduce harm using Minimum Unit Pricing was simply abandoned, despite its formal announcement in the Government's *Alcohol Strategy* (Home Office, 2012) and its subsequent reaffirmation to the Health Select Committee (Parliament, House of Commons, 2012):

"We will introduce a minimum unit price (MUP) for alcohol meaning that, for the first time ever in England and Wales, alcohol will not be allowed to be sold below a certain defined price" (Home Office, 2012, p.7).

Connecting with the history of alcohol-related harm may therefore be strenuously resisted by government, as well as by vested interests within the alcohol industry. A recent systematic review of lobbying activity by the industry illustrated the extent of industry efforts in this respect. It notes that the industry focuses on "*individual responsibility*" and "*primarily conveys its argument through manipulating the evidence base and by prompting ineffective voluntary codes and non-regulatory initiatives*" (Savell, Fooks and Gilmore, 2016, p. 18).

Resisting the temptation to drink too much alcohol is thus, again, an act of will for people, as it was under the doctrine of nineteenth-century Temperance. However, the promotion of responsibility to oneself alone and of voluntary codes by the industry, effectively mask the nineteenth-century legacy of responsibility to other people and distract government attention from options for control by regulation or statute. It is therefore unsurprising that excessive drinking and ARC harms have become accepted cultural norms. As Green observed presciently in the nineteenth century: "*A drunken population naturally perpetuates and increases itself... The citizens of England now make its law*" (Green, 1888, pp. 385-386). In the current liberal, political and economic climate, change is likely to require a paradigm shift in public concern and activism on alcohol harm equal to that in the nineteenth century.

THEORETICAL CONSTRUCTS

2.9 Public health theory and policy

This study examines ARC harm in the light of public health theory to cast light on ARC harm in the context of human agency, the abnegation of it and the social systems and environments that young adults create and mediate. Alcohol regularly features as a priority for intervention and is cited as “*the leading risk factor for preventable death in 15-49-year olds*” by Public Health England (2014, p. 17). However, the theories relating to public health and prevention of disease that target the individual and individuals’ lifestyles are not an easy fit for ARC harm, not least as there is no recognised condition of ‘suffering from ARC harm’ for interventions to target or prevent. Also, the person who experiences harm would normally be the target for lifestyle interventions to change their behaviour, but the person experiencing ARC harm is not the person whose behaviour is the most direct cause of it.

In the developed world, in recent decades, public health measures to prevent avoidable morbidity and early death have focused increasingly on four lifestyle factors: alcohol, smoking, diet and exercise. The former dominant public health concerns of infectious disease and other environmental determinants of health do still continue to present issues for public health, such as tuberculosis, antimicrobial resistance or pollution. However, it is the lifestyle determinants that now drive the widespread increases in preventable disease and the concomitant burden on society. Public health theory and policy have developed to address these lifestyle factors, and they focus primarily on the individual. It thus seems natural enough for interventions to target the individuals at greatest risk of harm in the population:

“... politicians and governments favour action confined to a needy minority rather than any recognition that health could reflect national or social policies. They argue

that individuals, with support from their doctors, should be held responsible for their own health. Thus among doctors, public and governments alike the natural focus for preventive medicine is action for individuals” (Rose, 1992, p. 66).

Rose’s theory calls into question the efficacy of such an approach to public health challenges:

“A preventive policy that focuses on high-risk individuals may offer substantial benefits for those individuals, but its potential impact on the total burden of disease in the population is often disappointing” (Rose, 1992, p. 107).

The four lifestyle areas of alcohol, smoking, diet and exercise are well-established targets for interventions and people’s behaviours in these areas are accepted as influences on their health outcomes. These four target areas have carried forward from *The Health of the Nation* (DH, 1992) into later public health publications:

“Our causes of premature death are dominated by ‘diseases of lifestyle’, where smoking, unhealthy diet, excess alcohol consumption and sedentary lifestyles are contributory factors” (DH, 2010, p. 11).

The first order interventions introduced in these areas are largely normalising measures:

“... removing or reducing some unnatural exposure in order to restore a state of biological normality (defined as conditions to which we are thought to be genetically adapted through our evolutionary history). Examples would be stopping smoking, avoiding obesity, taking regular exercise ...” (Rose, 1992, p. 127).

People’s behaviour in these areas is influenced not only by their own proclivities, but by a wealth of distal and proximal influences in their environment. Public health policy seeks to

identify these influences and exert leverage on them, either separately or in concert, to promote healthier lifestyles. As above, in earlier centuries, insofar as public health was considered, whole population approaches and wider societal concerns dominated. However, latterly, public health has tended to focus on secondary and tertiary disease prevention for the individuals most at risk, with population-level interventions largely limited to public education campaigns.

For primary prevention on alcohol, smoking, diet and exercise, the UK Chief Medical Officers (CMOs) and the NHS provide educational advice and guidelines for the whole population. However, direct interventions target the individuals at greatest risk: the smokers, the heavy drinkers and the obese. Yet, the effects of other people's poor lifestyle choices, including ARC harm, affect the whole population just as inexorably as the spread of infectious disease or pollution. The introduction of the population-level intervention of a sugar tax at the 2016 Budget (HM treasury, 2016) may, possibly, presage a changed direction in the face of increasing obesity. However, for alcohol, the concurrent price reductions for beer, cider and spirits extended the anti-preventive trend by lowering the price of alcohol for everyone.

Population based strategies for health promotion initiatives have been posited at least since the last decade of the twentieth century:

“The essential determinants of the health of society are thus to be found in its mass characteristics; the deviant minority can only be understood when seen in its societal context, and effective prevention requires changes which involve the population as a whole” (Rose, 1992, p. xiii).

In the arena of alcohol, the seminal work of Rose argues for an ‘up-river’ public health approach for all drinkers to prevent alcohol-related harm, rather than focusing on the group of

harmful drinkers at high risk. He describes such high-risk groups as the ‘deviant minority’ which has echoes in the ‘irresponsible minority’ of drinkers targeted by the UK Government currently. However, Rose observes that there is unwillingness to recognise this:

“Society seeks to distance itself from its deviants, either physically... or by categorizing them... or by denying responsibility for their problems (such as obesity, poverty-related illness, alcoholism, or violence)” (Rose, 1992, p. 99).

Winning support for a public health intervention is problematic and, arguably, the more abstruse or covert the harm the greater the challenge. People perceive the short-term enjoyment of a cigarette, a glass of wine, a slice of cake or taking the car rather than walking. However, people frequently fail to make the connection with the associated long-term harms, even when these harms are well known to them. For ARC harms, which are still largely unknown, people are also missing the basic building block of knowledge to make a connection between their own drinking behaviour and harm to other people. Similarly, people who are affected by the various ARC harms perpetrated by drinkers have no means of identifying or naming collectively the kind of harm that they have experienced.

This study is influenced by Rose’s theory and takes a population-based approach to ARC harm, rather than the current public health policy emphasis on the ‘irresponsible minority’ of drinkers. It does not seek evidence of ARC harm for young adult students as perpetrated, or experienced, only by a ‘deviant minority’ group of high-risk drinkers among them who are binge-drinkers, habitual heavy drinkers or dependent drinkers. Rather, this study collects empirical data on ARC harms perpetrated by *any* drinkers, and as experienced by drinkers and by non-drinkers alike. It does so across a sample of these young adults in the structural contexts of their home, social and student lives in order to examine the determinants of ARC harm for this population

group. Whilst the phenomenon of ARC harm continues to be largely unseen and research into its epidemiology remains underdeveloped, the relative significance of ARC harm cannot be weighed against other public health priorities. Better understanding of the experiences, risk factors and drivers involved is required before a viable preventive approach can be conceived to modify drinkers' harmful behaviours to other people or to reduce the ensuing ARC harms.

2.10 Social cognition in Public Health Theory

The use of social cognition in health theory owes its origins to Bandura's social learning theory (Bandura, 2004; 2006) in which people learn behaviour from social interaction and from imitating the behaviours of others: "*Human health is a social matter, not just an individual one*" (Bandura, 2004, p. 143). Social Cognition Theory (SCT) has been adopted within public health as means of articulating the notion that the immediate social environment impacts on behaviour and so on a person's health and wellbeing. Moreover, people are not seen simply as passive objects. They do not absorb without influence; they make their environment, even as they interact with it and are influenced by it:

"The evolutionary emergence of advanced symbolizing capacity enabled humans to transcend the dictates of their immediate environment and made them unique in their power to shape their life circumstances and the courses their lives take. In this conception, people are contributors to their life circumstances, not just products of them" (Bandura, 2006, p. 164).

Bandura developed five interdependent constructs for applying SCT in the public health context to underpin the development of prevention interventions: knowledge, self-efficacy, outcome expectations, goal formation and socio-structural factors. Knowledge and raising levels of awareness of a particular harm is the first and necessary step towards creating a

behavioural change to avoid or ameliorate that harm. This is particularly pertinent in the case of the present state of knowledge of ARC harm and thus to this study. For the purposes of this construct, knowledge is not merely knowing that the harm exists, but also knowing what action to take to address it. Green's philosophy, as summarised below, sets the stage for self-efficacy and a person's own perception of their ability to take the specific action recommended:

"... for life in any human, intelligible sense implies a personal self that (1) knows what to do, and (2) has power to do it" (Fairbrother, 1911, p. 535).

Outcome expectations are required to drive that action forward and these depend on a person's perception that a positive outcome will result from the action. In the context of this study, beneficial outcomes, e.g. in terms of improved health in the long term, may be in direct competition with perceived short-term benefits in immediate pleasures. Whether or not an outcome is viewed as positive in terms of the pleasure forgone will depend on the value each individual attributes to it. This construct presents a challenge for any potential intervention for ARC harm. For ARC harm, the costs and benefits often manifest simultaneously, e.g. sexual harassment from drunks may coincide with the pleasure of going out dancing. Moreover, the only choice may be between two negative outcomes: not going out dancing or going out and being sexually harassed - a choice between two ARC harms. This is problematic for a public health approach to intervention based on the behaviour of the individual. Goal formation is also problematic since the perpetrator of the ARC harm is not the person who will benefit most from the behavioural change sought. Nevertheless, SCT provides a fertile basis for examining the behaviours and motivations of both perpetrators and victims of ARC harm. It also provides an underpinning construct for the socio-structural factors and the environments in which the ARC harms take place.

In this study, the social cognitive approach to studying human behaviour, as affected by personal, behavioural and environmental influences, informed the study design for collecting qualitative data and for the evaluation of that data. Gaining insights into the participants' knowledge of ARC harm and their degree of self-efficacy in this context were key to understanding the impact of ARC harm on their young-adult lives. Open invitations to participants to report their personal constructions of their ARC harm experiences were thus integral to the study design in order to capture relevant data on these constructs and on the circumstances and environments in which those ARC harms took place.

Evaluation of the qualitative data collected in the study included recognition of the possible underlying psychological influences acting on the perpetrators and the victims of ARC harm. The theoretical basis provided by SCT informed that evaluation in a number of areas. These included: participants' expectations and goals around alcohol consumption and around ARC harm; how socio-structural and environmental factors influenced the ARC harms participants reported; how participants responded to and coped with the ARC harms they experienced and the extent to which participants were, or were not, empowered to contend with the impact of ARC harm on their lives. The theoretical work of Orford and his collaborators (e.g. Orford et al., 2010) and Bronfenbrenner (e.g. Bronfenbrenner, 1977) further informed such analyses.

2.11 Ecological Systems Theory - Why study people in their environment?

As ARC harms do not occur in a void, the study design sought to examine young adults' experiences of ARC harm in the physical settings and psychological contexts where those harms occurred. A review of the rationale for studying people in their environment, as expounded by Urie Bronfenbrenner, provided a theoretical basis for this approach.

Bronfenbrenner promulgated his *Ecological Systems Theory* for health promotion in the 1970s. Since that time, he has written extensively on the ecology of human development and the model he developed has been applied widely within public health policy theory (Bronfenbrenner, 1974; 1977; 1979; 1994; 2005, Santrock, 2013):

“The ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded” (Bronfenbrenner, 1979, p. 21).

Bronfenbrenner developed his theory as an approach to the study of people in their environment and to organise the many complex proximal and distal influences that act on them:

“The scientific study of the progressive, mutual accommodation, throughout the life span, between a growing human organism and the changing immediate environments in which it lives, as this process is affected by relations obtaining within and between these immediate settings, as well as the larger social contexts, both formal and informal in which the settings are embedded” (Bronfenbrenner, 1977, p. 514).

Bronfenbrenner’s system of ecological factors that influence an individual's growth and development comprises an interdependent nested arrangement of five domains of influence, with the individual at the centre. The five elements of his system are the *microsystem*, the *mesosystem*, the *exosystem*, the *macrosystem* and the *chronosystem*. (See Appendix 2.1 for Bronfenbrenner’s diagrammatic representation of his theory and definitions of these elements).

The first element of the system, the *microsystem*, lies closest to the individual and comprises their proximal environment where they live and have most social interactions. This includes their homes, family members, friendship groups and others with whom there is regular interaction and direct contact. For the study participants, any ARC harm risk factors related to the influence of friends, family and frequent contacts in a home environment would thus take place within their microsystems:

“A microsystem is a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics” (Bronfenbrenner, 1979, p. 22).

The *mesosystem* comprises the interactions between the microsystems. In the study context, these might be between a participant’s home and his or her university or social activities. In the *exosystem* the experiences have a direct impact on an individual’s microsystems, but the individual plays no role in the construction of those experiences. For example, parents’ drinking habits might impact on participants’ studies.

The *macrosystem* properties lie in the cultural and political norms, mores and societal expectations within which a person lives. These properties influence people directly, and an individual may have some power to determine their surroundings. Any risk factors for ARC harm relating to specific physical settings outside the participants’ homes and immediate social sphere might be described as taking place within the macrosystem that bears on them. Bronfenbrenner’s macrosystem has a wide compass that overlaps with other parts of his system. For the study participants, the properties of their macrosystems might derive from the generic student culture, or from the student and young-adult norms generated by social media.

These might also derive from the prevailing social norms at a university or within the local bar or nightclub culture that bears on them when they are out socialising.

The *chronosystem* reflects the cumulative experiences of a person over the course of his or her lifetime and thus extends into a third dimension. The relevant experiences in a chronosystem would include environmental events, as well as major transitions in life. For the young adult participants of the study, this might be represented by the life stage where they leave the parental home or start university. In the specific context of ARC harm experiences, this might involve a traumatic event like the loss of a friend in a drunk-driving accident or the premature alcohol-related death of a family member.

The relevance of emerging cognitive neuroscience

Factors that travel with an individual through the passage of time, such as those relating to a person's age, gender or health reside in the characteristics of the individual at the centre of Bronfenbrenner's nested system. In Bronfenbrenner's microsystems, macrosystems and chronosystems, the individual is not a passive observer of events and experiences. Rather, in these elements of the system, each individual reacts and plays an integral part in creating and constructing his or her own experiences. A person's own biology, personal proclivities and characteristics are thus factors that are embedded within his or her microsystem, macrosystem and chronosystem. In recent years, cognitive neuroscience has added to the prevailing understanding of these factors in ways that are directly relevant to the study of young adults' experiences of ARC harm.

Research in cognitive neuroscience is providing new insights into the developing brain and the way it affects cognition and behaviour. One noteworthy example of such research in the

context of this study is the work of Sarah-Jayne Blakemore. Blakemore's recent research now suggests that the 'adolescent' period of brain development continues for much longer than previously thought:

"This is the period of life where the sense of self and particularly the sense of social self undergoes real transition. What that research has taught us is that the human brain undergoes substantial and significant change throughout adolescence and into the twenties and even thirties" (Blakemore, 2015).

Blakemore's research effectively places the study's entire population group of 16-24-year-old young adults into that 'adolescent' phase of development. Blakemore highlights adolescence as the period of development associated with risk taking and during which the social influence of peers is key. Her research also emphasises the greater social influence of other people on adolescents' behaviour. Her findings are particularly pertinent to this study, as, although they show social influence at its highest among the younger adolescents, it is still significantly higher for these newly-defined older 'adolescents' in their twenties than it is for other adults:

"All age groups showed a significant social-influence effect ... this social influence effect decreased with age" (Knoll et al., 2015, p. 583).

Bronfenbrenner and public health policy

Bronfenbrenner's *Ecological Systems Theory* and the ecology of human development are also highly relevant considerations for the development of preventive public health policy, and thus in how ARC harm might be considered as a public health issue at the societal level:

"The recognition that developmental processes are profoundly affected by events and conditions in the larger environment accords major importance to public policies and practices that influence the nature of the environment ... This state of affairs has

implications for both science and public policy. ... it emphasises the need on the part of policy makers to acquire knowledge and understanding of how policies, and the ways in which they are implemented, affect the capacity of families, schools and other socialization settings to function effectively as contexts of human development” (Bronfenbrenner, 2005, p. xxviii).

Bronfenbrenner’s emphasis on social interaction in the context of the underpinning principles for developing public health policy echoes the theoretical writings of Rose in this area:

“...in order to grasp the principles of public health one must understand that society is not merely a collection of individuals but is also a collectivity, and the behaviour and health of its individual members are profoundly influenced by its collective characteristics and social norms” (Rose, 1992, p. 96).

Bronfenbrenner’s theory was pertinent for examining the domains of influence that bear on ARC harm. The relevant ecological properties of the study participants, such as their age and gender, were considered together with the properties of the various physical settings and psychological contexts that featured in their accounts of their diverse ARC harm experiences. His theory was thus useful in the interpretation of the structural, social and developmental environments in which ARC harm occurs.

2.12 The Stress-Strain-Coping-Support Model – How do victims cope?

Jim Orford has researched and written extensively over several years, alone and with others, on the harms experienced by families at the hands of a family member with a drink or drug addiction problem (Orford, 2001; 2008; 2012, Orford et al., 2005; 2010, Velleman and Orford, 1999). Within this body of work, Orford has conceived a model of individual and

family coping phenomena; his *Stress Strain Coping Support model* (Orford et al., 2010) which is derived from these explorations of the harms caused to families by the unwelcome behaviours of family members with addictions.

The research and theoretical writing of Orford on these harms that addicts visit on other people are centred on the family and the family home. He has expressed his aims as “*to deepen and extend understanding of experiences of family members trying to cope with excessive drinking or drug taking of a relative*” (Orford et al., 2005, xiv).

For alcohol, Orford's *Stress Strain Coping Support model* involves the examination of the perpetrators of the harms and, importantly, of the behaviours and adaptations of the drinkers' victims. Orford describes how family members experience and respond to repeated and increasingly stressful conditions caused by a problem drinkers' unwelcome behaviours. He examines how families perceive the problem, how they try to make sense of it, how it makes them feel and how they cope with it. He also demonstrates how the resulting harms impact on the physical and psychological health and overall wellbeing of family members.

Orford identified a range of alcohol-related collateral harms that are experienced in families. He showed that some harms that drinkers perpetrate on other family members are related to a single behaviour, event, action or outcome, and that many are also longer-term or chronic. Examples of the former appeared as instances of various types of disruptive, irresponsible or antisocial behaviours such as violence or neglect by the drinker. Examples of the latter appeared as impacts on physical health and psychological harms like stress and uncertainty that family members endured from living in close proximity with the drinker.

Orford's theoretical model was built on qualitative research in which he allowed the 'facets' of harms to emerge from his research participants' own descriptions of the harms they had experienced from living with a relative who drank excessively. He then categorised the diverse harms they described into four facets that were damaging to the family dynamic:

- *“Facet one: Living with the relative is highly stressful for family members*
- *Facet two: Family members worry about the relative*
- *Facet three: Home and family life are threatened by relative's behaviour*
- *Facet Four: Family members experience signs of strain”*

(Orford et al., 2010, p. 95).

Orford also divided each of these four facets into smaller subcategories. For example, he described *Facet one*, the 'stress' facet, as comprising three experiences where the alcohol misuser's behaviour was the cause of stress:

- *“becoming unsure about the relative (e.g. unpredictability of mood and behaviour, being missing from home);*
- *the relationship becoming disagreeable (e.g. reduced affection, deceit and loss of trust, verbal abuse);*
- *humbag from the relative (e.g. failure to contribute financially, stealing)”*

(Orford et al., 2010, p. 95).

Orford's inductive approach to identifying and characterising alcohol-related collateral harms was influential in developing the study methods. Accordingly, the young adult participants' own descriptions of the ARC harms they had experienced were coded inductively to identify the types of harm experienced and, thence, to build a taxonomy to characterise ARC harm for such young adults.

Orford's research context of the family home and family members has also been influential in the study. For the young adult participants, 'home' was extended to encompass other settings, friendship groups and their social circle. As young adults spend increasing amounts of time socialising outside the family home, and in external drinking environments, this wider focus was taken in recognition of the more social ecological context of young adults' drinking patterns. Whereas, for Orford, the harmful impacts identified arose from the unwelcome behaviours of just one drinker in the family, young adults face many drinkers, and the potential for multiple unwelcome impacts and influences from many drinkers.

Also, Orford's focus is confined to addictions, or at least to 'over-attachment' to an addictive substance, which, for alcohol, includes alcoholics and regular heavy drinkers. His focus does not extend to alcohol-related harms caused by drinkers who are not 'over-attached' or alcoholic. This study of young adults extends the focus of harms caused by drinkers beyond alcoholics and heavy drinkers as the potential perpetrators of ARC harm. This is, in part, because these terms are unhelpful in the context of young adults' drinking patterns, not least as the people identified as alcoholics or heavy or dependent drinkers are rarely young adults.

That is not to say that young adults do not engage in excessive drinking, the latest self-reported data on their reducing alcohol consumption notwithstanding (ONS, 2017a). Rather, heavy drinking in young adults is more often episodic and is usually described as 'bingeing'. In addition, beyond the remit of the breathalyser, the quantity of alcohol consumed is unknown when an ARC harm occurs. This study therefore encompasses ARC harms experienced by the study participants caused by *any* drinkers.

This study has benefited from the comparative background provided by Orford's *Stress Strain Coping Support model* and from his systematic modelling of the harms drinkers do to the people in their family and social circle. More specifically, Orford's model has been an influential guide for parts of the study methods that were used to unpack and categorise the wide range of the types of ARC harm reported by the young adult participants. This in turn underpinned the development of the taxonomy of ARC harm for young adults and influenced the conceptualisation of the themes that emerged later in the study analyses.

CHAPTER 3: THE STUDY METHODS

Summary of Chapter

This chapter sets out the mixed methods used in the study for data collection from a population group of young adult students and for the subsequent analyses undertaken. As the study comprised two complementary phases, the methods for each are described separately, with Phase I drawing predominantly on quantitative data and the focus of Phase II on qualitative data. For each phase, this chapter describes how the design, sample, procedures and analytical methods were used to examine, quantify and categorise ARC harm to explain how and to what extent it affected the lives of the study participants. Equal weight is given to the quantitative and qualitative approaches described and the points of triangulation between the two are outlined. Ethical issues raised by the two study methods and how these were addressed are described at the end of the chapter.

PHASE I: THE CROSS-SECTIONAL STUDENT SURVEY

3.1 Phase I: Summary of methods

In Phase I a single means of data collection was used. This took the form of a cross-sectional survey that collected a range of empirical quantitative and qualitative data. The study sample comprised young adult students aged 16-24 who were either studying at A-level (international baccalaureate level) or engaged in a course of undergraduate or postgraduate study. The survey design and the analyses of the returns were driven by the aims and objectives of the study, as set out in the opening pages of the thesis. In particular, Phase I of the study sought to identify the ARC harms experienced, to determine the prevalence of ARC harm, to test a number of hypothesised factors for associations with ARC harm and to determine an initial taxonomy of

ARC harm. The methods employed sought to provide standalone findings for Phase I which would also provide a foundation for the complementary qualitative exploration of ARC harm to be pursued in Phase II of the study.

3.2 Phase I: Design

The design objectives for the cross-sectional survey were to capture the nature and prevalence of ARC harm experiences for the young adult participants and to examine these as a public health issue in the context of other lifestyle considerations. A questionnaire was designed for the survey to collect empirical data with questions focused on alcohol and experiences of ARC harm. (See Appendix 3.1, *Phase I: Cross-Sectional Survey Questions*).

Participants were asked to provide information about their own behaviours and those of their friends and families. Specific questions were devised to capture participants' knowledge and experiences of ARC harm and the influence of other people on their drinking habits. These specific questions were also designed to be used again and addressed in greater depth in Phase II. These and other lifestyle questions on alcohol established the alcohol-related context in which ARC harm occurred for the participants.

Other questions in the survey collected information to provide a demographic context for the study participants' experiences of ARC harm and factors against which experience of ARC harm could be tested for associations. These questions addressed the three other key lifestyle risk areas of smoking, diet and exercise, to capture any potential relevance of participants' lifestyle risks to their experiences of ARC harm. The questions in these areas followed in a similar, but shorter, format to the questions used for alcohol. Questions on participants' individual demographic characteristics, such as age and gender, completed the set of questions.

Extending the demographic profile of the participants to include the other key lifestyle risk areas alongside alcohol fulfilled four further purposes. Firstly, it facilitated the benchmarking of the study findings on alcohol, smoking, diet and alcohol against routine national data collections for the 16-24 young adult age group. This enabled the potential representativeness of the sample to be tested, against the then current national levels of drinking (HSCIC, 2014b), smoking (ONS, 2014) obesity and exercise (HSCIC, 2014a). Secondly, the extent to which participants were compliant with current Department of Health and National Health Service advice and guidelines for alcohol, smoking, diet and exercise provided a proxy for participants' relative health status. This proxy status was then used to underpin the design for the purposive sample in Phase II. Thirdly, the inclusion of these other lifestyle risk factors expedited analytical comparisons of participants' healthy or unhealthy behaviours and attitudes around alcohol with those for smoking, diet and exercise and with the findings on ARC harm. Fourthly, given the known sensitivities around alcohol, a broad health and wellbeing approach for the survey was judged to be less sensitive and thus more likely to be generally acceptable to potential participants than a survey on alcohol and ARC harms alone. National surveys also regularly collect data on alcohol in the context of other factors, e.g. *Opinions and Lifestyle Survey* (ONS, 2016d); *Health Survey for England* (NHS Digital, 2016). A more speculative design premise was that this wider approach might also be more likely to deliver an unbiased sample, as a focus on alcohol alone might deter heavier drinkers from responding to the survey.

The survey questions drew on validated surveys where possible and used standard question formats (e.g. those of the Office for National Statistics). The survey questions required either binary yes/no responses, or used a Likert scale (Bowling, 2014) to obtain categorical data on participants' experiences and their opinions and behaviours. Free-text boxes followed certain binary questions to collect unforced descriptions of participants' behaviours and experiences.

By asking the question ‘Why do you say that?’ these free-text boxes gave participants the opportunity to use their own words to add depth to their binary responses. The free-text boxes were conceived as the principal means of capturing participants’ volunteered descriptions of the types and extent of the ARC harms they had experienced. The use of free text boxes was informed by Social Cognition Theory, as they were designed to invite participants to describe their subjective interpretations of their ARC harm experiences. Analysis of the qualitative data in these text boxes therefore aimed to achieve two objectives. The first was to reduce the possibility of making assumptions about the nature of the ARC harms experienced by the study population. Rather, the objective was to allow the study findings on the types of ARC harms experienced to emerge exclusively from the qualitative responses provided by the young adult participants themselves. The second objective was to collect data on the way these young adults construed their experiences of ARC harm, and thus to gain an initial impression of their knowledge of ARC harm and their degree of self-efficacy in this context.

A web-based package (Qualtrics, 2015) was selected with the objective of delivering the data collection through a confidential, on-line questionnaire. This afforded the participants easy access to the survey and ease of completion and return. For the researcher, it provided several administrative advantages over a paper survey, including ensuring that all participants were asked the same questions in the same order and allocating each participant a unique identifier. These properties of the software helped to guarantee consistent returns from the survey. In addition, Qualtrics was selected for the analytical functions it offered and as it could export the survey data efficiently into Excel (Excel, 2016) and SPSS (SPSS, 2013) for further analyses. The use of Qualtrics also supported the ethical requirements for the survey, as it offered confidential completion and displayed the participant information and sources of further information and advice to all participants.

3.3 Phase 1: Sample

The population group of interest was young adult students in Southern England. The study used an opportunity sample for which the selection criteria were: being a student (male or female), aged 16-24, studying at A-level or engaged in a course of undergraduate or post-graduate study. Such young adults in education now comprise almost half (44%) of the 16-24 population group in England (ONS, 2017b). The target age range of 16-24 was selected to align with the Office for National Statistics defined age range for 'young adults'. As above, this facilitated comparisons of the survey findings with contemporaneous national indicators for the whole 16-24 young adult population group.

A large sample of around 500 was sought for the purposes of increasing the likely precision of the sample and achieving reliable statistical analyses (Bryman, 2004). In addition, the researcher sought findings that would be as representative as possible of the target population. The proposed sampling frame planned for the study comprised one large university, four secondary schools and two sixth-form colleges in Southern England. All seven establishments were offered feedback on the survey findings in return for their participation. The four secondary schools invited to participate comprised two single-sex public schools (one male, one female), one mixed-gender comprehensive school and one mixed-gender academy. The university and the two colleges invited were all mixed-gender.

The university and both the sixth-form colleges agreed to participate in the study. The four secondary schools all declined the invitation to participate. Two expressed an interest initially, but subsequently withdrew. Only one gave any indication of the reason for declining, stating that the school did not participate in 'this sort of research'. The adjusted sampling frame thus comprised one university and two sixth-form colleges. No response rate was calculated for the

survey as, although the study was promoted widely across the university and in both the participating colleges, the proportion of students who saw the invitation was unknown.

3.4 Phase I: Procedure

Ethical approval was obtained for each of the two Phases of the study separately and the relevant procedures are described together at the end of the chapter. Once Phase I of the study had been approved by the university research ethics committee, the survey format was piloted on line to test it for ease of completion, logical flow, intelligibility, and correct data outputs. Ten pilot participants were recruited in October 2013 by presenting the study plans to a lecture group of first year university students and uploading a pilot survey to the web for them to complete. In line with the pilot feedback, minor adjustments were made to improve the clarity of some survey questions before it was launched. The full survey was then launched on a dedicated website, where it remained live between November 2013 and March 2014.

University and college students aged 16-24 were invited to participate in the study by several means, including widespread distribution of paper and electronic flyers, posters and presentations in lectures and seminars with collaboration from lecturers and teachers. University and college local intranet systems were used to promote participation where this was permitted, e.g. in 'What's on?' information bulletins and by engaging with the university's research participation groups. Blanket emailing of students with invitations was not permitted, although the researcher obtained permission to include paper flyers in the information packs issued to all university first years across all disciplines in the 2013/14 intake.

Proactive recruitment was continued throughout the period of survey deployment to maintain the flow of returns. To encourage returns from the colleges, the survey was presented to A-

level students on two occasions with the collaboration of the respective college teachers and with supporting electronic and paper flyers. To encourage returns from the university, electronic and paper posters and flyers were distributed twice while the survey remained live. The researcher also secured slots with several lecturers to give presentations about the study and to distribute flyers to lecture groups of students across a wide range of study disciplines. The range of disciplines invited in this way included architecture, chemistry, health visiting, history, nursing, nutrition, paramedic science, physics, politics, psychology, social work and sports' science. In return for their collaboration, and once the initial analysis of the survey data was complete, the participating college teachers were sent initial findings from the survey and offered further feedback. The supporting university lecturers were offered a reciprocal favour. Some initial findings were provided to one lecturer and, for another, the researcher's oral presentations of the study were incorporated into their first-year undergraduate module on research methods for two years as an illustration of mixed-methods research in practice.

Two specific survey questions were used to ascertain whether participants had experienced ARC harm. Participants were asked whether their health or safety had ever been put at risk by other peoples' drinking and then, separately, they were asked whether the drinking habits of anyone else had ever affected them in any other way. Responses to the two questions were used together as the test for ARC harm. Also, as above, participants' descriptions of the ARC harms experienced were collected from the free-text boxes attached to these two questions. This ensured that the qualitative information provided was unforced and directly relevant to the participants. This information was coded and categorised inductively to identify the different types of harm and thence to build a taxonomy of ARC harm for these young adults.

The young adult participants were also asked whether other drinkers affected their decisions to drink or not to drink alcohol and invited to provide information on their experiences of this in a free-text box. This question was asked to determine the potential relevance of the influence of others, but it was not used as a measure to test for ARC harm. Other questions on alcohol tested participants' knowledge, attitudes and practice around alcohol consumption for comparison with relevant national data (e.g. HSCIC, 2014b).

3.5 Phase I: Analyses

Quantitative analyses: using the data collected to test hypotheses

The survey questions collected data that were predominantly quantitative; prompted either by binary questions or multiple choice using a scale. The data generated and available for analysis were therefore chiefly dichotomous or categorical. The only continuous data generated by the survey were the demographic data for age, height and weight. Descriptive, bivariate and multivariate statistical analyses appropriate to the study hypotheses and to these types of data were therefore used. Computer software, Excel (2016), Qualtrics (2015) and SPSS (2013), were used for the descriptive and inferential statistical analyses. Descriptive statistics were used to summarise the data relevant to ARC harm and the public health context for alcohol. These included non-parametric, chi-squared tests of association between independent predictors and the experience of ARC harm. Inferential statistical analyses were used to explore the interrelatedness of the significant variables identified in the data collected.

The objectives of the statistical measures and multivariate analyses used in the study were to quantify the incidence of ARC harm experienced, the factors associated with, or predictive of, an experience of ARC harm, the interplay between these factors and their relative importance. Experience of ARC harm was hypothesised to be associated with a number of potentially

relevant factors related to the participants' individual characteristics, their behaviours and their environment. These included the participants' levels of alcohol consumption, their gender, their age, the influence of their family and friends, their domicile and whether they were at college or university. It was also hypothesised that participants' experience of ARC harm might be associated with their health and their behaviours in the other key public health lifestyle risk areas of smoking, diet and exercise, since behaviours in these areas are traditionally associated with alcohol-related behaviours. Using Excel and informed by Carlberg (2011) the potential relevance of all these hypothesised factors was tested. As the sample size achieved meant that there were no expected cell populations of less than five, a simple Pearson chi-squared test was used. As several hypotheses were being tested, significance levels were set at the 1% level, rather than the more usual 5%, to reduce the risk of Type I errors. This Bonferroni-like correction (Abdi, 2007) was made acknowledging that it might generate some Type II errors. Thus, the resulting statistical findings were reported at a 99% confidence level.

Associations with ARC harm were determined individually by using pair-wise, chi-squared tests for the bivariate data, i.e. with experience (or not) of ARC harm set as the dependent variable and the hypothesised factors as the independent variables. Associations between the significant independent variables identified were also determined individually by using pair-wise chi-squared tests for the bivariate data. The likely collinearities between these significant variables were thus identified by this process of examining them with one another. (See Chapter 5 and Appendix 5.1).

Informed by Hosmer and Lemeshow (1989) univariate analysis was employed first to explore the factors of interest: "*The selection process should begin with a careful univariate analysis of each variable*" (Hosmer and Lemeshow 1989, p. 83). Odds ratios (ORs) were therefore first

determined individually for the independent variables that had been identified as significant individually. Informed by Field (2009) and Green and Salkind (2007) the individual ORs were compared with ORs determined collectively using logistic regression in SPSS to ascertain the relative contribution of each significant variable. Finally, to establish the main drivers for ARC harm in the sample, the collinear variables identified were removed from the model and logistic regression was used again to provide ORs for the significant independent variables alone.

Qualitative analyses: building theory from the data collected

The Phase I qualitative data on ARC harm, collected by the survey in the form of free-text, were mapped initially to identify the ‘who?’, ‘what?’, ‘where?’ and ‘when?’ of ARC harm experiences as reported by the participants. (See Figure 3.1).

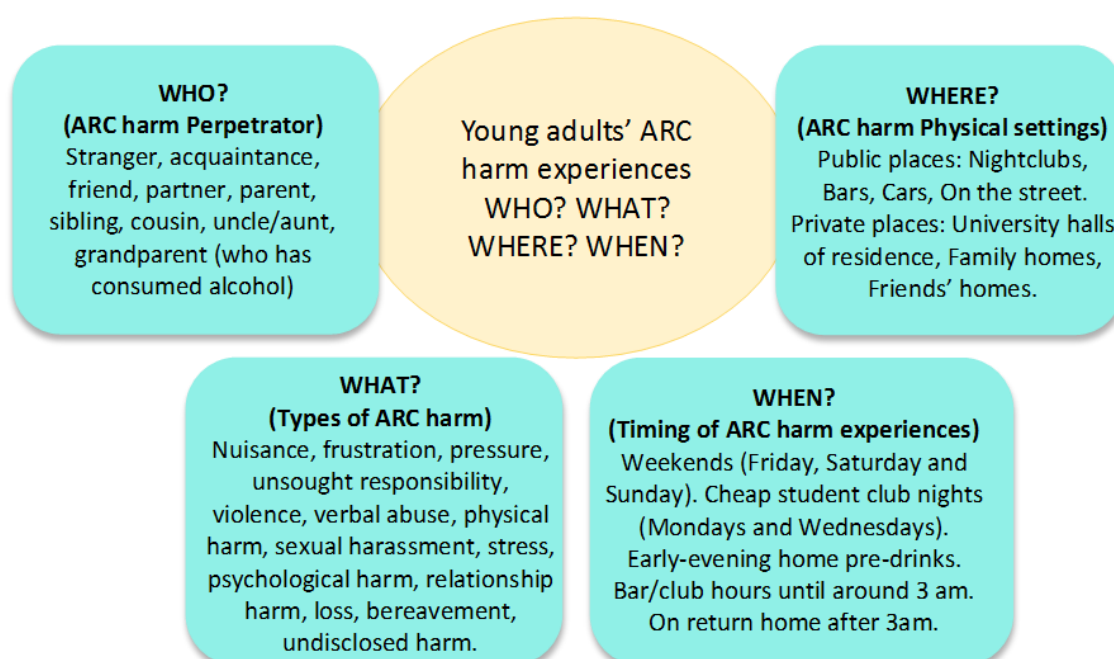


Figure 3.1 Initial mapping of the who, what, when and where for ARC harm.

These qualitative survey data were coded systematically using Excel to identify the different types of ARC harm experienced inductively. The full range of individual types of ARC harm identified was subsequently carried forward into Phase II, where it was incorporated into the interview schedule and thereby into the subsequent thematic analysis of the interview data. Relative frequencies were calculated for each type of harm identified in Phase I to derive additional categorical statistics for analysis. These data were used to ascertain the distributions for each type of ARC harm across the sample. The free-text responses from participants whose decisions to drink were affected by other drinkers were also used to derive additional categorical data. These data were used to calculate the percentages of the participants who were influenced by others to drink more and those who were influenced to drink less.

All the examples of ARC harms reported as free-text in the survey were coded inductively to identify a set of individual types of ARC harm experienced by the participants. The individual types of ARC harm identified from the qualitative survey data were then sorted into categories to develop a novel taxonomy of ARC harm. This taxonomy was illustrated with relevant quotes from participants' free-text responses as supporting examples of each category of ARC harm identified. In this way, the novel taxonomy determined in Phase I provided the initial characterisation of ARC harm as experienced by these young adult students.

PHASE II: THE SEMI-STRUCTURED INTERVIEWS

3.6 Phase II: Summary of methods

In Phase II of the study a series of in-depth interviews was undertaken with a purposive sample of the Phase I participants. These one-to-one interviews were informed by the Phase I findings and comprised the single means of empirical data collection employed in Phase II. A semi-

structured interview schedule brought forward specific questions relating to ARC harm from the Phase I survey, and participants' own answers to these were integrated into their interviews. The interviews invited participants to tell their own stories of their ARC harm experiences and explored the contexts in which those experiences had occurred. The objective was to produce rich, in-depth data on the participants' experiences and to analyse and report on the patterns of meaning in the dataset. In sum, the methods used in Phase II aimed to identify and interpret themes on the impact of ARC harm and its relevance in the lives of the young adult participants.

3.7 Phase II: Design

As little is known about young adults' experiences of ARC harm, Phase II was designed around a semi-structured interview format to generate new qualitative insights. Qualitative methods were used predominantly to *"explore people's subjective experiences and opinions in order to better understand and give meaning to social phenomena"* (Neale, 2009, p. 20). Phase I had been largely deductive, as it examined mainly quantitative data on participants' experiences of ARC harm, with some inductive analysis to identify the types of harm and determine the taxonomy. Phase II aimed to complement Phase I with largely inductive contextualised findings.

The Phase II design, delivery and analyses were chiefly influenced by Silverman (2006), Braun and Clarke (2006; 2013) and Creswell (2012). The objective of the Phase II interviews was to generate in-depth qualitative data to understand a group of young adult students from their own perspective. The interviews were designed to provide deeper information on ARC harm, with the semi-structured format of the interviews involving *"Some probing; rapport with the interviewee; understanding the aims of the project"* (Silverman, 2006, p. 110). The interviews thus aimed to solicit details of the participants' subjective interpretations of their ARC harm

experiences and of their interactions with the perpetrators. Analysis of their constructions of their ARC harm experiences would then use that data to examine the interacting situational influences acting on the harms described, the potential determinants of the participants' corresponding behaviours and the ways their expectations and goals around alcohol and drinkers of alcohol were affected by their ARC harm experiences. In this way, Phase II aimed to build on the Phase I findings on frequencies and types of ARC harm by providing deeper information on how and why ARC harm occurred to capture the extent of the impact of ARC harm on the lives of these young adults.

A two-part semi-structured interview schedule was devised to create researcher-provoked data in the form of digital recordings. (See Appendix 3.3, *Semi-Structured Interview Schedule*). The first part revisited participants' own survey responses to questions on ARC harm and used these to prompt deeper examination of the participants' ARC harm experiences. The second stage introduced participants to the set of ARC harm types identified in Phase I. The interview schedule thus set out areas of interest, such as how the participants' health or safety had been put at risk by a drinker, and provided an overall format for the semi-structured interviews. It did not, however, dictate the data to be collected, as the format invited participants to enlarge on their survey responses and volunteer other information about their ARC harm experiences.

The schedule design envisaged researcher interaction with the interviewees, to probe their replies and to encourage and preserve a relaxed atmosphere throughout. For participants, this approach afforded the opportunity to talk at will on each given topic and to express their own opinions and interpretations of their ARC harm experiences. At the same time, the schedule's structure ensured that the interviewer kept the aims of the research in mind and adhered to the prompts it provided. This interpretive approach to data collection was designed to allow the

target population in question “*to document their own stories and speak for themselves*” (Neale, 2009, p. 198). In this way, each Phase II interview participant was treated as an ‘*expert witness*’ (Silverman, 2006) providing new knowledge on young adults’ experiences of ARC harm.

The study design required each entire interview to be recorded and transcribed to capture the data provided by these young adults as expert witnesses to ARC harm. The objective was to create a verbatim account of the interview so that as little information as possible was lost or interpreted in turning the participant’s spoken word into an orthographic text (Braun and Clarke, 2013). To capture moods in the interviews, limited non-verbal communication, such as laughter, distress and long pauses, were included in the transcripts to be factored into the analysis later as appropriate. The resulting transcripts were then loaded on to qualitative analysis software (Nvivo, 2012) to facilitate the management and organisation of the transcripts as data items. Informed by Bazeley and Jackson (2013), the qualitative data in each transcript were then coded systematically using Nvivo and the entire dataset of coded transcripts was subjected to Thematic Analysis in accordance with Braun and Clarke (2006).

3.8 Phase II: Sample

A purposive sample of Phase I survey participants was invited to take part in the Phase II semi-structured interviews. Two base criteria drove the rationale for this sampling strategy. Firstly, since ARC harm was the phenomenon to be studied, the primary selection criterion for this prospective interview sample was an experience of ARC harm. The second criterion for the purposive sample was that the range of participants’ health from the Phase I survey sample should be represented, from the healthiest to the least healthy participants. This criterion was to represent the Phase I sample and as the Phase I findings suggested that ARC harm did not discriminate between participants who led an otherwise healthy lifestyle and those who did not.

An appropriate formula was developed to implement this rationale and deliver the purposive sample. Potential Phase II participants were identified using data findings from Phase I, drawing on the survey participants who reported a personal experience of ARC harm and on the four key areas of public health lifestyle risk tested in the survey (alcohol, smoking, diet and exercise). In these four areas, the following survey findings about the participants in the week prior to taking the survey were used:

- For alcohol - the average units of alcohol consumed per day
- For smoking - whether the participant was a smoker or non-smoker
- For diet - the average number of portions fruit and vegetables eaten per day
- For exercise - the average number of hours of at least moderate intensity exercise.

These findings enabled the researcher to determine whether participants had complied with the relevant public health guidelines in each of these four lifestyle risk areas. A proxy health status for each survey participant was then determined using these data to develop a health hierarchy of the survey participants. The hierarchy was based on participants' compliance in each of these four key areas with the relevant Department of Health advice or guidelines current at the time: exercise (DH, 2011b); diet (DH, 2011c); smoking (DH, 2011d) and alcohol (DH, 2012).

Where a participant had met, or exceeded the guideline in one area, the participant was awarded one credit. (No judgements were made on the relative merits of healthy behaviour in one area over any other and participants' responses were accepted at face value). Each participant's credits for the four areas were then aggregated to give a total of between 0 and 4 credits and participants were grouped in accordance with the number of areas where they met or exceeded the guidelines. That is, the participants compliant with the guidelines in all four areas were awarded four credits, those compliant with three were awarded three and so on. (Compliance

in all the four areas, alcohol, smoking, diet and exercise, can only be achieved in one way, but compliance with one, two or three areas can be achieved in different ways).

Figure 3.2, overleaf illustrates the composition of each group determined in this way, using different colour blocks to represent compliance in each area. Of the 450 survey participants, 59 participants met or exceeded the guideline in all four areas. These were classed as the ‘healthiest’ group (Group A). Fifty-five participants met just one, or none, of the advice or guidelines in the four areas. These were classed as the ‘least healthy’ group (Group D). Participants who met the standard in two or three areas became the intermediate groups; Group C (182 participants) and Group B (154 participants).

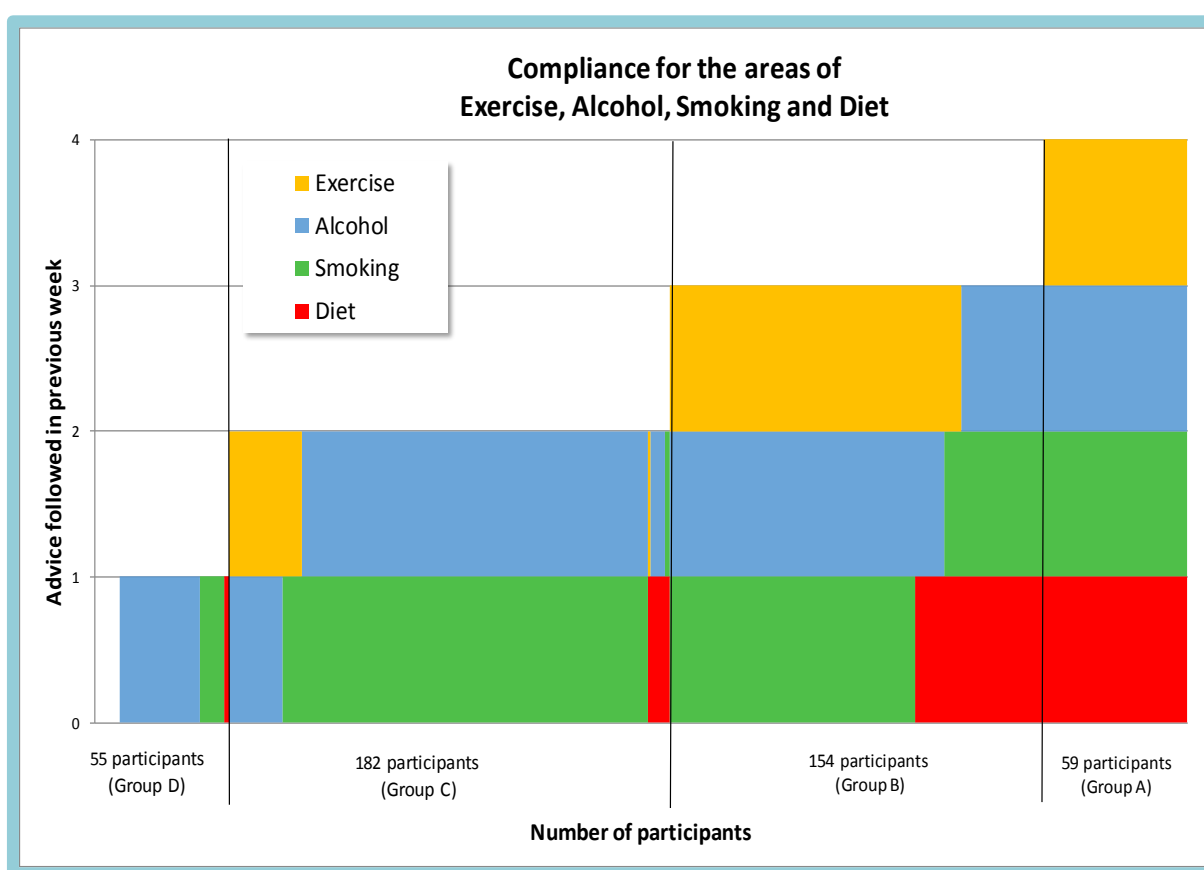


Figure 3.2 Compliance with Department of Health advice and guidelines (N=450)

To strengthen this proxy health status, a Body Mass Index (BMI) was calculated for each participant using their height and weight details collected in Phase I. These BMI's were used to identify participants whose BMIs came within the normal 'healthy' range of 18.5 to 24.9, in accordance with the *BMI Classification* of the World Health Organisation (WHO, 2006). These BMIs provided an additional, independent indicator of health status for each participant. Combining the BMIs and participants' compliance with the public health advice and guidelines of the Department of Health and NHS in the areas of alcohol, smoking, diet and exercise, provided a snapshot of the relative health status of each of the Phase I survey participants. The BMIs were also used to subdivide the groups, including the two large intermediate groups of 182 and 154 participants who had met the guidelines in two or three of the four areas. To represent their range in health status, the Phase I participants were divided into groups A1, B1, C1 and D1 where they fell within the healthy BMI range, and into groups A2, B2, C2 and D2 where they had an unhealthy BMI. (See Table 3.1).

Number of DH guideline areas met	Participants within healthy BMI range (BMI 18.5 - 24.9)			Participants not within healthy BMI range (BMI outside 18.5 - 24.9)			DH guidelines: Total who met this number
0	Group D1	8	80%	Group D2	2	20%	10
1	Group D1	32	71%	Group D2	13	29%	45
2	Group C1	121	67%	Group C2	61	33%	182
3	Group B1	109	71%	Group B2	45	29%	154
4	Group A1	44	75%	Group A2	15	25%	59
Total		314	70%		136	30%	450

Table 3.1 Purposive sampling groups showing Body Mass Index (BMI)

Potential participants for the Phase II semi-structured interviews were then randomly selected from participants who had experienced ARC harm from each of these groups. The purposive

sample thus represented both the Phase I survey participants who had experienced ARC harm and a cross section of the relative health status of those participants.

As the strategy for delivering the Phase II interviews relied on recruiting a purposive sample of the Phase I survey participants, the option of consent to follow up contact had been factored into the Phase I design. This measure allowed the consenting survey participants who met the purposive criteria to be randomly invited for interview, but it also afforded them the option to decline that invitation. Therefore, the Phase II design for the purposive sample entailed identifying a larger pool of consenting survey participants than was likely to be required. This allowed for any who declined the invitation to be substituted by other potential interviewees.

The sampling frame

As Phase II of the study would collect qualitative data, a saturation sample was sought, rather than a target number of participants. The work of Charmaz (2006), Green and Thorogood (2009) and Guest et al. (2006) was consulted in determining the point at which saturation might be reached. Charmaz (2006) suggests that the breadth and ambition of a study are relevant and concludes that a sample of 25 would be adequate for smaller projects. Green and Thorogood (2009) state that little that is new arises from qualitative interviews after the first twenty or so. Guest et al. (2006) analysed their own data from 60 interviews to determine the point where saturation had been reached. Working with a homogenous sample of women in a single country, they found that 34 of the 36 codes they developed in their study had been developed from the first six interviews. They concluded that six interviews might be sufficient for meaningful themes and useful interpretations to be developed using a similarly homogenous sample. The researcher applied this advice in determining the point at which a saturation sample had been achieved and in concluding when the Phase II sample was complete.

3.9 Phase II: Procedure

Once Phase II of the study was approved by the university research ethics committee, the interview format was piloted to test it for ease of delivery, acceptability to potential participants and appropriate data generation. The researcher also used this pilot stage to practice the interviewing skills acquired in earlier training. Two survey participants who had experienced ARC harm were recruited by email invitation to pilot the interview format. Following these pilots, additional pauses were factored into the interview schedule to afford participants greater opportunity to speak at will if prompted to do so by any of the individual types of ARC harm identified in Phase 1. This adjustment was made as the Phase I examples reminded the pilot participants of other experiences of ARC harm that had not arisen earlier in their interviews. Invitations for the main tranche of semi-structured interviews were sent by email to college and university students in small batches over an extended period to allow each batch to respond before inviting the next. The interviews took place between November 2014 and October 2015 with the date and timing of each interview set to be mutually convenient for the participant and the researcher. Participants were offered two private locations on the university campus or a location of their own choosing for the interview. All chose to be interviewed on campus. Survey participants who were invited, but did not accept the invitation were substituted by others, randomly selected from the same purposive group, until data saturation was achieved.

Conducting the interviews

The Phase II interviews were conducted face-to-face and followed a two-part format with a view to collecting relevant new data generating new concepts and developing novel theory. The interviews comprised a series of semi-structured interactions between the researcher and the participants built on the predefined structure provided by the questions imported from Phase I. In conducting the interviews and collecting information on the participants' experiences of

ARC harm in their family and social circle the researcher did not seek to access immutable facts about the world of the young adult interviewees. Rather, the researcher adopted a constructivist stance whereby the qualitative data collected were presumed to comprise a self-edited, subjective account of the young adult's experiences of ARC harm, as subjectively interpreted by the researcher. In this way, the qualitative findings ultimately generated should be viewed as a construct of the interaction between the researcher and the young adult interviewees. As Silverman observed:

"... interviewer and interviewee actively construct some version of the world appropriate to what we take to be self-evident about the person to whom we are speaking and the context of the question" (Silverman, 2006, p. 118).

The first part of each interview generated new data to complement Phase I by reintroducing the survey questions that related to ARC harm. The process revisited each participant's own Phase I survey responses to these questions (both those made in answer to binary yes/no questions and those entered in the free-text boxes). A prompt such as *'Can you tell me a little more about that?'* was used by the researcher to invite participants to provide additional information about, and views on, their reported experiences of ARC harm. This provided openings into new areas, as dictated by the participants. Individual participant's free-text responses from the survey were also read aloud to them by the researcher to encourage participants to build on these earlier responses and to speak freely. After each of the participant's survey responses on ARC harm was presented to him or her, the researcher engaged in active listening and gentle, strategic probing to encourage the flow of replies and to elicit more thoughtful and reflective observations from participants.

Part two of each interview was shaped by the set of thirty individual types of ARC harm identified in Phase I that drew on all the unprompted examples of ARC harm reported by the

survey participants. This fulfilled a two-fold purpose in each interview. Firstly, it was used to ascertain how many of those individual types of ARC harm each Phase II participant had experienced. Secondly, it acted as a memory prompt to participants for experiences of ARC harm that had not arisen earlier in their interview. The second part of the interview thus generated additional qualitative data which, on analysis, could provide richer and deeper insights and further categorical data to complement the Phase I findings.

All the interviews were structured to the extent that each used an identical set of base questions and standard prompts. The format of the interview schedule was strictly adhered to and every participant was encouraged to supplement the information they had provided for the survey. Thereafter, probing of the information provided by the participant allowed the interviews to follow a supplementary, unscheduled agenda dictated by each participant. Interviews were also consciously informal to create a relaxed atmosphere and participants were given leeway to dictate the pace as well as the direction of travel. In further recognition of the sensitivities of the subject matter, additional reassurances on confidentiality were given as required. The researcher also remained alert throughout to the possibility of a participant needing to halt the interview or ‘time out’ to regain their composure. The express intentions of this approach were to build rapport and to empower interviewees to talk with minimum inhibition about personal experiences of ARC harm, which might be embarrassing or painful to relate.

At the end of both parts of the interview, participants were offered a ‘carte blanche’ opportunity to ask questions or add any additional comments about any of the ARC harm-related topics discussed. This was conceived as part of the interview structure to afford participants a completely unfettered opening to revisit issues or to air any new information, concerns or sensitive issues around ARC harm that were important for them. It was accepted that according

participants this freedom might result in wide variations in the recorded interview durations. Regardless of the recorded duration, a further ten to fifteen minutes of unrecorded time was allowed at either end of all interviews, to secure informed consent and settle the interviewee beforehand and for thanks, questions and any further reassurances required afterwards.

3.10 Phase II: Analyses

With the aims of the research driving the analysis, the researcher sought to identify the themes which captured the important elements in the entire interview dataset. Thematic Analysis (TA) was used to code, categorise and conceptualise the interview data collected using an iterative and reflexive process to identify and represent these key themes (Braun and Clarke, 2013). The rationale for using TA was driven by a number of factors. Firstly, this study examines an area of alcohol-related harm which is under-researched and the experiences and opinions of young adult students in the study area are largely unknown. Secondly, the study sought to represent the perspective of these young adult students as a population group, rather than as individuals, and to examine their subjective experience of ARC harm in the context of their interactions and communications within their family and social circle. TA provides useful strategies for this type of enquiry.

TA was therefore used to capture meaning and to generate rich thematic descriptions of the sum of the data extracted from the Phase II set of semi-structured interviews. TA was also used as it is compatible with the interactive, constructivist paradigm employed in Phase II to determine the extent and impact of ARC harm on this group of young adults. The final important reason for selecting TA as the most appropriate analytic research tool was its greater flexibility over more strictly demarcated methodologies with their attendant perspectives:

“TA is relatively unique among qualitative analytic methods in that it only provides a method for data analysis; it does not prescribe methods of data collection, theoretical positions, epistemological or ontological frameworks” (Braun and Clarke, 2013, p. 178).

Thematic Analysis has had a clearly outlined set of procedures since these were first described by Braun and Clarke (2006). (See Table 3.2, *The Phases of Thematic Analysis*). The systematic analytical processes undertaken in the study accorded with these procedures.

Phases of Thematic Analysis	
Phase	Process
1. Familiarising yourself with your data	Transcribing data (if necessary) reading and rereading the data, noting down initial ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes	Checking the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Table 3.2 The Phases of Thematic Analysis (Braun and Clarke, 2006)

Familiarisation, reading and transcription

At the end of each interview, the researcher immediately recorded first impressions of the interview and of the interviewee as field notes to keep the interview experience fresh when the data were revisited later. Interviews were audio-recorded to capture the qualitative data as it

was generated and then transcribed to provide a written representation of participants' experiences of ARC harm. The interview recordings were transcribed by a third party, to minimise researcher bias, since transcription is not a neutral process.

The researcher corrected the transcripts for accuracy whilst listening to the recordings and edited out any persons or places named to preserve anonymity. Further notes of items of interest were made at this time and each recording was listened to twice more before it was loaded into Nvivo (2012) for coding and categorisation. Transcripts were read and re-read to be familiar with the detail and the researcher made further notes and observations as '*analytic memos*' (Saldaña, 2012) at each reading to supplement the transcript information. In this way, the researcher used this initial stage of TA to engage with the details of the interviews, and the listening and transcript-correcting procedures began the process of identifying patterns in the data as a precursor to the formal coding and analysis of the text:

"Immerse yourself in the details, trying to get a sense of the interview as a whole before breaking it into parts" (Agar, 1980, quoted in Creswell, 2012, p. 103).

Generating codes

The qualitative data generated by the in-depth interviews were organised into manageable units to examine and analyse the new information collected. Nvivo (2012) software was used for this in the light of its superior computing power over manual methods for organising and coding large quantities of qualitative data. Informed by Creswell (2012), the researcher began coding with a short list of categories and began to expand them. The eight categories of ARC harm identified inductively in the Phase I survey analysis were used for this. These categories from the Phase I taxonomy were therefore the first codes entered tentatively into Nvivo and they formed the basis of the first coding of the Phase II transcript data. To this extent, the approach

to the coding of the Phase II transcript data began deductively, since the researcher approached the interview transcripts with a predetermined agenda, albeit an agenda developed inductively in Phase I. Thereafter, data from the interview transcripts were used to adjust and supplement this tentative baseline inductively and to modify the categories continuously and cyclically.

Throughout, the analytical focus of the coding was on the content of what was said by the interview participants, and the interpretation of meanings was in terms of generic themes for the entire interview dataset. The coding process did not seek to derive any meanings around ARC harm for the individual participants as a series of case studies. Therefore, individual interview transcripts were not examined in isolation. For the same reason, neither did the coding process seek meanings from the finer details of how things were said by the participants, as in Interpretative Phenomenological Analysis (Smith et al., 2009).

Searching for themes

The coded data were interpreted and corralled into meaningful groups in readiness for identifying potential themes for the entire dataset of interview transcripts. To facilitate searching for themes, the systematic coding of each interview transcript had been undertaken with the aims of the research and the Phase I findings in mind. However, despite this epistemological position, the researcher sought to avoid imposing an exclusive regimen on the new data. Accordingly, new codes were created inductively from the interview data, allowing the coding process to generate findings from which themes might emerge. Codes were also modified and regrouped as the Phase II dataset grew, with shifts in emphasis and realignment as the analyses progressed. In this way, and in accordance with Braun and Clarke (2013), the combined analytical processes used to search for themes employed both ‘top down’ and ‘bottom up’ approaches.

Defining and naming themes

A detailed analysis was developed for each potential theme and sub-theme identified to explain and refine its meaning. Each theme was given a preliminary working title and the contribution it made to meeting the objectives of the study was clarified as the analyses progressed. Semantic themes and sub-themes were identified, named and defined first to describe and characterise ARC harm. A hierarchy for these was then developed. (See Appendix 6.i, *Phase II Semantic themes and codes characterising ARC harm*). Also, as suggested by Huberman and Miles (1994) and as an adjunct to the thematic analysis, the frequency with which data items were allocated to each code in the interview database was ascertained for the final set of confirmed codes. This provided further categorical data, and a numerical hierarchy was thus determined for the impact of ARC harm on these young adults.

The analytic narratives suggested by the data, and grounded in it, were then written up and superordinate themes were identified. Each superordinate theme was defined to tie it into the developing narrative of the study and into the aims of the research. Verbatim quotations from participants were used as illustrative data extracts to add depth to the themes expounded. (See for example Appendices 8.1 and 8.2, *Themes for environmental risk factors for ARC harm*).

These analyses and the defining and naming of the themes from the interview dataset embraced the underpinning theoretical constructs invoked in the study. Further to this, the analytic design encompassed the examination of the study findings in the light of the historical, philosophical, theoretical and public health background to the study. This included exploring how the themes arising from TA resonated with public health theory (e.g. Rose, 1992) with relevant models of family coping mechanisms (e.g. Orford, 2001; Orford et al., 2010; Velleman and Orford, 1999)

and with relevant ecological models of human development (e.g. Bronfenbrenner, 1974; 1979; 2005).

Reviewing themes

Once the interviews and the coding and initial analysis were complete, the categories and tentative themes derived from the transcript data were reviewed. Where an extract conformed to an identified code or parent code, its position was confirmed as part of a final representation of the entire dataset, otherwise it was reassigned to another existing code, or to a new code to capture its meaning, or discarded. The dataset was thus reviewed and refined reflexively to achieve a satisfactory thematic set through a process of ‘winnowing’ (Creswell, 2012).

All the data extracts collated and coded together were re-examined and vetted for coherence, and visual representations, in tables and diagrams, were used to assist in mapping the data and the themes that emerged. (See, for example, Figure 6.1, *First order coding for the ARC harm of Nuisance* or Figure 11.1, *The iceberg as a metaphor for the phenomenon of ARC harm*).

To mitigate the potential for researcher bias in Phase II, and to ensure that claims made and conclusions drawn were founded in and supported by the data collected, the researcher’s supervisors coded a sample of transcribed data independently. The accuracy, consistency and replicability of the coding and categorisation processes employed were thus confirmed. This in turn reduced the potential for interpretative bias in the thematic analysis and in the themes that emerged and were written up. Nevertheless, it was not assumed that the researcher’s analyses would necessarily be replicable. As Patton observed, “...because each qualitative study is unique, the analytical approach used will be unique” (Patton, 2002, p. 433).

The final themes determined aimed to represent the essential story within the entire Phase II dataset of ARC harm experiences in the lives of the young adult participants. Later chapters set out themes for factors identified as relevant to young adults' experiences of ARC harm. These encompass: the relevant family and social environments; settings and contexts where ARC harm occurred; the range of risk factors that increased the likelihood of an ARC harm experience; the possible underlying psychology of the perpetrators and victims of ARC harm; how young adults coped with their ARC harm experiences and why ARC harms remain unseen.

3.11 ETHICAL PROCEDURES AND CONSIDERATIONS

Ethical approval was obtained separately for the two phases of the study from the University Research Ethics Committee (UREC) of Oxford Brookes University. Approval for Phase I was obtained on 13 September 2013, UREC Ref No: 130743. Approval for Phase II was obtained on 19 March 2014, UREC Ref No 140793. (See Appendices 3.6 and 3.7 respectively). In obtaining approval, the NHS Health Research Authority (2013) online guidance for researchers and ethics committees on consent was noted. This sets out guidance and information on: the ethical and legal principles of consent; how these principles relate to preparation and use of a *Participant Information Sheet* (PIS) and consent form; recommended content of a PIS and consent form and the design and style of an effective PIS and consent form.

Participation in the study was voluntary, although both phases of the study incentivised participation by offering the chance to win a £50 Amazon voucher and all interview participants received £10 to compensate them for their time and any expenses. Participant Information Sheets prepared for both phases of the study assured students that they were under no obligation to participate, and participants were assured that taking part would have no

bearing on their study grades. (See Appendices 3.2, *Phase I: Participant Information Sheet* and 3.4, *Phase II: Participant Information Sheet*). Any potential questions or concerns that might arise from participation were addressed by providing details of relevant sources of further information, support or pastoral care.

Participants' informed written consent for Phase I was obtained when participants took part in the on-line survey. Phase II participants signed written consent forms prior to each interview, which included permission to use anonymised verbatim quotes from their interviews to illustrate any published findings. (See Appendix 3.5, *Phase II: Participant Consent Form - Semi-Structured Interviews*). Participants were assured of confidentiality and that information provided in survey responses and recorded during interviews would be de-identified and kept securely. Accordingly, all the data collected were secured in password-protected computer files and designated locked cabinets for paperwork. Participants were also assured that once analysis was complete, all the study data would be anonymised before being retained in accordance with the University Policy on Academic Integrity. Survey participants were asked to indicate their willingness to be contacted again after the survey by giving an email address. Data derived from participants who provided this were therefore deidentified, but not anonymised until completion of the Phase II interviews. Recordings of interview data were deidentified before being transcribed. Completed transcriptions were allocated a fictional, gender-correct name and anonymised.

Specific ethical issues considered in undertaking the study arose from the legal limitations to confidentiality that exist for 16 and 17-year olds. These issues came to the fore in Phase II where personal contact between the researcher and the participants was anticipated. Children's rights to protection from violence, abuse and exploitation are laid down in international and

domestic law in the *Children Act* (2004). The protection conferred by this legislation extends to the age of 17, and thus into the 16-24 target age group of the study, since young adults aged 16 and 17 are also defined as ‘children’ in the safeguarding context. The potential thus existed for the disclosure of activities relevant to the safeguarding of children to arise in an interview.

Children may experience harm caused by parents’ drinking, so a 16 or 17-year-old participant might volunteer information about such ARC harms to themselves in an interview. Therefore, UREC advised that the participant information should explain that action would be taken in the event of such a disclosure by a participant aged 16 or 17, i.e. referral to child protection mechanisms. Accordingly, the Phase II participant information sheet stated that child protection mechanisms would be observed for participants aged 16 and 17 to alert the relevant prospective young adults to this before they agreed to participate in an interview. In setting this condition, UREC noted the importance for the study to be aware of such harms in this age group and that it might reduce the likelihood of such disclosures or deter potential participants from accepting an interview invitation.

There were also considerations around the potential for disclosing illegal activities. Young adults aged 16 or 17 may practice illegal activities, such as purchasing alcohol or drink-driving and participants might volunteer information about these activities. This was deemed unlikely, but the researcher undertook to ask no direct questions that might invite such disclosures from any participants aged under 18. The researcher also pledged to disclose any such information volunteered, insofar as the law required, that is if formally required to do so by a Court Order. (In the event, no 16 or 17-year old young adults agreed to participate in Phase II of the study).

CHAPTER 4: THE STUDY SAMPLES

DEMOGRAPHIC PROFILES OF THE PARTICIPANTS

Summary of chapter

This chapter describes the samples of young adult students who participated in Phases I and II of the study. For Phase I, demographic characteristics are set out for the participants using information reported in the survey responses. The profiles include the participants' age, gender, domicile, stage of study, aspects of their health and the country where they lived immediately prior to starting their current course of study. Participant profiles are also presented for the four key public health areas of alcohol, smoking, diet and exercise. Relevant findings are benchmarked against national data collections and health behaviours are noted for participants' family and friends. For Phase II, profiles are presented for the subset of Phase I participants who later comprised the purposive sample for the semi-structured interviews.

4.1 Introduction

As described in Chapter 3, the Phase I survey asked participants to provide information about themselves, their friends and families and their experiences. Specific lifestyle questions on alcohol and alcohol-related behaviours established the context in which ARC harm occurred for the participants. These focused on behaviours around alcohol consumption, the influence of other people, knowledge of public health advice on alcohol and attitudes to it. The three other key public health lifestyle risk areas of smoking, diet and exercise considered alongside alcohol established the wider health context in which ARC harm occurred for the participants. Including these key lifestyle factors alongside alcohol also facilitated comparisons between participants' healthy and unhealthy behaviours around alcohol with those for smoking, diet and

exercise insofar as these were relevant to the findings on ARC harm. The health profiles obtained were also used to examine whether experiences of ARC harm differed between participants who led an otherwise healthy lifestyle and those who did not.

In addition to providing an overall health profile for the study participants, the public health context facilitated the benchmarking of relevant findings against analogous routine national data collections for the 16-24-year old, 'young adult' age group, such as those by the Office for National Statistics or the Health and Social Care Information Centre (now NHS Digital). Comparisons with these provided a broad indication of the potential representativeness of the study sample when compared with contemporaneous national data for young adult drinking habits (HSCIC, 2014b) smoking habits (ONS, 2014) or levels of obesity and physical activity (HSCIC, 2014a). However, no small study methods can replicate those employed in the generation of such national data reports. So, whilst examining the national and study data in parallel is helpful in determining the relative health profile and representativeness of the study sample, the respective national and study datasets cannot be said to be directly comparable. The relevant detailed data and full descriptive analyses are tabulated in Appendices 4.1 to 4.5.

The Phase 1 sample comprised the 450 university and college students who returned adequately completed questionnaires in response to the on-line survey. The gross number of survey returns received was 607. Some were eliminated as they were from students aged over 24 who did not satisfy the inclusion criteria. Others were removed from the sample as the responses to the survey questionnaire were incomplete and a clean dataset was sought for better data integrity. The researcher also sought to avoid errors that measures used to compensate for missing data can introduce. The remaining 450 returns represented a sufficiently large sample to generate statistically accurate findings.

DEMOGRAPHIC PROFILE OF THE PHASE I SAMPLE

4.2 Age, gender, college and university

The Phase I study sample was an opportunity sample of young adult students recruited from one university population and two sixth-form college populations in central Southern England, derived as set out in Chapter 3. The baseline demographic of the sample was determined by the inclusion criteria for the study: being a student, aged 16-24, either studying for A-levels at school or college or engaged in a course of undergraduate or post-graduate study at university.

The sample was biased by gender, with 70% (316) of the 450 returns analysed from females and 30% (134) from males. The gender bias arose in the section of the sample who were in tertiary education, with a much lower response from males at university (college students: male 72, female 60; university students: male 62, female 256).

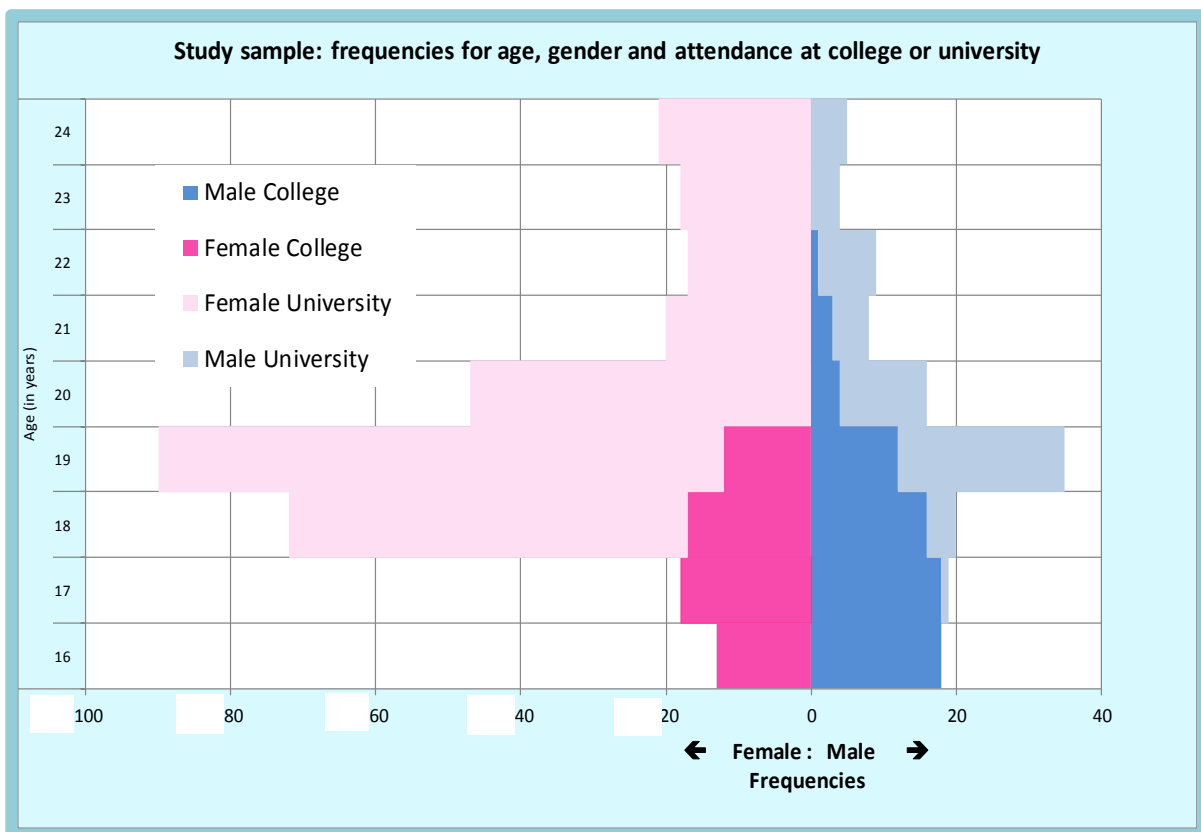


Figure 4.1 Phase I study sample by age, gender and attendance at college or university

All the target population ages from 16 to 24 were represented in the sample, with much higher percentages between 18 and 20. (See Figure 4.1). This 18-20 age group represented some 62% of the sample, with the age of 19 being the most represented at 27.8% of the sample. In part, this bias reflects the overlap in the 18-20 age group for college and university students. It is also likely to reflect the recruitment focus at the university which targeted first year students. Overall, the number of college participants was lower, at 29% with 71% at university. This is likely to reflect the smaller pool of potential participants at the participating colleges.

4.3 Self-assessed health

Participants were asked to assess their own health and wellbeing by choosing from five options: ‘excellent’, ‘very good’, ‘good’, ‘fair’ and ‘poor’. (See Figure 4.2 below).

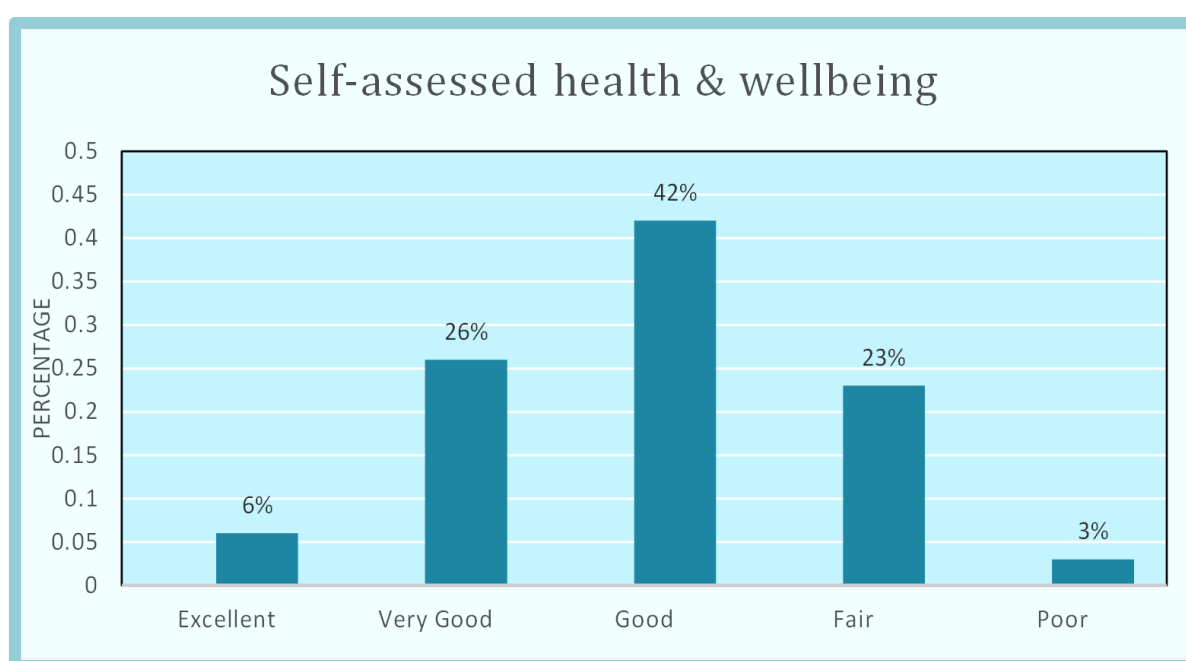


Figure 4.2 Phase I study sample: Self-assessed health and wellbeing

Participants’ estimation of their own health indicated less good health for the study sample than the national level for all 16-24-year-olds. The national data on self-assessed health at the time of the survey dated from the most recent census. These national data showed very high levels

of good health reported by the 16-24-year-old population group, with 95% of males and 94% of females reporting their health as ‘good’ or better (ONS, 2013a). In the study sample, just 78% of males and 72% of females reported that their health was ‘good’ or better, with 28% of female participants reporting ‘fair’ or ‘poor’ health. (See Appendix 4.1, Phase I: *Demographic profiles of participant sample* for the detailed data and descriptive analyses for the participants’ gender, age, stage of study and self-assessed health).

4.4 Body Mass Index (BMI)

The mean BMI status for the study sample was 22.38 (22.47 for female students, 22.17 for male students) based on participants’ self-reported information of their weight and height. These mean BMIs were within the healthy range, albeit in the upper half of that range. Overall, 70% of the Phase I participants were within the normal, healthy range of BMI 18.5-<25. Some participants’ returns put them in the unhealthy ranges of underweight, overweight or obese, but no participant was in the most-unhealthy, morbidly obese, category. (See Table 4.1 below).

BMI status	Underweight < 18.5	Healthy 18.5 - <25	Overweight 25 to <30	Obese 30 -<40	Morbidly obese 40+	Total
Female	8%	72%	14%	6%	0%	100%
Male	16%	64%	16%	4%	0%	100%
All	11%	70%	14%	5%	0%	100%

Table 4.1. Phase I: Study participants’ BMI status by gender

Nationally, overweight and obesity as determined by reference to BMI are lowest in the 16-24 age group of the population (HSCIC, 2014a). Yet the national percentages of overweight and obesity for the 16-24 age group were higher for both genders than those of the study sample. The national figures by gender for overweight and obesity in adults aged 16-24 compared unfavourably with the study sample percentages shown in Table 4.1. (Males: overweight 20.1%; obese 8.5%. Females: overweight 23.9 %; obese 10.8% (HSCIC, 2014d)).

The 70% of participants with a healthy BMI status was higher than the national figure of 59.4% (HSCIC, 2014a) in the healthy BMI range for young adults in the national 16-24-year old population group. (See Table 4.2 below).

BMI status	Underweight < 18.5	Healthy 18.5- <25	Overweight 25 to <30	Obese 30 -<40	Morbidly obese 40+	Total
National data 16-24	7.5%	59.4%	22%	9.7%	1.4%	100%
Study data 16-24	11%	70%	14%	5%	0%	100%

Table 4.2. Phase I: National data and study data BMI status comparison

Mean BMIs for the different age groups in the study showed an association between increasing age and increasing BMI, from BMI 20.98 at age 16 to BMI 24.32 at age 24. This trend emerged for both genders, with males showing the greater increase between the ages of 16 and 24. The mean BMI for females rose from 21.44 at age 16 to 24.23 at age 24, and for males from 20.66 at 16 to 24.83 at age 24. (See Table 4.3 below).

Age	16	17	18	19	20	21	22	23	24
Female	21.44	20.15	21.91	22.65	22.48	22.42	22.96	24.04	24.23
Male	20.66	19.71	22.25	21.96	22.85	23.08	25.00	28.02	24.83
All	20.98	19.91	21.99	22.46	22.58	22.61	23.69	24.76	24.32

Table 4.3. Phase I: Participants' mean BMIs by age and gender

There was a strong correlation, $R = +0.93$ ($R^2 = 0.8652$), between increasing age and increasing BMI in the sample, indicating that age was predictive of BMI in the range of ages sampled.

As seen in Figure 4.3 overleaf, the BMIs for both male and female participants showed a rising trend as age increased from sixteen. The average BMI was only just below the threshold for overweight (BMI 25) by age 24. The rising trend line for the mean BMIs in the sample indicates that, if projected, the average BMI for both genders together would be 25.2 the following year, at age 25, and thus into the overweight category.

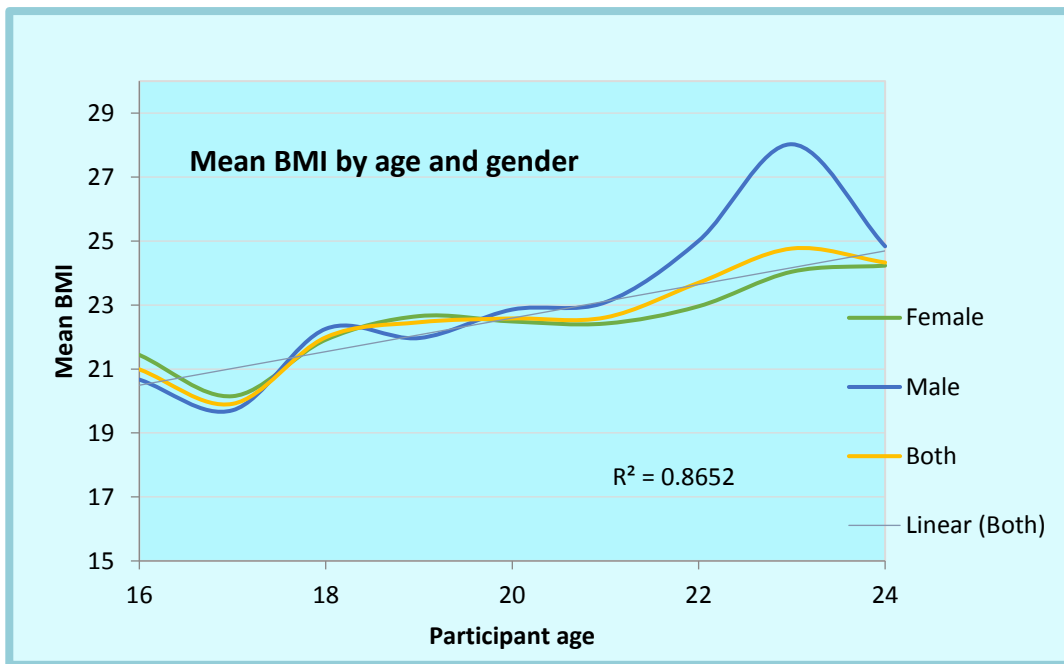


Figure 4.3 Phase I study sample: Correlation between increasing age and mean BMI

As BMIs are an accepted indication of health, these findings suggest that, based on the participants' BMIs, the study sample may be healthier than the national average for the 16-24 age group of the population. This contrasts with the participants' estimation of their own health status, which was much lower than the national mean. The rising trend line for the participants' mean BMIs also suggests a direction of travel towards a less healthy status for the study sample.

4.5 Domicile

Four types of living accommodation were recorded for the study sample: living with parents or family, hall of residence, other rented, and owned or mortgaged accommodation. Almost all (97%) of the college students lived with parents or family and 15% of university students also lived in the parental or family home. The majority of university students (53%) lived in halls of residence with a further 31% living in other rented accommodation. (See Table 4.4 overleaf).

Type of accommodation during course of study	College		University		Both	
With parents or family	128	97%	46	15%	174	39%
Hall of residence	1	1%	168	53%	169	38%
Other rented	3	2%	100	31%	103	23%
Own home or mortgaged	0	0%	4	1%	4	1%
	132	100%	318	100%	450	100%

Table 4.4 Participants' type of accommodation during their course of study

4.6 Country of origin

To obtain an indication of the international mix in the sample, participants were asked to name their country of residence immediately prior to starting their course of study. Participants' responses to a choice of worldwide countries were collated into three categories: United Kingdom, other Europe and outside Europe. To estimate how representative the sample was of the university, the university students' responses were compared with university data on the 2012/13 intake of students aged 24 or younger. The study sample profile for university students was: UK 84%, other Europe 10%, outside Europe 6%. This was very similar to the profile of the university's intake in 2012/13: UK 83%, other Europe 8%, outside Europe 9%. (See Table 4.5 below).

Country of origin	University student intake 2012/13 (aged 24 or younger)		Study sample of students at University (aged 24 or younger)	
	Frequency	Percentage	Frequency	Percentage
United Kingdom	1919	83%	267	84%
Other Europe	196	8%	33	10%
Outside Europe	212	9%	18	6%
Total	2327	100%	318	100%
University Intake and Phase I university sample comparison $\chi^2 = 5.140$, $df = 2$, $p = 0.0765$				

Table 4.5 Country of origin for study participants and university intake 2012/13

The small differences between the university intake and the Phase I university sample were not significant at 95%, so it is reasonable to assume that the study's participant sample was representative of the university intake in terms of its national and international mix. A similar comparison was not attempted for the college students in the sample, as just four of the 132 college participants were not from the UK (two 'other Europe' and two 'outside Europe').

PROFILES OF THE SAMPLE BY LIFESTYLE RISK FACTORS

4.7 ALCOHOL

Alcohol: Compliance with public health guidance

Alcohol consumption featured strongly as a behaviour reported by the young adult participants. Eighty-five percent of participants reported that they drank alcohol, against the national benchmark of at the time of 73% for young adults (ONS, 2015b). Seventy-nine percent stated that alcohol played a role in their lives and 51% said they did not always keep within the guidelines and sometimes got drunk. The mean numbers of units of alcohol participants reported consuming the week before taking the survey were: male 7.8 units and female 9.1 units. In comparison, national self-reported data (HSCIC, 2014d) gave mean weekly units as: male 15.3 and female 9.1 in the young adult 16-24 age group. (See Table 4.6 below).

	Male (units per week)	Female (units per week)	Percentage drinkers
National data 16-24	15.3	9.1	73%
Study data 16-24	7.8	9.1	85%

Table 4.6 Phase I: National data and study data, mean alcohol consumption / percentage of drinkers

This suggests that, overall, female participants consumption matched the national mean and male participants were drinking less than the mean, well within the guidelines at the time (DH,

2012). The comparatively low mean for male participants is probably a function of the gender skew in the sample, as more than half (54%) of the male participants (72 of 134) were at college and likely to be under the legal age for purchasing alcohol. Both the male and female means were lower for the college students (college: male 7.0, female 6.1, university: male 8.8, female 9.8). Again, this is most likely to be a function of age. It also suggests that females at university in the sample were drinking slightly above the national mean. This is consonant with other studies that report female university students having comparatively high levels of alcohol consumption (e.g. Young et al., 2005; Bartoli et al., 2014).

Alcohol: The influence of others

Eighty-nine percent of participants reported that they had close family members who drank alcohol and 25% reported that they had close family members who drank every day. Ninety-four percent of participants had close friends who drank alcohol. The majority of participants (60%) reported that the drinking habits of family or friends affected their own. There was a marked female bias in those reporting the influence on their drinking habits by other people, with many more young women (64%) reporting that others influenced them than young men (49%).

Eighty-seven percent of participants stated that children were more likely to drink if their parents drank. Eighty-eight percent of participants stated that parents' drinking put their children at risk and 91% stated that it was not acceptable for a woman to drink when she was pregnant. While high, these two last percentages were lower than those for the equivalent questions on smoking.

Alcohol: Knowledge and opinions of public health guidance

Knowledge of alcohol-related harms caused by other peoples' drinking was high at 83%, although knowledge of passive smoking was higher at 91%. Nevertheless, this was a high level of recognition for ARC harm, given the disparity in harm prevention policy between smoking and alcohol. Some of this knowledge of harms from others drinking had arisen from personal experience, since the majority of participants reported that other people's drinking had put their health or safety at risk or affected them adversely in some other way. (See Chapter 5).

Only just under half (48%) of participants correctly identified the UK CMOs' guidelines on the number of units for lower-risk consumption of alcohol from six options on a Likert scale. Despite this, participants were strongly supportive of these guidelines for lower risk consumption. Eighty-one percent of the participants agreed that people should aim to keep within the guidelines always or most of the time. There was negligible evidence of any concern about the 'nanny state' among the participants, with just 2% agreeing with the statement that the guidelines were 'an unwarranted intrusion on peoples' freedom to choose'.

To test participants' understanding of alcohol units, they were asked to estimate the number of units in standard servings of popular alcoholic drinks. The national comparator used (HSCIC, 2014d) for mean weekly alcohol consumption is based on declared consumption of standard servings of popular drinks from which the HSCIC calculates the number of units. A comparable calculation was used in the study for the units of alcohol in standard servings of popular drinks to test for knowledge of units. (The HSCIC does not test for knowledge of units). This calculation indicated that 62% of participants underestimated the number of units in the drinks, no participants overestimated the number of units and the mean estimate was 75% of the actual number of units ($N = 450$, mean = 75%, sd = 22%). Given this underestimate, and

since alcohol-related harm to the drinker is linked to the quantity of alcohol consumed (DH, 2016a), participants' exposure to harm from their own drinking was greater than they realised, whatever the true amount of alcohol they consumed.

Participants' self-reported numbers of units of alcohol consumed were subsequently adjusted in line with their knowledge of the amount of alcohol in a unit. The adjustments based on this underestimate yielded the mean numbers of units of alcohol consumed by the study sample in the previous week as: male 11.6 units and female 13.6 units. The mean values of participants' estimates for a single unit of alcohol are shown below in Figure 4.4.

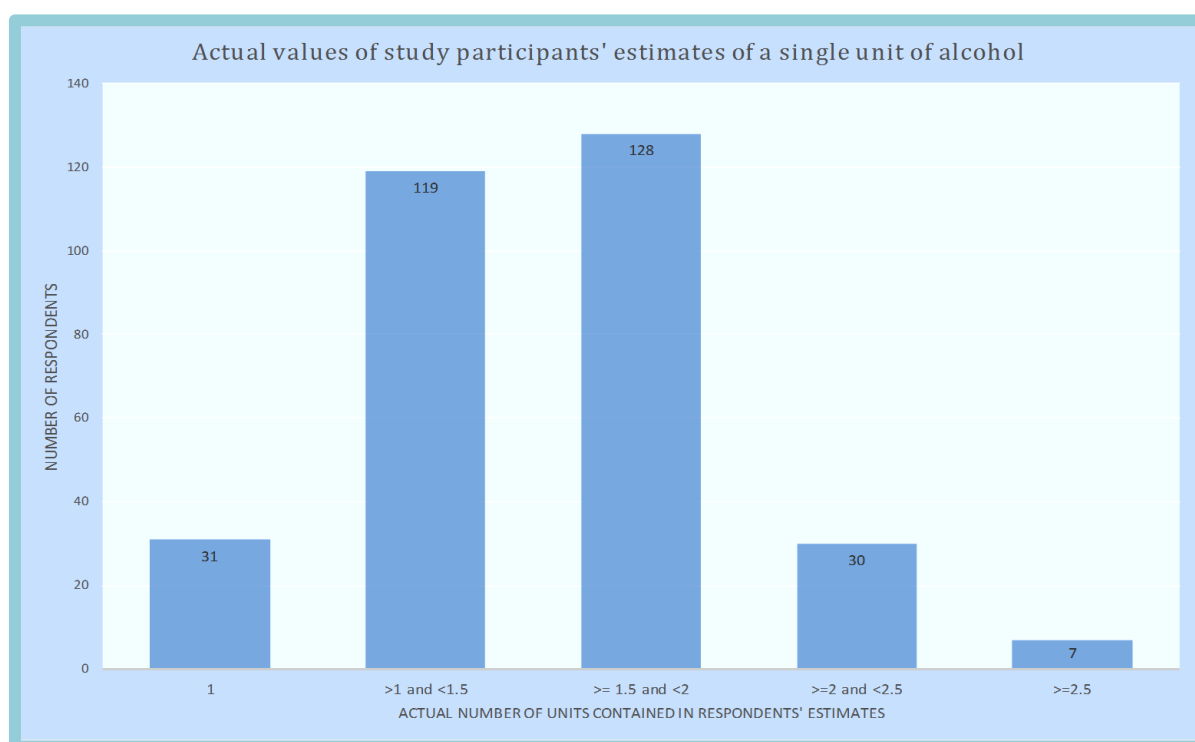


Figure 4.4 Phase I: Actual values of participants' estimates for a single unit of alcohol

This adjustment suggested that, overall, females in the sample were likely to be drinking well above the national mean. Nevertheless, unit consumption for both genders fell within the UK CMOs' daily guidelines for lower-risk limits, which were then 2-3 units or fewer for females

and 3-4 units or fewer for males (DH, 2012). They are also just within the UK CMOs' updated guidelines (DH, 2016c).

Alcohol: Summary of health profile

Eighty five percent of the survey participants reported that they drank alcohol, against the national benchmark at the time of 73% (ONS, 2015b) for young adults. Fifty-nine percent stated that they did not always keep to the guidelines and sometimes got drunk, and the female participants appeared to be drinking well above the national mean. Alcohol consumption was thus likely to be impacting on the health of the study sample. Nevertheless, their self-reported levels of consumption, even after adjustment, fell within the recommended levels for lower risk. Given this mixed picture, the lifestyle of the study sample could not be said to be healthier or unhealthier for alcohol use than the national young adult population group. (See Appendix 4.2, *Phase I: Participants' alcohol profile*, for the detailed data and descriptive analyses).

4.8 SMOKING

Smoking: Compliance with public health guidance (not to smoke)

When asked whether they smoked tobacco either regularly or occasionally, 24% of participants reported that they did (male 19%, female 26%). Benchmarking these figures against national data, shows some disparity between the study figures and those reported nationally for the 16-24, young adult population group. The national figure for young adults overall was 23%, with men at 26% and women at 20% (ONS, 2014). A higher proportion of the college participants reported that they smoked (29%) than the university participants (22%).

These findings contrast with national data that showed smoking prevalence as highest in the 20-24 age group at 28%, and lower for the 16-19 age group at 18% (HSCIC, 2013), although

the ages of the college and university participants are not a precise fit for these national age groups. The headline percentage of 24% of participants who were smokers is also misleading because ‘occasional’ smokers featured strongly in the study sample. When the smokers were asked if they smoked every day, less than half reported that they did and nearly a fifth said they had not had a cigarette in the last week.

The mean number of cigarettes participants smoked was low, with 31% reporting that they usually smoked three or fewer cigarettes in a week and 40% reporting seven or fewer (i.e. one a day or fewer). When asked how many cigarettes they smoked per day *in the last week*, 61% reported smoking just three or fewer per day in that week, 90% reported smoking fewer than 10 and 99% reported fewer than twenty. National data for 16-24-year olds in 2013 showed just 8% of smokers smoking fewer than ten cigarettes per day and 9% smoking fewer than twenty per day (HSCIC, 2014b).

Cigarettes smoked	Male (number per day)	Female (number per day)	All
National data 16-24	13.7	12.2	12.7
Study data 16-24	4.8	2.2	2.8

Table 4.7 National data and study data, mean numbers of cigarettes smoked per day

As seen in Table 4.7, the mean number of cigarettes smoked per day by smokers in the study sample was low at 2.8 per day. This compared favourably with the national mean for smokers of 12.7 cigarettes per day (HSCIC, 2013). The pattern for smoking low numbers of cigarettes was more pronounced for female participants, of whom 46% reported usually smoking no more than one cigarette per day and 68% had smoked three cigarettes or fewer in the last week.

Smoking: The influence of others

As seen in Table 4.8 below, the majority (62%) of the Phase I participants had close friends who smoked and 29% had close family who smoked.

		Do you smoke tobacco at all currently? (Regularly or occasionally)					
		Yes	%	No	%	Total	%
Whether you smoke or not: Do your close friends smoke at all?	Yes	101	93%	180	53%	281	62%
	No	8	7%	161	47%	169	38%
$\chi^2 = 56$, df = 1, p <0.001	Total	109	100%	341	100%	450	100%
Whether you smoke or not: Do your close family members smoke at all?	Yes	41	38%	90	26%	131	29%
	No	68	62%	251	74%	319	71%
$\chi^2 = 5.04$, df = 1, p = 0.025	Total	109	100%	341	100%	450	100%
Whether you smoke or not: Do the smoking habits of anyone else affect your decision to smoke (e.g. friends or family)?	Yes	80	73%	175	51%	255	57%
	No	29	27%	166	49%	195	43%
$\chi^2=16.39$, df=1, p <0.001	Total	109	100%	341	100%	450	100%

Table 4.8 Phase I: Associations with other peoples' smoking habits

For the smokers in the sample, these percentages were significantly higher, particularly when friends smoked, with 93% of participants who smoked having close friends who smoked and 38% having close family members who smoked. More than half of all participants (57%) reported that the smoking habits of others, such as friends or family affected their decision to smoke or not smoke ($\chi^2=16.39$, df=1, p <0.001). Other effects, like advertising or health warnings on packets, were less influential, with 44% of participants saying that these influenced their decision ($\chi^2=6.49$, df=1, p=0.011).

Smoking: Knowledge and opinions of public health guidance

The majority of participants overestimated the percentage of smokers in England, with more than half (57%) believing that the percentage was higher. Just a quarter correctly stated that 20% of adults overall smoked in England (ONS, 2014). A very high proportion of participants

(91%) had heard of smoking-related harms caused by other people's second-hand smoke (passive smoking) although fewer (84%) of the college participants were aware of it. Sixty percent of participants reported that passive smoking had put their own health at risk. Almost all (99%) said it was not acceptable for a woman to smoke if she were pregnant, with many participants citing harm to the foetus. 88% stated that children were more likely to smoke if their parents smoked and 95% stated that parents' second-hand smoke put their children at risk.

Smoking: Summary of health profile

Overall, the percentage of the study participants who smoked was above the national mean. However, the participants smoked relatively few cigarettes when compared to national data. It was not clear from the findings whether the study sample exhibited healthier or unhealthier smoking behaviours than the national population group of 16-24-year-olds. (See Appendix 4.3, *Phase I: Participants' smoking profile*, for the detailed data and descriptive analyses). More participants were aware of passive smoking than of harms from other peoples' drinking and more were aware of harms to children from parents' smoking than from parents' drinking.

4.9 DIET (fruit and vegetable consumption)

Diet: Compliance with public health guidance

Almost all participants (97%) reported eating some fruit and vegetables regularly or occasionally. This dropped to 85% when asked if they ate fruit and vegetables every day, and to 77% for male participants. Fewer college participants (79%) reported eating fruit and vegetables every day, with 6% of them reporting that they ate no fruit or vegetables. When asked how many portions of fruit and vegetables they had eaten per day in the last week, 99% of participants reported eating at least one portion of fruit and vegetables per day and more

than a quarter reported eating three portions per day. Figure 4.5, *Phase I study sample: Fruit and vegetable consumption*, shows a detailed picture of the number of portions consumed.

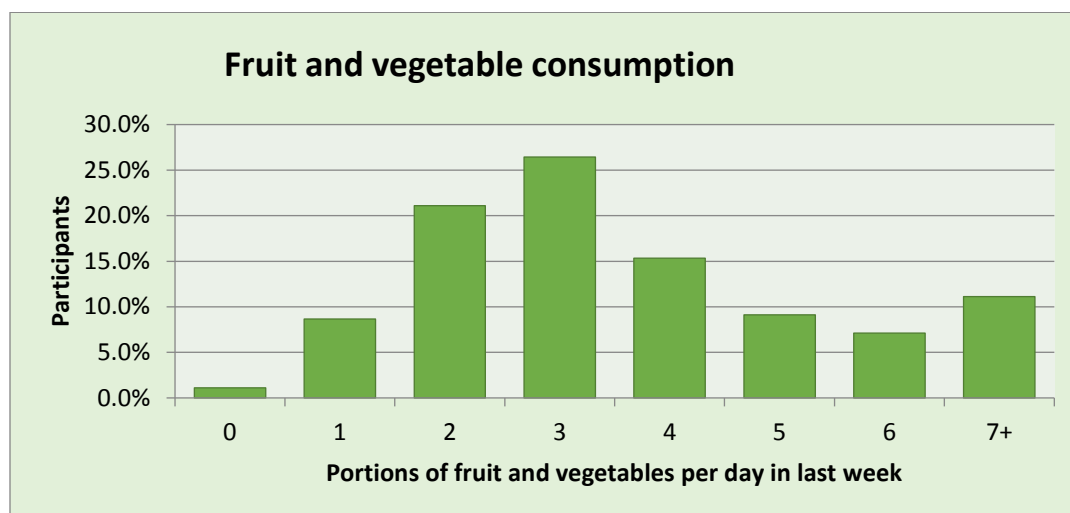


Figure 4.5 Phase I study sample: Fruit and vegetable consumption

In describing the extent to which they adhered to the guidance on eating fruit and vegetables (DH, 2011c), 34% of participants reported trying or succeeding to include five portions per day in their diet. A further 53% reported eating a good balanced diet with fruit and vegetables, although they didn't think of five a day. However, 14% reported eating "some but not many" fruit and vegetables or none at all, and only just over a quarter (27%) had achieved or exceeded the five-a-day target. The mean number of portions eaten by the remainder of the sample was just 2.6 per day, barely above half the target amount. Nevertheless, mean consumption for the study sample was higher than the national mean for the 16-24 population group. Nationally, just 18% (17% of men and 19% of women) in this age group meet or exceed the five-a-day target (HSCIC, 2014d). (See Table 4.9).

	Male (five-a-day)	Female (five-a-day)	All
National data 16-24	17%	19%	18%
Study data 16-24	27%	27%	27%

Table 4.9 National data and study data for meeting the five-a-day target

Participants reported a pattern of fruit and vegetable consumption similar to their own for their close family, with 99% eating some regularly or occasionally and 87% eating some every day. The pattern reported for close friends differed in that a much smaller percentage (65%) stated that friends ate fruit and vegetables every day, far less than participants reported for themselves.

Diet: The influence of others

The majority of participants (71%) reported that the dietary habits of family or friends affected their own. There was a strong female bias, with more young women (78%) reporting that others influenced them than young men (54%). College participants' views were evenly divided between the genders. Thus, male participants and sixth-form participants were more likely to think that others did not influence their own dietary habits.

Diet: Knowledge and opinions of public health guidance

Participants' knowledge of the extent of overweight and obesity was poor. Just a quarter of the sample correctly selected 25% (24.8%, HSCIC, 2012) from a six option Likert scale as the percentage of the population in England who were obese at the time of the survey. Almost half (48%) underestimated the extent of obesity. Participants' knowledge of the combined proportion of overweight and obese people in the population was very poor, with just 17% selecting the correct proportion of 60% (61.7%, HSCIC, 2012). The remainder underestimated, with 57% opting for 40% of the population or fewer. Participants strongly supported the public health advice to eat five portions of fruit and vegetables per day, with 85% of participants agreeing that it was advice people should follow always or most of the time. Just 2% agreed with the statement that it was 'an unwarranted intrusion on peoples' freedom to choose'.

Diet: Summary of health profile

Almost three-quarters of the participants were not achieving the five-a-day target and the mean amount of fruit and vegetables consumed by those not eating five-a-day was barely above half the target amount. Nevertheless, the advice on fruit and vegetable consumption (DH, 2011c) was well supported with just 2% agreeing with the statement that it was ‘an unwarranted intrusion on peoples’ freedom to choose’. Nationally, only 18% in the young adult population group met or exceeded the five-a-day target (HSCIC, 2014a). That being so, the reported dietary habits of the Phase I sample point to a healthier lifestyle than the national average for young adults in terms of fruit and vegetable consumption. (See Appendix 4.4, *Phase I: Participants’ diet profile*, for the detailed data and descriptive analyses).

4.10 EXERCISE

Exercise: Compliance with public health guidance

Some 70% of the study participants said exercise played a role in their lives and 80% reported doing some exercise. However, this fell markedly when participants were asked if they exercised every day and 20% reported doing no exercise at all regularly or occasionally. Whilst 42% of male students reported doing some exercise every day, the figure for female student was just 22%. In describing the extent to which they adhered to the guidance to exercise for at least thirty minutes at least five times per week (DH, 2011b), 40% reported that they were succeeding or trying to do this. However, when asked on how many days in an average week they did 30 minutes or more of moderate intensity exercise, just 27% of the participants reported achieving this on five or more days. This suggests that almost three-quarters of the study sample were doing less than the recommended amount of exercise of 150 minutes per week.

A higher percentage of males (43%) than females (21%) met the target (See Figure 4.6, *Phase I study sample: Numbers Compliant with DH guidance on exercise*).

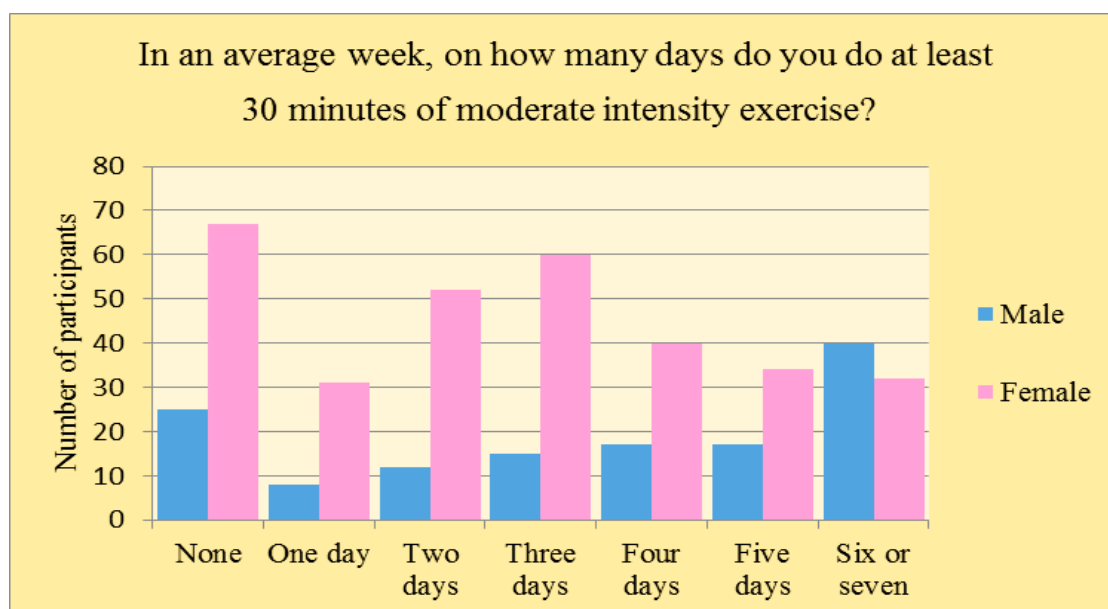


Figure 4.6 Phase I study sample: Numbers compliant with DH guidance on exercise

The national means for young adults meeting the target at the time of the survey were males 83% and females 57% (DH, 2011a) so neither the male nor female participants compared favourably with the national means. The most recent national data report that 75% of the 16-24 age group overall meet the 150-minute target (Sport England, 2017) although methods of calculating the activity levels have now altered considerably.

Exercise: The influence of others

The majority of participants (63%) reported that the exercise habits of family or friends affected their own. A smaller proportion (48%) reported that other influences such as advertising or televised sports, affected the amount of exercise they achieved. There was a female bias, with more young women (66%) reporting that others influenced them than young men (55%).

Exercise: Knowledge and opinions of public health guidance

Participants' knowledge of the public health recommendations on exercise was fair, with a third of participants identifying the correct amount from seven options on a Likert scale. However, almost half (47%) of the sample thought the target amount was less than this. Nevertheless, there was strong support for the recommendations on exercise, with 86% of the participants agreeing that it was advice people should follow always or most of the time.

Exercise: Summary of health profile

The data provided a very mixed profile of health as related to exercise for the study sample. While 20% of participants reported doing half an hour or less of moderate intensity exercise in the week before completing the survey, a different 20% of the sample reported doing 5 hours or more in that week. Some of the young adults in the sample were leading highly active lives while others, and a large proportion of the young women in particular, appeared to be almost entirely sedentary. The unfavourable comparison of the sample with the national data for young adults suggests that the participants' lifestyle was likely to be less healthy in terms of physical activity than that of the national young adult population group. (See Appendix 4.5, *Phase I: Participants' exercise profile*, for the detailed data and descriptive analyses).

4.11 PROFILE OF THE PHASE II PARTICIPANT SAMPLE

The Phase II study sample generated for the semi-structured interviews was a purposive subset of the Phase I participants. The sample was determined and recruited, as described in Chapter 3, to examine the participants' experiences of ARC harm and relevant alcohol-related behaviours in greater depth. The number of participants in the Phase II sample was determined using the criterion of saturation. The saturation sample was achieved when 25 interviews had

been completed and no further new codes for facets of ARC harm arose from the transcript data. At that point, a random sample of 128 of the 288 survey participants who had experienced ARC harm in Phase I had been invited for interview; a response rate of 20%.

The sample thus comprised 25 young adult students, of whom 7 were male and 18 were female. The sample was thus biased for gender in a similar proportion to the Phase I sample that comprised 30% male and 70% female participants. Twenty-three of the interviewees were drinkers and two were non-drinkers, proportionately fewer than the 15% of non-drinkers in the Phase I sample. Also, one non-drinker had previously been a drinker, but had been teetotal for some three months at the time of the interview.

All the Phase II interviewees were university students. The age range of the Phase II participants therefore differed from Phase I, as neither of the two youngest ages in the target age range were represented. This was because none of the college students who participated in Phase I agreed to take part in Phase II. Two female college students expressed an interest initially, but subsequently withdrew. The participants' ages represented in the Phase II sample thus ranged from 18 to 24, with no participants aged 16 or 17. This bias in the sample may reflect an ethical stipulation for Phase II which required the participant information sheets to inform prospective participants that child protection mechanisms would be observed for participants aged 16 and 17. This may have deterred younger students from participating in Phase II, as the mechanisms that secure child protection also erode participant confidentiality for young adults aged 16 and 17, for whom alcohol and under-age drinking are sensitive topics. The profile of the Phase II participant sample is shown overleaf at Table 4.10, *Phase II: Profile of the sample of interview participants*.

Interview identifier	Allocated name	Age	Gender	Drinker?	Healthy BMI?	Self-assessed health status	Proxy health status (See Chapter 3)
A	Annie	21	F	Yes	No	Very Good	A2
B	Betsy	23	F	Yes	No	Very Good	A2
C	Carl	21	M	Yes	Yes	Very Good	B1
D	Dan	22	M	No	Yes	Good	A1
E	Edward	22	M	Yes	Yes	Excellent	A1
F	Frank	23	M	Yes	No	Good	C2
G	Georgia	19	F	Yes	No	Good	B2
H	Helen	19	F	Yes	Yes	Fair	C1
I	Isabelle	24	F	Yes	No	Fair	C2
J	Jenna	19	F	Yes	Yes	Good	C1
K	Kristie	18	F	Yes	No	Good	C2
L	Lara	22	F	Yes	No	Fair	D2
M	Melinda	19	F	Yes	No	Fair	D2
N	Nathan	19	M	No*	Yes	Very Good	B1
O	Olivia	23	F	Yes	No	Fair	D2
P	Peter	20	M	Yes	Yes	Very Good	A1
Q	Queenie	24	F	Yes	Yes	Good	B1
R	Rosa	20	F	Yes	Yes	Very Good	A1
S	Stella	19	F	Yes	Yes	Fair	D1
T	Tess	19	F	Yes	Yes	Fair	C1
U	Ursula	19	F	Yes	Yes	Good	C1
V	Vivienne	18	F	Yes	Yes	Good	B1
W	Whitney	20	F	Yes	Yes	Good	B1
X	Xavier	19	M	Yes	Yes	Good	C1
Y	Yvonne	19	F	Yes	Yes	Good	D1
*Drinker at the time of the Phase I survey, established non-drinker by the time of the Phase II interview							

Table 4.10 Phase II: Profile of the sample of interview participants

In line with the study design, the range in health status achieved for the Phase II sample represented the full range of health observed for participants in the Phase I participant sample. Three indicators of participants' health status from Phase I were used in the Phase II profile.

The first of these indicators was each participant's self-assessed report of their own health status in the Phase I survey as 'excellent', 'very good', 'good', 'fair' or 'poor'. The second was whether or not each participant had a BMI in the 'healthy' range of 18.5 to 24.9. The third was the proxy health classification determined in for each participant in Phase I. These classified the participants from A1 for the 'healthiest' to D2 for the 'least healthy', reflecting each participant's reported levels of compliance with public health advice or guidelines on alcohol, smoking, diet and exercise.

In addition to the above information for participants, the Phase II profile features alphabetical identifiers from A to Y for the 25 interviews allocated after complete anonymization of the interview dataset. The fictional names allocated to the interview participants using these identifiers are also shown in the profile. This enabled each interview to be identified, and for selected quotes from interviewees to be attributed to them by using their allocated name in the subsequent analyses.

CHAPTER 5: PHASE I ANALYSES AND RESULTS

EXAMINING THE EVIDENCE, TESTING HYPOTHESES AND FIRST QUALITATIVE FINDINGS

Summary of chapter

This chapter sets out the results from Phase I of the study and all the findings derive from data collected by the survey. The majority of these findings are quantitative and derive from statistical analyses of the numeric data collected, although analyses of the qualitative data collected have also provided significant findings. The extent to which ARC harm was experienced by the study sample is examined and factors that may be associated with ARC harm are identified and assessed for their relative importance and the interplay between them. Participants' own alcohol-related behaviours and the influence of others' drinking habits are explored for their relevance to ARC harm, drawing on the demographic and health profiles of the participant sample described in Chapter 4. Participants' free-text survey responses detailing their ARC harm experiences, and their reactions to them, are analysed and categorised qualitatively. Key findings from the qualitative analysis are tabulated in a novel taxonomy of the ARC harms identified for these young adults.

ANALYSIS OF THE QUANTITATIVE DATA IN PHASE I

5.1 How many young adult students experienced ARC harm?

As described in Chapter 3, two survey questions were used to identify and quantify the incidence of ARC harm in the study sample. These questions were: "*Do you think that other peoples' drinking has ever put your health or safety at risk?*" and "*Have the drinking habits of anyone else ever affected you in any other way? e.g. got you into an argument or affected*

your studies". Overall, taking the two questions together, 64% of participants answered 'yes' to either or both questions, indicating that their health or safety had been put at risk by others' drinking and/or that they had been affected adversely by others' drinking in another way. The responses indicated higher overall levels of experience of ARC harm among the university students (69%) than for college students (52%). The incidence of ARC harm was also higher for university students than for college students for each of the questions separately. When asked whether their health or safety had been put at risk by others' drinking, 47% of participants answered 'yes' overall (college students 39%; university students 51%). When asked whether the drinking habits of others had ever affected them in any other way, 47% of participants answered 'yes' overall (college students 36%; university students 52%).

The responses to these two specific survey questions used to test for experience of ARC harm were strongly associated with each other (See Table 5.1 below). Sixty-four percent (135/212) of participants whose health had been put at risk by other peoples' drinking had also been affected by others' drinking in another way; a considerable overlap between the two measures of ARC harm. In comparison, just 32% (76/ 238) of participants whose health and safety had not been put at risk by other peoples' drinking had been affected by other peoples' drinking in another way. The qualitative data in participants' free-text responses linked to these two questions are analysed later in the chapter.

		Have the drinking habits of anyone else ever affected you in any other way?		
		Yes	No	Total
Do you think other peoples' drinking has ever put your health or safety at risk?	Yes	135 (64%)	77 (32%)	212
	No	76 (36%)	162 (68%)	238
	Total	211	239	450
		$(\chi^2 = 45.38, df = 1, p = <0.001)$		

Table 5.1 Association between the two measures of ARC harm

5.2 Factors tested for association with ARC harm

Experience of ARC harm was hypothesised to be associated with a number of factors from the demographic profiles of the study participants described in Chapter 4. As set out in Chapter 3, and in accordance with Hosmer and Lemeshow (1989) univariate analysis was employed first to explore the factors of interest. Nine factors were tested individually as independent variables in non-parametric, chi-squared tests with exposure to ARC harm as the dependent variable. This ascertained whether these factors were germane to participants' experience of ARC harm.

The nine factors of interest tested for the participants were: their gender, their age, whether they were at college or university, whether they were living in the parental home, whether they drank alcohol, whether they drank within the UK guidelines, whether their family drank alcohol, whether their family drank every day and whether their friends or family affected their decision to drink. These analyses are set out in Table 5.2, *Experience of ARC harm: non-parametric analyses of demographic and behavioural factors as potential independent variables*. Multivariate logistic regression analysis was used to determine the relative importance of these nine factors as predictors of ARC harm in the sample. The regression analysis was undertaken initially by entering all the factors together as variables, as set out in Table 5.3, *Multivariate logistic regression of nine hypothesised factors*.

As discussed later in the chapter, the factors that were not significant were subsequently excluded successively to minimise the number of variables, so that the resulting model would be more likely to be numerically stable. These analyses are set out at Appendix 5.2, *Successive multivariate logistic regression analyses*. In addition, all the factors of interest were also tested for association with each other in non-parametric chi-squared tests to identify potential collinearities between them. Potential collinearities between factors were also examined by

comparing the odds ratios (ORs) derived for them from the univariate analyses with those derived from the multivariate logistic regression and observing the changes.

5.3 ARC harm: Association with participants' gender

Gender was strongly associated with ARC harm. In Table 5.2 at A, 69% of young adult women had experienced ARC harm, compared with just 53% of young adult men ($\chi^2=10.05$, $df=1$, $p<0.0020$). In Table 5.3 at A, the multivariate logistic regression undertaken with all the hypothesised factors supports this finding (OR= 1.62, 95% CI 1.01-2.62). That is, being a young adult woman is likely to be a risk factor for ARC harm.

5.4 ARC harm: Association with participants' age

Experience of ARC harm was strongly associated with age, with older students reporting more experiences of ARC harm than younger students. Table 5.2 at B shows that 50% (80/160) of participants aged 16 - 18 had experienced ARC harm, against 72% (208/290) of those aged 19 - 24 ($\chi^2=21.12$, $df=1$, $p<0.001$). In Table 5.3 at B, the logistic regression supports this finding (OR=2.61, 95% CI 1.57-4.34). The gender divide was also much more pronounced in the 16 - 18 age group, where (59%) of the young women had experienced ARC harm, but only (33%) of the young men ($\chi^2=9.94$, $df=1$, $p<0.002$).

5.5 ARC harm: College, university and domicile associations

Table 5.2 at C suggests that university students were more likely to have experienced ARC harm than college students. Whereas 52% (63/132) of college participants had experienced ARC harm, 69% (99/318) of university participants had experienced it ($\chi^2=11.15$, $df=1$, $p<0.001$). However, the multivariate logistic regression analysis in Table 5.3 at C (OR=0.74, 95% CI 0.33-1.64) suggests that this association is probably confounded with age.

	Experience of ARC harm (N= 450). (288/450 participants experienced ARC harm)			
Variable		Frequency		% Yes
		Yes	No	
A. Gender	Male	71	63	53%
	Female	217	99	69%
	Total	288	162	64%
	$\chi^2=10.05$, df=1, p<0.002. OR=1.95 (95% CI: 1.29 - 2.94)			
B. Aged under 19 years of age? (16-18)	Yes	80	80	50%
	No	208	82	72%
	Total	288	162	64%
	$\chi^2=21.12$, df=1, p<0.001. OR=2.54 (95% CI: 1.7 - 3.79)			
C. Student at college or university?	College	69	63	52%
	University	219	99	69%
	Total	288	162	64%
	$\chi^2=11.15$, df=1, p<0.001. OR=2.02 (95% CI: 1.33 - 3.06)			
D. Living in the parental home?	Yes	97	77	56%
	No	191	85	69%
	Total	288	162	64%
	$\chi^2=8.39$, df=1, p=0.004. OR=1.78 (95% CI: 1.2 - 2.64)			
E. Do you drink alcohol at all currently? (Regularly or occasionally)	Yes	255	129	66%
	No	33	33	50%
	Total	288	162	64%
	$\chi^2=6.58$, df=1, p=0.0103. OR=1.98 (95% CI: 1.17 - 3.35)			
F. Self- reported number of units of alcohol consumed in the last week within UK guidelines?	Yes	260	150	63%
	No	28	12	70%
	Total	288	162	64%
	$\chi^2=0.69$, df=1, p= 0.408. OR=1.35 (95% CI: 0.67 - 2.73)			
G. Do your close family members drink alcohol at all?	Yes	261	139	65%
	No	27	23	54%
	Total	288	162	64%
	$\chi^2=2.44$, df=1, p=0.118. OR=1.6 (95% CI: 0.88 - 2.89)			
H. Do your close family members drink alcohol every day?	Yes	80	20	80%
	No	208	142	60%
	Total	288	162	64%
	$\chi^2=12.79$, df=1, p<0.001. OR=2.73 (95% CI: 1.6 - 4.66)			
I. Do the drinking habits of friends or family affect your decision to have a drink or not to drink?	Yes	195	74	73%
	No	93	88	51%
	Total	288	162	64%
	$\chi^2=20.93$, df=1, p< 0.001. OR=2.49 (95% CI: 1.68 - 3.7)			
The χ^2 , p and OR values derive from the univariate analyses of factors hypothesised to have an association with ARC harm. These factors and, subsequently, just those found to be significant in this analysis were used as the potential predictor variables in the multivariate logistic regression analyses.				

Table 5.2 Experience of ARC harm: non-parametric analyses of demographic and behavioural factors as potential independent variables.

Similarly, in Table 5.2 at D, participants who lived with their parents were less likely to have experienced ARC harm (56%, 97/174) than those living away from the parental home (69%, 191/276) ($\chi^2=8.39$, $df=1$, $p=0.004$). Yet, again, the OR derived from the logistic regression suggests a potential confounding with age (OR=1.14, 95% CI 0.59-2.22).

Variable	Experience of ARC harm (N= 450)		
		95% C. I.	
	OR	Lower	Upper
A. Gender (Female: Male)	1.621	1.005	2.615
B. Aged under 19 years of age? (16-18) (No: Yes)	2.612	1.572	4.337
C. Student at college or university? (University: College).	.738	.332	1.640
D. Living in the parental home? (No: Yes)	1.144	.590	2.221
E. Do you drink alcohol at all currently? (Yes: No)	1.482	.790	2.780
F. Units of alcohol consumed within UK guidelines? (No: Yes)	1.196	.549	2.606
G. Do close family members drink alcohol at all? (Yes: No)	.994	.497	1.988
H. Do close family members drink alcohol every day? (Yes: No)	2.646	1.492	4.693
I. Do the drinking habits of friends or family affect your decision to have a drink or not to drink? (Yes: No)	2.026	1.324	3.101
Constant	.272		
(Details of the successive multivariate logistic regression analyses employed are tabulated at Appendix 5.2)			

Table 5.3 Multivariate logistic regression of nine hypothesised factors

As the associations with ARC harm of being at university rather than at college and of living away from the parental home appeared likely to be functions of age, these three factors were tested for association against each other to assess the possibility of covariance. When cross tabulated, the factors of age and being at university showed a strong association ($\chi^2=131.8$, $df=1$, $p=0.00$). Similarly, age and living in the parental home were associated ($\chi^2=65.9$, $df=1$, $p=0.00$) and not living in the parental home and being at university were strongly associated ($\chi^2=267.7$, $df=1$, $p=0.00$). These associations provide further evidence suggesting collinearity for these three factors. These and other potential collinearities are addressed further later in

the chapter and shown at Appendix 5.1, *Variables cross-tabulated showing potential collinearities*.

5.6 ARC harm: No association with alcohol consumption

Two instances where associations with participants' experience of ARC harm might have been anticipated, but which were not supported adequately by the data, are shown in Table 5.2 at E and F. Table 5.2 at E compares experience of ARC harm for drinkers and non-drinkers. The table shows that more drinkers (66%) experience ARC harm than non-drinkers (50%). However, this just fails to be significant ($\chi^2=6.58$, $df=1$, $p=0.0103$) and in Table 5.3 at E the multivariate logistic regression analysis supports this finding (OR=1.48, 95% CI 0.79-2.78). These analyses demonstrate that, for these young adult students, being teetotal did not confer protection from ARC harm.

ARC harm was also tested for association within the UK CMOs' guidelines for lower-risk weekly limits (DH, 2012). The upper weekly limits of the guidelines were then 21 units for females and 28 units for males (2-3 and 3-4 per day respectively). Table 5.2 at F shows no association between an experience of ARC harm and drinking above or below the guidelines ($\chi^2=0.686$, $df=1$, $p=0.408$). The logistic regression analysis in Table 5.3 at F supports this finding (OR=1.20, 95% CI 0.55-2.61). That is, there was no significant difference between heavier drinkers and moderate drinkers in their chance of experiencing ARC harm.

For completeness, ARC harm was also tested subsequently for association within the new, lower, UK CMOs' guidelines (DH, 2016c) for lower risk drinking of 14 units or fewer per week for both males and females. Again, there was no association ($\chi^2=1.76$, $df=1$, $p=0.1859$).

This last result is not included in Tables 5.2 and 5.3 above as the revised guideline was not in place at the time of the survey.

5.7 ARC harm: Associations with family members' drinking frequency

The findings in Table 5.2 at G and H should be viewed together and the results compared. Table 5.2 at G cross tabulates the experience of ARC harm with *Do your close family members drink alcohol at all?* The data show no significant association ($\chi^2=2.44$, $df=1$, $p=0.118$), with this univariate finding supported by the logistic regression in Table 5.3 at G (OR=0.99, 95% CI 0.50-1.99). However, at H when experience of ARC harm is cross tabulated against *Do your close family members drink alcohol every day?* this yields strong evidence of an association ($\chi^2=12.79$, $df=1$, $p<0.001$) again supported by the logistic regression in Table 5.3 at H (OR=2.65, 95% CI 1.49-4.69). While there was no association between close family members drinking alcohol and ARC harm to participants, there was a strong association when close family members drank alcohol every day. This strongly suggests that family members' drinking frequency was a risk factor for ARC harm experiences among these young adults.

5.8 ARC harm: Associations with the influence of others (friends and family)

Table 5.2 at I shows that 73% of the participants who reported that the drinking habits of friends and family affected their own decision to drink or not drink had experienced ARC harms, compared with 51% who said they were not influenced by others' drinking habits. There was a significant association ($\chi^2=20.93$, $df=1$, $p<0.001$) supported by the logistic regression in Table 5.3 at I (OR=2.03, 95% CI 1.32-3.10). This strongly suggests that others who influenced these young adults' decisions to drink were a potential risk factor for ARC harm.

FURTHER STATISTICAL ANALYSES

5.9 Successive logistic regression analyses

To minimise the effects of collinearity and to increase confidence in the statistical findings, multivariate logistic regression analysis was used again to explore the risk factors hypothesised for ARC harm. This was done, in accordance with Hosmer and Lemeshow (1989) by minimising the number of factors in the model:

The traditional approach to statistical model building involves seeking the most parsimonious model that still explains the data. The rationale for minimising the number of variables in the model is that the resultant model is more likely to be numerically stable, and is more easily generalised. The more variables included in the model, the greater the estimated standard errors become. (Hosmer and Lemeshow, 1989, p. 83)

Two factors found to be not significant in univariate analyses were eliminated from the model and the factors that were significant were entered into this second regression analysis. The extraneous factors excluded were: *drinking alcohol in excess of the UK guidelines* and *close family members drink alcohol*. The six significant factors entered were, briefly: *female gender*, *aged 19 or older*, *being at university*, *not living in the parental home*, *close family who drink every day* and *friends or family who affect drinking habits*. One borderline factor from the univariate analyses, whether participants drank alcohol, was also entered to test it again for significance. This factor was retested as it had been found significant in some other research studies of ARC harm (e.g. Greenfield et al., 2015; Seid et al., 2015). The significant factors derived from this second logistic regression analysis were then compared with the first.

Both the first and second regression analyses identified strong associations with ARC harm for the same four of the original nine factors that had been entered as variables. These four significant factors were: *female gender, aged 19 or over, close family who drink every day and friends or family who affect drinking habits*. Entering just these four factors together in a final multivariate logistic regression determined their relative importance as statistically significant risk factors and predictors of ARC harm in the study sample. The key drivers for ARC harm for the participants, in descending order of ORs and therefore likely importance, were:

- *Close family who drink every day* (OR=2.60, 95% CI 1.50-4.58);
- *Aged 19 or older* (OR=2.36, 95% CI 1.55-3.60);
- *Friends or family who affect drinking habits* (OR=2.051, 95% CI 1.35-3.11) and
- *Female gender* (OR=1.62, 95% CI 1.04-2.52).

Full numeric details for these stages of the successive multivariate logistic regression analyses are shown in the tables at Appendix 5. 2, *Successive multivariate logistic regression analyses*.

5.10 Additional examinations of collinearity

Cross tabulating variables to show potential collinearities

As described in Chapter 3, all the nine factors associated with ARC harm in univariate analysis were examined for potential collinearity which could affect the value of the multivariate analyses undertaken. As seen above, cross tabulating the factors of *age, domicile* and *university* against each other suggested notable collinearity between these three factors. Experience of ARC harm and the other hypothesised factors were also cross-tabulated and scrutinised for collinearity in the same way. The results of these cross-tabulations are shown in the table at Appendix 5.1, *Variables cross-tabulated showing potential collinearities*. This table shows the extent to which factors may be collinear in their chi-square values. The potential collinearities suggested already between *age, domicile* and *university* are confirmed in this

analysis. For example, collinearity is suggested between being aged under 19 years and living in the parental home ($\chi^2=65.9, p=0.00$) and being at college rather than university ($\chi^2=131.8, p=0.00$). The shaded squares in the table at Appendix 5.1 highlight the more significant potential collinearities between all the nine hypothesised factors.

Comparing ORs to show potential collinearities

To further ascertain the likely extent of collinearity between the nine factors, their ORs and the lower and upper ranges determined in the univariate and multivariate analyses were also compared. The comparison comprised observing the extent to which the ORs for each factor altered between the univariate and multivariate analyses. (See Table 5.4, *Odds Ratios (ORs) derived from univariate and multivariate analyses showing potential collinearities*).

	Univariate analysis			Multivariate analysis		
		95% CI			95% CI	
Independent variables	OR	Lower	Upper	OR	Lower	Upper
A. Gender (Female: Male)	1.95	1.29	2.94	1.62	1.01	2.62
B. Aged under 19 years of age? (No: Yes)	2.54	1.70	3.79	2.61	1.57	4.34
C. At college or university? (University: College)	2.02	1.33	3.06	0.74	0.33	1.64
D. Living in the parental home? (No: Yes)	1.78	1.20	2.64	1.14	0.59	2.22
E. Drink alcohol currently? (Yes: No)	1.98	1.17	3.35	1.48	0.79	2.78
F. Drink within UK guidelines? (No: Yes)	1.35	0.67	2.73	1.20	0.55	2.61
G. Close family drink? (Yes: No)	1.60	0.88	2.89	0.99	0.50	1.99
H. Close family drink every day? (Yes: No)	2.73	1.60	4.66	2.65	1.49	4.69
I. Friends/family affect drinking? (Yes: No)	2.49	1.68	3.70	2.03	1.32	3.10

Table 5.4: Odds Ratios (ORs) derived from univariate and multivariate analyses showing potential collinearities

The potential collinearities suggested already above between *age*, *domicile* and *university* are confirmed in these analyses. In Table 5.4 at C, *Living in the parental home*, and at D, *At college*

or university, the multivariate OR is far removed from the univariate OR in each case indicating the effect of collinearity. However, at B the OR for *Aged under 19 years of age* remains remarkably stable between the univariate OR (2.54) and multivariate OR (2.61), showing the strength of the association. In other words, age is the most significant of these factors. Also, there is little movement in the ORs at H for *Close family drink every day* (univariate OR 2.73, multivariate OR 2.65) showing that this factor is little affected by collinearity with others.

In Table 5.4, whilst none of the other factors shows the same degree of collinearity as for *Living in the parental home* and *At college or university*, all the factors considered in the study show some degree of collinearity. This demonstrates the interconnectedness of these factors in the young adults' lives. Of course, other factors may also exist which influence the factors considered here, and which are not among those hypothesised as potential risk factors for examination in the study.

5.11 ARC harm: No association with key lifestyle risk factors

To test whether factors from participants' health profiles were significant in their experiences of ARC harm, these were tested for association with ARC harm. As for the other demographic factors, the hypothesised factors were tested as independent variables in non-parametric, chi-squared analyses with exposure to ARC harm as the dependent variable. In addition to testing the experience of ARC harm against whether or not the participants drank alcohol, as discussed above, six further health factors were tested individually as potential independent variables. The additional factors tested were, briefly: body mass index (BMI), self-reported health status and compliance with public health advice and guidelines in each of the other three key lifestyle risk areas of smoking, diet and exercise. The results are shown at Table 5.5 below.

Experience of ARC harm (N= 450). (288/450 participants experienced ARC harm)				
Variable		Frequency		% Yes
		Yes	No	
Body Mass Index (BMI) (Healthy range 18.5-<25)	Unhealthy	84	52	62%
	Healthy	204	110	65%
	Total	288	162	64%
$\chi^2=0.423$, df=1, p=0.516				
Self-reported health status. (Excellent, very good, Good v Fair, Poor) (N=447)	Fair or Poor	72	44	62%
	Good or better	214	117	65%
	Total	286	161	64%
$\chi^2=0.249$, df=1, p=0.618				
Complied with public health advice on smoking (not to smoke).	No	59	27	69%
	Yes	229	135	63%
	Total	288	162	64%
$\chi^2=0.978$, df=1, p=0.323				
Complied with public health advice on diet. (Eat at least five portions of fruit and vegetables per day).	No	206	121	63%
	Yes	82	41	67%
	Total	288	162	64%
$\chi^2=0.522$, df=1, p=0.47				
Complied with public health advice on exercise. (Moderate intensity exercise for at least 150 minutes per week).	No	155	85	65%
	Yes	133	77	63%
	Total	288	162	64%
$\chi^2=0.076$, df=1, p=0.783				
Complied with public health advice on alcohol. (Lower risk weekly guideline amounts: men 28 units, women 21 units).	No	28	12	70%
	Yes	260	150	63%
	Total	288	162	64%
$\chi^2=0.686$, df=1, p=0.408				
Combined compliance with public health advice in all the four areas of alcohol, smoking, diet and exercise. (Number of pieces of public health advice followed).	0 or 1	35	20	64%
	2	121	61	66%
	3	95	59	62%
	4	37	22	63%
	Total	288	162	64%
$\chi^2=0.890$, df=3, p=0.828				
The χ^2 and p values derive from the univariate analyses of health-related factors hypothesised to have an association with ARC harm. As none of these factors was found to be significantly associated with ARC harm, multivariate logistic regression analysis was not undertaken for these factors.				

Table 5.5 Experience of ARC harm: non-parametric analyses of health factors as potential independent variables

As Table 5.5 shows, non-parametric, chi-squared tests revealed no associations with experience of ARC harm for any of the health factors when tested individually. For each of the factors, the percentage of participants who had experienced ARC harm was markedly close to the 64% of participants who had experienced ARC harm in the sample overall. Combined compliance with public health advice in all four of the key lifestyle risk areas of alcohol, smoking, diet and exercise was also tested; but, again, no association with experience of ARC harm was found. As none of these health factors tested against ARC harm in Phase I were shown to be significant in univariate analysis, multivariate logistic regression analysis was not pursued.

Overall, the findings on health factors indicate that neither the relative health, nor the healthy or unhealthy behaviours of participants, were significant for experiencing ARC harm. Just as being teetotal or being a moderate drinker did not protect the participants from ARC harms, neither did being otherwise healthy or leading a healthy lifestyle. In addition, these findings suggest that existing public health lifestyle advice, whether for alcohol or any of the other three key lifestyle risk areas, had no leverage on the ARC harm experiences of these young adults.

ANALYSIS OF THE QUALITATIVE DATA IN PHASE I

5.12 Identifying and categorising the ARC harm experiences

The qualitative data elicited in the free-text boxes of the survey attached to the survey questions on ARC harm provided information on the types of ARC harm the participants had experienced and the impact on their lives. The examples of ARC harm described were categorised systematically into a novel taxonomy of eight ARC harm categories (Table 5.6 *Taxonomy of ARC harm experienced by young adults*).

Category and definition of each type of ARC harm experienced by young adult students.	Examples (Selected illustrative quotes)
1. Nuisance/ frustration/exasperation Direct, immediate impacts on everyday life. Includes disturbed sleep and effects on study and work from drunken, rowdy, careless and disruptive, friends, flatmates or family.	<i>Housemates in halls went out most nights and woke me up often, even the night before exams.</i> <i>I got many detentions from where my mum was too drunk to sign my homework diary. She also used to keep me up at night, was more out of control and ripped up my homework.</i>
2. Tolerance/adjustment/accommodation Personal tolerance and adjustments to unacceptable behaviour by drinkers in the family or social circle. Includes the need to avoid drunks and places where people get drunk and to accommodate being excluded from social activities by heavier drinkers.	<i>I had to move out of my student halls because my hallmates were so out of control with their drinking.</i> <i>When my friends get drunk and walk off without me I'm left on my own to walk home in the early hours of the morning.</i>
3. Pressure into unwanted situations Pressure in the form of threats or unwelcome attention leading to unwanted situations, resulting in unsolicited arguments or objectionable sexual behaviour from drinkers. Pressure from peers who encourage drinking large quantities of alcohol as 'normal'	<i>I have been ill from drinking too much and trying to keep up with my friends.</i> <i>Drunk people have started arguments with me in clubs for no apparent reasons, and drunk men always try to touch you up, so you end up getting aggressive with them too.</i>
4. Unsought/inappropriate responsibility Care required by drunken friends and family members. Includes risks to personal safety to do so: intervening in arguments or fights, carrying friends or family home, putting them to bed, cleaning up after them or taking them to A&E for emergency hospital care.	<i>I've had to help severely drunk people be sick, carry them to their rooms, stay hydrated with water rather than have fun at parties.</i> <i>I've had to look after people that have been very drunk and hard to handle. They take a great deal of looking after and they cannot be left alone at any point.</i>
5. Psychological harm Acute or longer-term worry, stress or distress caused by or about the drinker. Threats of violence, aggression, arguments, tension, embarrassment, loss. Includes bereavement resulting from drinkers' behaviour.	<i>I've had to diffuse fights on many occasions, and I've argued with my partner because he's been too drunk.</i> <i>My dad is dead due to alcohol. He was an alcoholic and hanged himself one night whilst he was drunk.</i>
6. Physical harm / acute risk of physical harm Personal injury sustained in a malign violent attack, or unintentionally caused, by a known or unknown drinker. Includes drink-spiking and acute risk of physical injury, e.g. drunk-driver incidents.	<i>One of these incidents included a thug shattering a glass over my head and causing my fiancée to have a small anxiety attack due to the amount of blood.</i> <i>I have been attacked by a drunk person before and have had many near fights with drunk men who become violent when under the influence.</i>
7. Relationship harm Negative effect on relationships. Arguments, rifts or chronic degradation caused by the behaviours of drinking friends, partners or family members.	<i>One of my friends' mood drops dramatically when drinking and this causes me stress.</i> <i>My parents were drunken and abusive.</i>
8. Undisclosed harm Details of harm declined. (Speculatively, shame, guilt or personal embarrassment attaching to the ARC harms experienced, leading to concealment).	<i>Rather not say, personal issue.</i> <i>It has and I'm not going to delve any deeper into that information.</i>

Table 5.6. Taxonomy of ARC harm experienced by young adults.

Participants volunteered examples of both physical and psychological ARC harms drawing on their own experiences. The taxonomy is thus specific to these young adult students as it derives exclusively from their own descriptions of the ARC harms they had experienced. These examples revealed a wide variety of harms, from which thirty individual types of ARC harm were identified. (See Table 6.1 in the next chapter). The ARC harms described also showed a wide range in severity, from the relatively minor, e.g. occasional noisy disruptions to sleep or study, to more serious concerns, including risks to life, and bereavement.

The eight categories that comprise the taxonomy capture the range of experiences identified. Briefly, these are: *Nuisance*, *Tolerance*, *Pressure*, *Unsought responsibility*, *Psychological harm*, *Physical harm*, *Relationship harm* and *Undisclosed harm*. Each category shown in the taxonomy was defined and illustrated with selected quotes from participants. The ‘undisclosed harm’ category relates to 15 survey participants who explicitly declined to disclose details of any of the ARC harms they had experienced. This suggests a degree of sensitivity around the nature of ARC harm for these young adults.

5.13 ARC harm impact on health or safety: Most frequent experiences

The ARC harm examples the participants volunteered that affected their health or safety were examined to assess the frequency with which each of the examples occurred. The most frequently cited example of ARC harm affecting health or safety in answer to the prompt ‘Why do you say that?’ was of aggressive or violent behaviour on the part of the drinker. As seen in Table 5.7 below, 41% (86) of the 212 participants who stated that their health and safety had been put at risk specifically referred to aggressive or violent behaviour, e.g. “*I have been threatened to be stabbed by a drunk man*”. This finding is consonant with the national data

that show that the 16-24 population group suffers the highest level of violent crime and that 53% of their attackers are drunk (Hughes et al., 2008; ONS, 2015a).

Health or safety put at risk by other people's drinking (N=212)	Frequency	Percent
Experienced aggressive or violent behaviour from a known or unknown drinker.	86	41%
Travelled with a drunk driver or experienced a drunk driver incident with another car or on the street.	56	26%
Cared for drunken friends or family members (carried home / took to A&E / put to bed / cleaned up vomit etc.).	21	10%
Affected in another negative way by other people's drinking. (N=211)	Frequency	Percent
Drawn into an argument by a known or unknown drinker.	101	48%
Disrupted sleep and /or studies caused by drinkers' rowdy behaviour.	44	21%
Stress or distress caused by the drinking habits of a partner, friends or family members.	36	17%

Table 5.7 Examples of ARC harm reported most frequently

The second most frequently cited experience of ARC harm relating to a risk to health or safety was drink-driving. Twenty-six percent (56/212) reported being put at risk by a drunk driver, e.g. *"I have witnessed and was nearly involved in a road traffic collision caused by a driver who was heavily under the influence of alcohol"*. The third most cited example of a risk to participants' health or safety was caring for friends or family members who were drunk, with 10% (21/212) reporting that taking on this responsibility had put their own health or safety at risk, e.g. *"Could not get taxi home because friend was so drunk so outside in the cold and dark for a very long time"* and *"Trying to keep intoxicated people from doing something stupid and risking my own safety"*.

Often, participants' responses suggested that they tolerated drinkers' unwelcome behaviours, e.g. *"I have a very argumentative friend that manages to start a fight every night. Stopping these fights have often gotten me into trouble"*.

In several instances participants also simultaneously excused or discounted the ARC harms they reported that had affected their health or safety, e.g. *“Most people can turn quite nasty when they’ve been drinking”*; *“I’ve realised they were drunk and did not know what they were doing”*; *“It was just a moment of madness”*; *“I don’t see this as much of a problem though because strangely it’s part of the entertainment of ‘going out’”*. The tendency to discount ARC harm also featured in 25 of the responses where survey participants answered ‘no’ when asked if they had ever experienced any ARC harms. The reason then given for answering ‘no’ was *‘nothing serious’*, or its equivalent, in answer to the survey prompt of ‘Why do you say that?’

5.14 ARC harm, other negative impacts: Most frequent experiences

When asked whether the drinking habits of anyone else had affected them in any other way, participants most frequently reported being drawn into an argument by a drinker. As shown in Table 5.7 above, of the 211 participants who reported an experience of ARC harm that had caused other negative impacts, 48% (101/211) described being drawn into arguments. The experiences described spanned a range of severity, e.g. *“I’ve been in my fair share of alcohol involved arguments and confrontations that wouldn’t of happened if alcohol was not present”* and *“My uncle is an alcoholic so, yes I got in some arguments with him. But now I know that I should ignore him or leave when he is in his ‘mood’”*.

Twenty-one percent (44/211) of participants reported effects on their sleep or studies from others’ drinking, stating for example: *“I have had to stay up with a friend when she was drunk and this meant I was very tired and wasn’t able to complete my work the next day because I was catching up on sleep”*. Seventeen percent (36/211) of participants mentioned worry and or stress caused by family members’ or friends’ drinking habits. E.g. *“My ex-boyfriend drank a lot and his father was an alcoholic, it was pretty traumatising to witness him turn to alcohol*

when he needed comforting, rather than his family or myself who always let him know we were there for him". These other ARC harm impacts revealed a wide variation in the degree of ARC harm experienced and a more diverse and less immediate range of risks than those posed by the ARC harms that had affected health or safety.

Some of the instances of ARC harm described, like disturbed sleep or an argument, appear relatively minor as single events. However, participants signalled a longer-term cumulative effect when they described action taken to avoid repeated 'minor' ARC harms e.g. *"Made me move out of student halls to live back at home"*. Participants' descriptions of repeated ARC harm incidents, minor or otherwise, also indicated chronic stress, e.g. *"My dad drinks every night and it upsets me"* and *"Frequent arguments with mother after she has been drinking"*. Such examples suggest the presence of more insidious and longer-term psychological harm. The semi-structured interviews in Phase II of the study facilitated more detailed, in-depth examination of all these types of harm.

5.15 The influence of other peoples' drinking on participants' decisions to drink

As Chapter 4 records, when participants were asked whether the drinking habits of friends or family affected their decisions to drink or not to drink alcohol, 60% of the 450 survey participants reported that the drinking habits of these other people affected their own decisions. Of the participants who reported that their drinking habits were affected by the influence of others in this way, 41% stated that other peoples' drinking habits encouraged them to drink more, 10% said that others' drinking habits made them drink less and 9% reported that others' habits influenced them in both directions. (See Table 5.8 below). Participants who reported that they were not affected by others' drinking habits tended to cite a belief in their own autonomy, stating typically: *"I am my own person and don't get influenced easily"*.

Where other peoples' drinking acted as a deterrent, a wish not to emulate a heavy drinker was most often cited as the deterring factor, e.g. *"Family friend died from kidney failure I believe. Heavy drinker - probably put me off"*.

The influence to drink more was expressed as peer pressure in some instances, e.g. *"Friends pressure you into drinking sometimes"*. In others, it was expressed as normal sociability, e.g. *"If everybody else is going to drink you drink"*. In other instances, there was interplay between these, e.g. *"My friends often tempt me into drinking and going out more"*. Given this range of responses, the point at which normal sociability and personal volition to drink progressed to the point where pressure to drink became an ARC harm was unclear. As above, influence to drink more was therefore not counted as an experience of ARC harm for the purposes of the Phase I statistical analysis. Yet, as there was a point at which it did progress to ARC harm, pressure to drink was included in the categorisation of types of ARC harm with 'Pressure into unwanted situations'. This was also designated as an issue to pursue in Phase II of the study.

	Negative	Positive	Unknown	Both	Neither	Total
Effect of others' drinking habits on participants' drinking (to drink more = negative to drink less = positive)	41%	10%	0%	9%	40%	100%
Effect of participants' drinking habits on others (to harm = negative to help = positive)	24%	17%	3%	7%	49%	100%

Table 5.8 Effects of the participants' drinking habits on other people and of other peoples' drinking habits on the participants

5.16 The impact of participants' own drinking habits on other people

Survey participants were asked whether their own drinking habits had ever affected anyone else. Fifty-one per cent of participants reported that their own habits had affected others.

Participants' free-text explanations for their responses gave positive or negative examples of how their drinking habits had affected other people. The 51% comprised, 17% who said their own drinking habits had affected other people in a positive way, 24% who reported negative effects on others, 7% who reported that their own drinking habits had affected others in both directions and 3% who did not report how others had been affected. (See Table 5.8 above).

Where participants said their own drinking habits had a positive effect on others, they reported a variety of actions taken to protect other drinkers from excess. The actions described were a mix of advice and intervention that effectively took on responsibility for those drinkers. The most frequent protective action taken was on-the-spot harm mitigation. This was reported by 51 participants, e.g. *"I have persuaded someone to have a soft drink when I think they've had enough"* and *"I've made people drink water instead of more alcohol or I've given them a fizzy drink and told them it had alcohol in it when it hadn't"*. Some actions were to prevent drunk driving, e.g. *"I have stopped the designated driver from drinking at a party and told them to drink non-alcoholic drinks"* and *"I persuaded many to hand over their car keys to me to prevent them from driving"*.

In 42 instances, participants reported taking on the role of carer when they themselves were sober and their drinking friends were so intoxicated that they were incapable of looking after themselves e.g. *"There have been many nights where I have had to take friends home and cut my night short because they are too drunk"* and *"Stayed with a friend who had passed out and took one to A&E who broke their hand when drunk"*. In a few instances, participants reported offering more spiritual advice and support e.g. *"Helped a close friend see he had drinking problems and work on them"* and one participant reported leading by example, *"I think I have shown people that you can have a good time without alcohol"*.

When participants reported negative impacts on other people from their own drinking habits, the effects reported most frequently were missed lectures, study, work or other appointments from hangovers and oversleeping. These were reported by 76 participants, e.g. *“I’ve been too hungover to go to lectures or to do the work I wanted to that day”* and *“I have missed many a lecture to over-sleeping after a night out”*. Eighteen participants reported being cared for by friends when drunk e.g. *“If I get too drunk I can become a liability and ruin/dampen the night for my friends because they have to look after me”* and *“I’ve been so drunk on a number of occasions where I have had to rely on my friends to look after me and take me home”*. However, 11 of those 18 participants also reported a degree of reciprocity in taking on the role of carer, stating that they had cared for their friends on other occasions. Fifteen participants reported being taken to hospital as an emergency, but without reference to the ARC harm impact on the friends who called the ambulance or on their other, unknown, carers in the NHS, e.g. *“I have been taken to A&E unconscious before, extremely embarrassing”* and *“I was taken to A&E after I severed my Achilles tendon as I was drunk and kicked a broken window”*.

Many of the 49% of participants who reported that their own drinking habits had not affected others did not respond to the prompt ‘Why do you say that?’ Where they did, they tended to say either that they did not, or did not wish to, influence others. Typical responses were: *“I live my life and tend not to interfere with others”* or *“I try my hardest not to let what I do affect someone else”* or *“My friends and I do not care about whether or not someone is drinking or not”*. A few participants reported that their own drinking habits had no effect on others because they themselves did not drink alcohol. This last suggests a belief among those participants that being teetotal isolated them from people who drank alcohol.

SUMMARY AND DISCUSSION

The Phase I analyses of the quantitative and qualitative survey data provide an initial conceptualisation of ARC harm that is specific to these young adults. Analysis of the quantitative evidence identified key predictors for ARC harm and analysis of the qualitative evidence yielded a taxonomy of types of ARC harm. Both the quantitative and qualitative findings also raised issues which were addressed further in Phase II.

A key finding was the substantial proportion (64%) of these young adult students who had been exposed to ARC harm. Moreover, their experiences of ARC harm were regardless of their own drinking status, since abstainers and moderate drinkers, as well as heavier drinkers, experienced ARC harm. The findings on the lack of a significant association between ARC harm and whether the participants drank alcohol, or with the quantity they drank, contrast with the alcohol-related harms that drinkers do to themselves, which are positively correlated with the quantity of alcohol consumed (Home Office, 2012; DH, 2016a). These findings also contrast with some other research studies that have reported associations with the amount of alcohol consumed (e.g. Greenfield et al., 2015; Seid et al., 2015).

If ARC harm is not associated with alcohol consumption per se for these young adults, this suggests that the precipitating factors for their ARC harms lie elsewhere. In addition, the findings on the lack of any association with ARC harm and overall health, or with the other three key lifestyle risk factors of smoking, diet or exercise, suggest that neither healthy, nor unhealthy behaviours are significant. Unhealthy behaviours in these areas did not precipitate ARC harms, but neither did healthy behaviours mitigate ARC harm as they do for alcohol-related harms to the drinker.

The survey findings suggest that having family members who drink every day and being influenced by family and friends' drinking habits were main drivers for ARC harm. Phase II of the study examined these environmental influences further as potential risk factors for ARC harm, including in the context of existing research on the effects of family drinking (e.g. Orford et al., 2005; Orford et al., 2010) family and friends drinking (e.g. Ramstedt et al., 2015) and the effect of drinkers on the social environment (e.g. Room et al., 2010).

The findings also strongly suggest that the young women in the sample were at greater risk than the young men and at risk earlier in their lives, whilst still living in the parental home and before entering university. Other studies have reported a more complex and mixed gender division (e.g. Laslett et al., 2011; Ramstedt et al., 2015) while some studies have also reported higher levels of ARC harm for young women (e.g. Huhtanen and Tigerstedt, 2012).

The survey findings also suggest a significant increase in the risk of ARC harm for participants after the age of 18, at the transition point of leaving the parental home and entering university life. However, the effect was not a function of age alone since the data show significant collinearities with the other factors that occur at the same point in participants' lives. The increase in risk suggested at this stage of participants' lives can therefore be said to be a function of age, domicile and entering higher education.

Qualitative analysis of the ARC harms described revealed a wide range of severity, from relatively minor harms to serious harms including risks to life, and bereavement. Determining the severity of ARC harm is an issue considered by others researching in the area. It has been attempted in a survey context for example by Callinan (2014) by asking participants if they

experienced ‘a little’ or ‘a lot’ of harm. However, the present study relies on qualitative findings on the degree of ARC harm experienced and these were refined further in Phase II.

Participant responses to the survey suggest a degree of tolerance of ARC harm whilst, at the same time, its effects were felt keenly and participant descriptions of repeated minor harms suggested an increased impact linked to the frequency with which they occurred. Participant descriptions of pressure from others to drink more alcohol as an ARC harm cannot be distinguished satisfactorily from participants’ personal volition to drink from the Phase I findings. There is also an unresolved tension between the desirable effects of alcohol, which were sought by the 79% of participants who reported that alcohol played a role in their lives, and the undesirable consequences they reported from other people’s drinking. Phase II of the study examined these aspects further and there remains scope for more research in these areas.

Taken in isolation, Phase I of the study provides empirical evidence of the ARC harm experienced by a sample of young adult students in Southern England and contributes information to the current understanding of the totality of alcohol-related harm and the place of ARC harm within it. This first phase provides an initial contribution to characterising the nature of ARC harm for these well-educated young adults. Insights have been gained into the types and extent of the ARC harms that are specific to them and into the way that they themselves perceive these harms.

There are currently no comparable studies for this research on young adults. In the UK, there are only two other surveys of the harms that drinkers do to people around them and these are for all adults. Gell et al. (2015) considers all adults aged 16 and over in Scotland and aged 18 and over in the North West of England and Balance North East (2016) considers all adults aged

18 and over in the North East. There has also been a study in Southern Ireland (Hope, 2014) that examines these harms in the general population, the workplace and to children in families.

A journal article that draws on the Phase 1 findings set out in this chapter has been published in a themed issue of the journal *Drugs: Education, Policy and Practice* (Enser et al., 2017). This paper was commissioned further to a presentation of emerging findings given by the researcher at the international thematic conference arranged by the Kjetil Bruun Society, *Alcohol's Harm to Others – perceptions, policies and approaches*. Following this conference, held in Helsinki in September 2015, the researcher and other delegates were invited to submit articles for publication for the then prospective themed issue of the journal, *Special Focus: family and harms to others on alcohol*.

Phase I of the study raised several issues that invited further investigation into the nature of ARC harm. These included the predisposing risk factors for ARC harm, the roles played by family and friends, the environments in which ARC harm occurs and the extent to which ARC harm may contribute to the overall level of alcohol-related risk for young adults. Pursuing these potential behavioural, societal and environmental influences in Phase II of the study enabled such issues to be addressed in greater depth. The next chapter begins to describe those analyses and the resulting findings.

CHAPTER 6: PHASE II ANALYSIS AND RESULTS

CHARACTERISING ARC HARM FOR YOUNG ADULTS

Summary of Chapter

This chapter introduces the Phase II dataset and analyses, and considers the first stages in triangulating the quantitative and qualitative findings from the two phases of the study. The chapter takes forward the process of characterising ARC harm, setting out the first analyses of the data collected from the in-depth interviews completed in Phase II. The findings in the chapter mainly derive from non-numeric data and rely on systematic qualitative analysis using the first three stages of Thematic Analysis (TA). The salient features of the range of physical and psychological experiences of ARC harm reported in Phase II are presented as semantic themes. Descriptive statistics of categorical data derived from the interviews are also presented.

6.1 The Phase II sample and dataset

The empirical dataset analysed in Phase II comprised the transcripts from a series of 25 semi-structured interviews carried out with a purposive sample of young adult students. The interviews were completed over the course of a year, between November 2014 and October 2015. The recorded durations of the interviews ranged from 27 minutes to 58 minutes. The mean audio-recorded duration of the interviews was 45 minutes, with additional unrecorded time for introductory procedures and questions afterwards. Verbatim audio transcription of the interview recordings produced a dataset of 445 pages of transcripts for coding and analysis.

Lack of representativeness is a frequent charge laid against qualitative research findings. Silverman (2006) argues, as others such as Guba and Lincoln (1989) had before him, that

transferability is the qualitative equivalent of statistical generalisability. Silverman (2006) suggests that the potential transferability of the findings from qualitative research rests on establishing the representativeness of a small sample. Accordingly, the Phase II purposive sample was designed to be a representative cross section of the Phase I survey participants who had experienced ARC harm.

Details of the processes undertaken to achieve representativeness for the Phase II sample are in Chapter 3 and detailed profiles of the Phase I and Phase II samples, and the relationship between them, are described in Chapter 4. To recap briefly, an integral part of the study design was to define and describe the characteristics of the Phase I and Phase II participant samples clearly. Potential interview participants for Phase II were invited from the pool of Phase I participants who had experienced ARC harm and from across the range of health for those participants, using the proxy health status groups determined in Phase I. The resulting dataset for the Phase II analyses was derived from a saturation sample of 25 interviews.

As a result of the purposive sampling process used, all the Phase II participants had experienced ARC harm and the range in health status achieved in Phase II represented the range observed in Phase I. The Phase II and Phase I samples were also similarly biased for gender, with the 25 young adult interviewees comprising seven male and 18 female participants. However, there were proportionally fewer non-drinkers in Phase II, as 23 of the interviewees were drinkers and just two were non-drinkers. Also, as detailed in Chapter 4, the Phase II sample achieved did not represent the study's full target age range of 16 to 24. This was because none of the college students who participated in Phase I accepted the invitation to be interviewed in Phase II. The age range achieved for Phase II participants was therefore confined to the ages of 18 to 24. Nevertheless, interview participants' reflections on their younger selves' ARC

harm experiences provided some further insights into the ARC harms experienced by 16 and 17-year-olds and these were represented in the analysis.

In this and subsequent chapters, names are allocated to the interview participants to enable selected quotes in the analyses to be attributed to individual interviewees. Details of the names allocated to each participant after complete anonymization of the interview dataset were set out at Table 4.10, *Profile of the interview sample of participants*. Also, the analyses that follow refer generically to a person who caused an ARC harm as a *perpetrator*, and a person who experienced an ARC harm as a *victim*. It should be noted that, *perpetrator* and *victim* are not mutually exclusive terms. Sometimes, the young adult participants who provided information about their experiences of ARC harm also described themselves as perpetrators of ARC harm. All the interviewees who were drinkers also answered ‘yes’ when asked if their own drinking had ever adversely affected others. Therefore, the young adult victims represented may also be perpetrators of ARC harm in other circumstances.

6.2 Introduction to the Phase II analysis

In Phase II of the study, follow-up, semi-structured interviews with a purposive sample of the Phase I survey participants provided the additional information that completed the empirical dataset analysed. In accordance with the study design, and as detailed in Chapter 3, continuity between Phase I and Phase II was secured through three main elements in the study method. Firstly, the sample of young adult participants in Phase II comprised a purposive subset of the Phase I participants. Secondly, the Phase I survey questions relating to ARC harm, and the thirty individual types of ARC harm identified in Phase I, formed part of the structure for the semi-structured interviews. Thirdly, the triangulation of the Phase I and Phase II findings included reflexive consideration of the initial characterisation of ARC harm determined in

Phase I. In Phase II, predominantly qualitative analyses were used with some content analysis to supplement and complement the Phase I findings by confirming or qualifying the initial Phase I characterisation of ARC harm. The ARC harms identified and the taxonomy of ARC harm conceived in Phase I became foundations for the characterisation of ARC harm in Phase II. The analyses in Phase II then supplemented and extended the Phase I findings on ARC harm by addressing the deeper questions of why and how ARC harm occurs.

The results of the TA processes used in Phase II are reported over the next five chapters. The first semantic themes generated using TA are addressed in this chapter. These derive from the descriptive patterns identified in the young adults' accounts of their experiences of ARC harm. These first themes characterise ARC harm by bringing together a fairly literal interpretation of the types of ARC harm described in the data provided by the Phase II participants. Later chapters use the complete TA process to encapsulate patterns of meaning, consider latent themes and develop superordinate themes around ARC harm through a greater level of interpretation of the Phase II data.

QUALITATIVE DATA ANALYSIS IN PHASE II

6.3 Using Thematic Analysis in Phase II

As described in Chapter 3, the full dataset of interview transcripts was subjected to TA. TA was used as the critical analytic method because its range and flexibility were suitable for achieving the study's aims. In accordance with Silverman (2006) the TA process was applied with the aims of the research driving the analysis, to capture the important elements in the entire interview dataset. The analyses followed the six phases of TA set out by Braun and Clarke (2006). (See Table 3.2, *Phases of Thematic Analysis*). Accordingly, the analysis of the

new qualitative information relating to ARC harm generated by the interviews was first organised into initial codes. These were then grouped together to identify initial themes in the data and reviewed before final themes were defined. Interview transcripts were coded systematically using Nvivo (2012) to organise and manage the data, with its use informed by Bazeley and Jackson (2013).

As each interview progressively provided further rich data on the ARC harms experienced by the participants, the data were categorised and conceptualised through an iterative and reflexive process. Through this process, a coherent and complete set of codes for ARC harm was generated to represent the dataset: *“a comprehensive set of codes that differentiates between different concepts, issues and ideas in the data, which has been applied consistently to the dataset”* (Braun and Clarke, 2013, p. 211).

6.4 Generating codes

In accordance with Braun and Clarke (2013) the researcher began the process of generating codes from the interview data by seeking meaningful ideas that recurred in participants' stories of their ARC harm experiences and by looking for patterns: *“Pattern-based analysis rests on the presumption that ideas which recur across a dataset capture something psychologically or socially meaningful”* (Braun and Clarke, 2013, p. 223). Codes were generated by examining participants' subjective experiences of ARC harm in the context of other peoples' behaviours in their family and social circles, and through the participants' interactions with their physical and social environments.

In Phase I of the study, the ARC harm examples reported by the survey participants had been coded into thirty types of ARC harm and classified into eight categories. Chapter 5 described

how these types and categories were identified inductively and used to generate the taxonomy of ARC harm in Phase I. These qualitative findings were considered reflexively in Phase II. The extent of the Phase I coding had been limited, however. Langdridge (2004) describes three levels of coding to reflect the extent to which coding is an interpretation of the meaningful data in the source material. These levels comprise *first order* coding which is purely descriptive, *second order* coding, in which the descriptive codes are combined and *third order* pattern coding for the TA process. First and second order coding had been applied in Phase I to generate the taxonomy of ARC harm. Third order coding had not been attempted in Phase I as the depth of the qualitative data was constrained by the survey method of data collection. Nevertheless, the inductive categorisation of participants' experiences of ARC harm in Phase I provided a preliminary framework that was incorporated into the analysis of the Phase II data.

In Phase II, coding of the interview data commenced, as in Phase I, with first and second order coding. The initial mapping of the patterns was around the 'who', 'what', 'where' and 'when' of ARC harm experiences. First order coding in Phase II mapped the participants' reported ARC harm experiences in terms of the actions of perpetrators and the impacts on victims.

The mapping of the examples shown in Figure 6.1, *First order coding for the ARC harm of Nuisance*, illustrates how some of the interviewees' literal descriptions of ARC harm experiences were coded together as *Nuisance*. For example, several examples of perpetrators' ARC harm behaviours were identified as *shouting and being rowdy*, and several examples of the ARC harm impacts on victims were identified as *woken at night* or *cleaned up after drinkers*. Second order coding then combined these groups into the category of *Nuisance*.

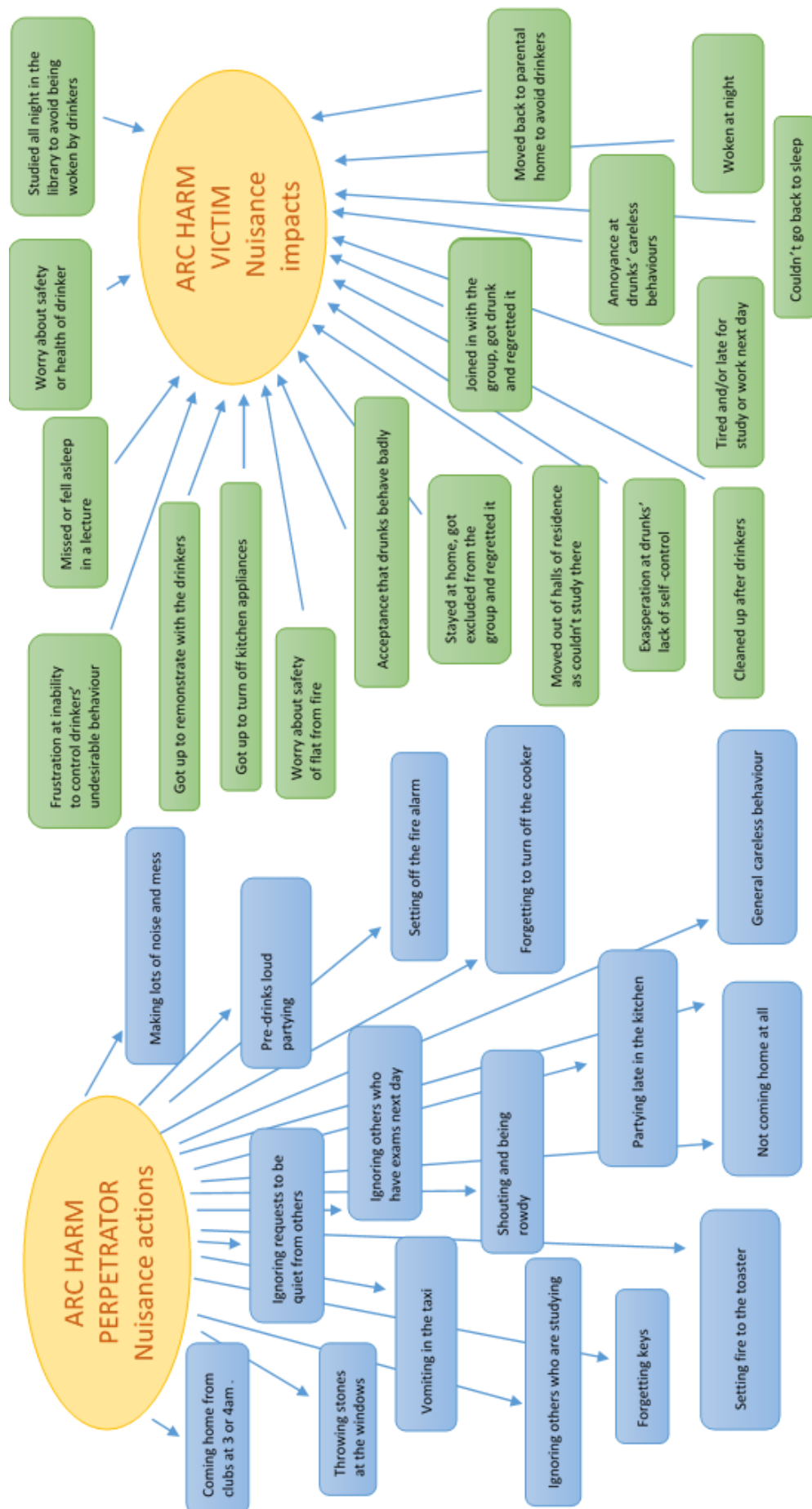


Figure 6.1 First order coding for the ARC harm of Nuisance

As recommended by Creswell (2012) the researcher began the second order coding of the new data with a short list of categories. These categories were: *Nuisance*, *Tolerance*, *Pressure*, *Unsought responsibility*, *Psychological harm*, *Physical harm*, *Relationship harm* and *Undisclosed harm*. These eight categories drew on the first order coding in Phase II and on the categories of ARC harm identified inductively from the Phase I survey data. These comprised the first ‘interesting features’ entered as potential codes in accordance with the second phase of TA (generating initial codes) as described by Braun and Clarke (2006). The categories identified in Phase I were thus integrated into the first tentative ‘parent’ codes in Phase II. Relevant extracts of the interview transcripts were coded to these as ‘data items’ to represent the different elements that characterised ARC harm for these young adults. The participants’ accounts also provided additional insights into the social and psychological relevance of ARC harm in their lives. These generated further new codes to address the ‘how’ and ‘why’ of the ARC harms experienced by the participants and the scale of the impacts on their lives.

6.5 Searching for themes

As the Phase II data analysis progressed, new codes emerged to incorporate the new data items collated, and existing initial codes were modified and regrouped accordingly. In this way, new information from each interview was used to expand and adjust the coded categories continuously, systematically and cyclically. As each interview was coded in turn, more codes were added, existing codes were reappraised and confirmed or realigned to capture the developing patterns of meaning. The patterns revealed were examined and the relationships and environments in which ARC harm had occurred for the participants were determined. This process of continuous review and revision, using the rich data produced by the interviews, expedited the identification and interpretation of themes around the multifaceted types and varying impact levels of ARC harm.

As additional elements emerged to explain the ARC harm experiences, subsets and reclassifications were distinguished from the original categorisations. In this way, new parent codes were generated to capture the broader and deeper concepts arising from these patterns and the initial categories entered were subsumed and transmuted into themes.

The important new information arising in the interviews generated codes that reflected the depth of the participants' emotional responses to an ARC harm experience, or to a series of ARC harms, or to a long-standing chronic experience of ARC harm. The emotional responses captured thus included short-term shock and longer-term distress or resignation in response to drinkers' unwelcome behaviours. ARC harms as the unseen impacts of undesirable drinkers' behaviours thus came to the fore. These not only emphasised the division first detected in Phase I between the more visible facets of ARC harm and those that were hidden from view, but further underlined the consequence of the unseen elements.

The first themes derived from the analysis of the Phase II interview transcripts focused on quite literal interpretations of the interview transcript data that emerged from the pattern of the coded data items. Braun and Clarke (2013) distinguish such semantic themes from the 'latent' themes, which address underlying meanings derived from deeper interpretation of the data by the researcher. Each of these semantic themes encompassed and interpreted a number of individual facets of ARC harm and thus represent the meaning extracted from a suite of experiences reported by the participants

These semantic themes were divided into two groups to capture the 'seen' ARC harms and the 'unseen' ARC harms. Visible ARC harms that had an immediate impact were coded to *Nuisance* and to *Physical harm*. These two themes thus represent the character of the ARC

harms that are easily seen. The invisible harms, which were also often less-immediate, and longer-term, were coded to *Tolerance*, *Pressure*, *Unsought responsibility*, *Psychological harm* and *Relationship harm*. (See Appendix 6.1, *Phase II Semantic themes characterising ARC harm*). These five themes represent the character of ARC harms that are covert and unseen. These first themes emerging in Phase II to characterise ARC harm largely echoed the categories in the Phase I taxonomy. However, the coding of the ARC harms in Phase II altered the pattern of the characterisation of ARC harm considerably, as unseen ARC harms came to dominate the dataset. It also became clear that even the immediate and visible ARC harms described often had longer term, and unseen, psychological impacts on the victim.

CHARACTERISING ARC HARM: THE SEMANTIC THEMES

ARC harm: Visible harms with immediate impact

6.6 Theme: ARC harm as Nuisance

“Coming in at three or four, drunk, making loads of noise”

This theme represents the relatively low-level ARC harms described by the young adult participants, as illustrated above in Figure 6.1. In this theme, *Nuisance* encompasses the immediate impacts on the victims and the victims’ immediate responses to nuisance, such as frustration and exasperation. Almost all the interviewees reported experiences of nuisance and disruption to their lives caused by someone else’s drinking. The most frequently reported impact was lost sleep or an impact on studies from being woken late at night: *“At my last university, loud drinking parties often would mean that I couldn’t study very well”* (Queenie, aged 24). However, unsurprisingly, participants were often keen to report that, despite the disruptions, they had not allowed their studies to be affected.

Examination of the new data emphasised the Phase I finding that even seemingly minor and low-level ARC harms caused a considerably greater impact through repetition:

“She goes out Mondays and Wednesdays usually and she knocks up at the house around four-o-clock in the morning, very loud, and she sometimes forgets her keys and she keeps knocking and throwing stuff on the windows until somebody gets up and opens the door and then she has this urge to talk very loud, I don’t know who’s she’s talking to, and then she makes ‘phone calls for up to an hour or so, like in the middle of the night. It’s so annoying, I’ve been fuming over that” (Olivia, aged 23).

Such repetitions prompted irritation in the moment and more extreme responses over time, such as moving home to avoid the disruption. It also became apparent that participants reacted to them by adjusting their own lives to accommodate the drinker’s behaviour in some way. Some participants reported, resignedly, their attempts to live around the perpetrators:

“There was two of us in our flat that were having exams and the other three weren’t and two of them they’d go out quite a lot and so be coming in at three or four, drunk, making loads of noise, didn’t really care, and obviously that was like exhausting, and then we had to get up in the morning” (Vivienne, aged 18).

In addition, some participants, wishing to go on social outings found themselves excluded if they were non-drinkers or moderate drinkers:

“Sometimes it won’t be direct, I mean it can be that you might not just get invited even to something because people ... think you’re not going to drink. So, that’s another pressure that’s actually not really direct” (Carl, aged 21).

Nuisance often manifested in tandem with the theme of *Tolerance* as participants simultaneously described the adjustments that they had made to accommodate the drinkers' undesirable behaviours. This served to demonstrate a tripartite structure in the ARC harms described. This comprised the element of the drinker's undesirable behaviour (disorderly and rowdy), the impact on the victim (woken at night/tired next day) and thirdly the victim's response to that impact, with the response options of confronting it, living around it or avoiding it in future. In a few cases, participants reported confronting the perpetrators and venting their frustration on them:

"Yeah, been down there and had a shout at them then and 'be quiet, do you know how loud you are?', like 'no we're drunk' like 'just stop it and go to bed, you've come back now, just go to bed'" (Edward, aged 22)

However, there was also widespread acceptance that such efforts were futile:

"We weren't very happy with them and even when we'd speak to them, they're like 'oh, we'll keep it down' but because they're drunk, they don't really realise how noisy they are and you know they're saying 'Shh...' but they're shouting 'Shh...' so it's not really, you know, that effective" (Vivienne, aged 18).

In the case of *Nuisance*, as confrontation was both tacitly and explicitly acknowledged to be futile, the drinkers' unacceptable behaviours were effectively accepted because the ARC harm victim adjusted their own life to accommodate the nuisance created by the drinker. Some of the adjustments described by participants in an everyday and casual way were quite extreme:

"My friend goes to the library, like all night, because she probably, she could get more work done like there so... She did it last night actually because some of us went out so

she went to the library, she stays, she does her work there because she just she'll get disrupted and stuff" (Melinda, aged 19).

6.7 Theme: ARC harm as Physical harm "I've been attacked by a drunk person"

In this theme, the title *Physical harm* embraces acute risk of physical harm and such harms as being injured in a fight by a drinker, or in an unsolicited attack by a drinker, or by a drunk driver. It also includes accidental physical harms occasioned by drinkers' carelessness.

Participants described a range of physical harms experienced directly at the hands of drinkers. Some of these were sustained in fights or unsolicited physical aggression. One participant amply demonstrated the visible nature of such ARC harms not only by relating the story of a recent experience of unsolicited violence from a drunk, but by presenting the physical evidence. He attended for interview with a large, fresh scar from a facial cut sustained in the incident, which had also temporarily damaged his eyesight. Other examples included an accidental injury to a participant who had trodden on a carelessly discarded wine glass, only to find that the glass stem had pierced right through his foot. However, the most horrific physical injuries described by participants were the results of road traffic accidents caused by drunk drivers. These included severe, life-changing injuries, and deaths of friends.

ARC harm: Invisible harms, often with longer term impacts

6.8 Theme: ARC harm as Tolerance "You have to keep just moving away"

In this theme, the title *Tolerance* encompasses adjustments, accommodations and acts of avoidance made by the young adult participants. Participants reported accepting unacceptable behaviour from drinkers by adjusting their own lives in some way to live with, avoid or mitigate the impact that drinkers had on them. Tolerance therefore manifested in numerous different

ways. Several interviewees reported staying away from places where people get drunk such as the city centre or certain pubs and clubs:

“...people fighting and stuff, that’s something I like to avoid, not really into conflict. So I walk away from that... where I live there’s this bit of town, it’s guaranteed that every Saturday there’s at least one fight somewhere” (Frank, aged 23).

Other participants reported that they did not stay away as they sought the socialising, music and dancing, but that the price to be paid for this was tolerating the undesirable ARC harms that came with the experience:

“But people, you know, will get very close to you or dance on you or, you know, touch you and you do tell them to go away, but they just don’t. You know then you have to end up leaving” (Queenie, aged 24).

Some participants made a point of avoiding people who were drunk generally, usually citing the potential for violence or unpleasant behaviour:

“I love dancing. So I just go out and have a dance on the dance floor and if there is any like fights or like too-drunk people acting out or anything, I just try and avoid it as much as possible... It obviously, it ruins your night if you get involved in one” (Kristie, aged 18).

Participants who attempted to tolerate heavy drinkers by socialising with them without drinking heavily themselves described mixed feelings. Those who did not drink or who drank moderately could find themselves excluded or on the periphery of social activities:

“I think being sober when everyone else is sort of out of it, it can... In a way, it is good because you’re sort of... you can look after them and stuff and you’re like “don’t do

this! Don't do that!" But then you can end up just being like "why have I come out?"
(Stella, aged 19).

Again, as for *Nuisance*, repetition of the seemingly minor facets of *Tolerance* had a greater impact. For example, non-drinkers or more moderate drinkers found that their less moderate drinker friends were repeatedly excluding them from outings:

"I didn't get invited to things. I was thinking well, you know, I could have quite easily gone, I could have even had... You don't have to have a lot to drink. I don't see that, it's bizarre, it's absolutely bizarre. I don't see why you have to have eight pints, you know" (Carl, aged 21).

In situations of tolerance, the ARC harm victim was described as enduring the drunk person, but not actively taking on responsibility for them. Participants also described taking avoiding action to keep separate from drinkers. Illustrations of this behaviour were provided by participants whose parents were heavy drinkers. In one such case, the participant reported avoiding her drunk father because being with him was hard to bear:

"If I'm at home and my dad's drunk and I'm not drinking then I'll just stay in my room... I do like to have a talk with my dad, but when, when he is really drunk, it is hard to have a conversation, so I will stay in my room. This is what I used to do when I was younger, obviously I prefer not to... yeah, I don't like seeing him drunk all the time" (Yvonne, aged 19).

In another case the participant described the discomfort behind his avoidance of his father:

"I was more afraid of him when he was sober really. Yeah, when he was drunk he was mostly just happy with us, if anything too, like too many hugs and stuff when he was

drunk, so, uncomfortable, yeah. But not in sort of like scared for my own safety..."

(Nathan, aged 19).

Other participants described their efforts to parent their parents' drinking habits, but also sought to defend them from any censure that might attach to their parents from the descriptions of their drinking. Typically, such participants advised that the parent currently had a good job, or they stated directly that they did not want to get their parent into trouble. Others with parents who drank frequently described growing up in the absence of parental attention, and one participant reported that he had only ever had one conversation with his father when his father was not drunk. Only one of these participants expressed anger or resentment about the multiple effects of parental drinking. The others displayed apparent resilience and made no complaint, despite the parental deficits described and the evident detrimental effect on themselves and the family. The one participant who expressed anger had received counselling for this. Speculatively, that may have enabled that participant to say this without feeling guilt or betrayal.

In almost all cases, the young adult participants reported making adjustments to their lives, in respect of what they would otherwise have been doing, to accommodate the carelessness or irresponsibility of drinkers' undesirable behaviours. These tolerant behaviours were normalised to the extent that brooking selfish and inconsiderate behaviour from drinkers was accepted as part of life in the young adult world of the interview sample. The life adjustments made were small, moderate and large. They ranged from managing with less sleep, to catching up on studies at other times, to sitting exams when tired, to moving out of accommodation, to living with a parent who did not fulfil the role of parent and to getting on with life despite a personal bereavement caused by a drinker.

In this way, the ARC harm theme of *Tolerance* was seen to represent a range of adjustment and accommodation that might be required in different circumstances for different ARC harm impacts. Crossing the street to avoid rowdy drunks or staying away from the city centre might be a negligible irritation requiring little in the way of adjustment to one's life. However, participants' descriptions of adjustments during childhood, and in the present, to accommodate a drunk parent required adjustment of a different order of magnitude.

6.9 Theme: ARC harm as Pressure into unwanted situations “I really didn't want one”

In this theme, the title *Pressure into unwanted situations* encompasses pressure to drink more alcohol, sexual pressure and pressure to accept unacceptable behaviour generally. This theme can be seen to link immediately to *Tolerance* and, for practical coding purposes, was distinguished from it as the point at which tolerance became overwhelming. All the interview participants reported experiencing pressure in some form. Participants most frequently reported experiencing pressure from drinking friends who encouraged drinking alcohol as 'normal' socialising. Participants who did not wish to drink alcohol were occasionally accepted (e.g. when one participant had an illness that required her to abstain or, for the non-drinkers in the sample, after a long period of insistent and determined teetotalism). Yet, the overriding experience of the participants was one of pressure to drink, and to drink heavily:

“I've got quite drunk on occasions like that, where I've said I wasn't drinking at the beginning of the night and people just keep buying you drinks and then you end up quite drunk” (Betsy, aged 23).

However, it should be noted that all but two of the interview participants were drinkers and evidently enjoyed the pleasures of alcohol. The pressure to drink was not always described as unwelcome and sometimes participants were ready enough to succumb to temptation. Several

participants reported that they had been more susceptible to pressure to drink when they were younger, either whilst still at school, and sometimes underage, or when first arriving at university. In these cases, the participants tended to report having, later, moved away from that world of pressured heavy drinking, or grown up and risen above it. Some reported moving away from the friends who adopted that lifestyle, others reported moving beyond the mindset that made their younger selves more susceptible to this ARC harm:

“There’s a lot of peer pressure going on as well for sure. But now, being more mature, having more mature friends, it’s like it doesn’t really matter anymore” (Dan, aged 22).

Another adjustment, made in response to pressure to drink involved deception. Several participants had pretended to drink alcohol to humour the expectations of other drinkers:

“I just have a Coke and pretend it was really, really strong. [Laughter] Just because I know my friends would want me to get as drunk as them or they would want me to have a good time like them, even though I am, you know, I would be having a good time anyway” (Tess, aged 19).

ARC harm pressure in the form of undesirable sexual behaviour from drinkers was reported by all but one of the participants. Unlike the pressure to drink, this was universally described as unwelcome. The young male participants described it as a one-off experience, whereas for the young women it was a regular and frequent occurrence to be endured. The young women described sexual pressure in terms of disgust and offence, but also in terms of the price to be paid for going out, and especially for dancing in a club. Often this behaviour was tolerated on the grounds that the perpetrator was drunk. To go dancing, young women ran the gauntlet of ARC harm from male drinkers in the forms of inappropriate sexual barracking and unwelcome proximity, accompanied by overly-familiar hand and mouth to body contact.

“That one really gets to me... In nightclubs, yeah, it’s kind of... I avoid night clubs now for one of those reasons because it seems to me a sort of accepted thing now in nightclubs to be sort of groped and touched... and I just sort of find it really sort of sickening” (Betsy, aged 23).

One report, in particular, emphasised the difference in the experiences and perceptions of this ARC harm for the different genders:

“My brother when he was out before, there was a gay guy and he was dancing, the same way men do to other, to women, he was doing that to one of their friends and he kept doing it to this guy and he was a straight man, he felt really uncomfortable with it and he said to him ‘You know, mate, can you not’, you know ‘I’m not gay and I’m not interested’... and then he did it again. And then, so all the lads they took him outside and they like got really aggressive with him...my brother came home from this thing and... he said about how awful it was and I said ‘that happens to me every time I go out’... Then it really clicked with him and he was like ‘oh, my goodness’ like ‘I’ve never even thought about that you know that that happens to other people, like to women like all the time and that that is actually how it feels” (Whitney, aged 20).

This example illustrates the high level of subliminal tolerance and acceptance amongst the female participants for the ARC harm of sexual pressure from male drinkers, even when the young women themselves described such behaviour in terms such as ‘sickening’. It also illustrates how that tolerance renders such unacceptable behaviour invisible to others.

6.10 Theme: ARC harm as Unsought Responsibility: “It’s not what you want to be doing”

This theme goes beyond tolerance and pressure and encompasses taking on the role of carer for friends or family members who have had too much to drink, and rescuer of friends from

arguments or from fights. The theme might be summarised as: those who care, those who don't care and those who are cared for. It speaks to later chapters in which the ARC harm perpetrators and the ARC harm victims are discussed. The survey data had provided information on instances of short-term care for drunk friends or family members. These were supplemented in Phase II by additional instances of often difficult, unpleasant and protracted care for friends and family members. The depth of the interview data indicated that the ARC harm of *unsought responsibility* not only made greater demands on the young adult in question, but was often of longer duration, and sometimes ongoing. The Phase I category of *unsought responsibility* was transmuted from a series of instances in which one young adult looked after another into a theme in which the ARC harm perpetrator transfers responsibility for himself or herself on to another person.

As with the other descriptive themes for ARC harm experiences, the range in the severity of impact within *unsought responsibility* was considerable. At one end of the scale, it was no more than one young adult taking responsibility for a drunk friend by persuading them to have a soft drink instead of more alcohol. At the other end of the scale, the young adult victim was regularly cleaning up the body fluids of her dying, alcohol-dependent uncle. In between these extremes, every participant reported instances of varying degrees of care for drunk friends or family members, such as rescuing them from arguments and fights, carrying them home safely, putting them to bed and watching over them so they would not choke on their vomit. Eight participants even reported proactively going to the aid of drunk strangers in need of help to take responsibility for them:

“There was this girl who was sat on a pavement, throwing up all on her own... I saw her, her friends were with her, and then they went ‘we’re not looking after her anymore’ and just ran off. And so, I went over and sat with her until she’d finished throwing up

and then I called her a taxi and asked her if she knew her address and she said she did, so I put her in a taxi and she went off” (Kristie, aged 18).

In some instances, and to some extent, the care for drunk friends was a reciprocal arrangement. However, it was apparent that some young adults were cast in the role of carers who took on the unsought responsibility, where others rejected it, and others again cast themselves in the role of helpless drunk needing care:

“And when you have to look after friends you want to do what’s best for them, but it can be stressful as well. You can’t pretend it’s what you want to be doing because it’s not..., but you just do it because they’re your friends so...” (Kristie, aged 18).

Some facets of *Unsought responsibility* might seem relatively straightforward such as taking a drunk friend home safely after a party, but the participants’ descriptions made it clear that this was unlikely to be a small undertaking given the probable level of intoxication involved:

“...especially if they’re passed out, it’s really hard to get them home properly and... yeah, if they’re like really ill, like throwing up everywhere, it’s quite hard to get them home as well” (Melinda, aged 19).

Other facets of *Unsought responsibility* were self-evidently very heavy responsibilities for young adults to be taking on, such as the young woman who described supporting her mother during her teens in caring for her mother’s brother who was dying of alcoholism:

“He was forty-something when he died, no just forty I think when he died. So, it was kind of like bit by bit, but he was ill for the past six/seven years, kind of in and out of hospital and my mother and I would go and clean the house when it would have like you know... when it was really bad there’d be kind of like, you know, throwing up blood

and things like that in the toilets, the whole bathroom was a complete mess. It was really hard going to see him and seeing him like that. I was kind of more going for my mum more than anything” (Annie, 21).

6.11 Theme: ARC harm as psychological harm “I’m really worried about her”

This theme encompasses the stress and distress facets of ARC harm. It ranges from, for example, the embarrassment experienced when participants’ families had drunken arguments, to worrying about friends or family members who were heavy drinkers, to the shock and bereavement experienced on the death of a close friend or family member. One participant described an example of the latter and, in so doing, amply demonstrated the extent of the impact that this had had on her. The incident had occurred over a year previously, but, as she attempted to speak about it, she was immediately overcome by tears and unable to go on. After a pause, she determinedly returned to the incident, saying *“If anything can be done to avoid that ever happening again, then I’d like to cover all that”*. She then gave a succinct, matter-of-fact account of what had evidently been a life-changing experience for her:

“The driver was drunk, they were all drunk, they came in too fast and crashed and one of the ... My friend, who was the only one wearing a seatbelt, she died... and then there was another three of them seriously injured, like in hospital. One was in a coma, the other one I think lost his hand... The driver was fine, but he’s in prison now for manslaughter and he’s on suicide watch in prison” (Betsy, aged 23).

6.12 Theme: ARC harm as Relationship Harm “He’s like a different person”

This theme encompasses the various facets of the negative effects on current or past relationships caused by friends' alcohol consumption. Inductive coding of the ARC harm stories from the interviews to *Relationship harm*, broadened the Phase I findings on individual

instances of ARC harms within relationships. Conceptualising the overall impact of ARC harm on relationships involved the sub-division of the original single category into three subsets, designated as *Conflict*, *Degradation* and *Severance* to represent the varying degrees of ARC harm damage within participants' relationships. Arguments with friends and partners who had been drinking were frequently reported and there were references to ex-partners where drinking behaviours were cited as part of the reason for severance of the relationship. Several participants described ARC harms in the form of unwelcome increases in carelessness and irresponsibility in their friends, partners, family members and acquaintances that occurred when they had been drinking:

“and I’ve told him how much I hate it, but he still carries on and he says he can’t help it because he’s drunk” (Tess, aged 19).

Unwelcome and significant personality changes in family members and friends were also recurring facets reported in the overall pattern of ARC harms to relationships:

“One of them has told me very horrible things to me when he was drunk about like me and how he wanted me to die” (Edward, aged 22).

6.13 Undisclosed ARC harm *“Oh, there is, there is, yeah...”*

The inductive refinements to the Phase I taxonomy categories of ARC harm included subsuming the category of *undisclosed harm* into the theme of *psychological harm* as participants' reluctance to disclose the nature of such ARC harms represented a psychological scar. All the interview participants were quite forthcoming about their experiences of ARC harm and had readily provided examples of ARC harms from their own personal experience. Nevertheless, when each was asked at the end of the interview whether they had experienced any other ARC harms that they felt unable to disclose, twelve of the twenty-five interviewees

replied that they had. Given the extent of the personal information that the participants had readily provided up to that point of the interview, this strongly suggested that the undisclosed ARC harm experiences should be coded as psychological harms. There were fewer instances and, by definition, no illustrative examples for a separate ARC harm theme alongside the other descriptive themes. Nevertheless, to accord with Braun and Clarke (2013) who cite Stephen Buetow's (2010) 'saliency analysis', it was noted as salient in the emerging ARC harm pattern:

"In working out which patterns are relevant and important in relation to your research question it is not just a question of which are the most frequent. While frequency is an important factor, it is also about capturing the different elements that are most meaningful" Braun and Clarke (2013, p. 223).

In addition, at the point in the interviews when participants were asked if they had experienced any ARC harms that they felt unable to disclose, two participants then elected to volunteer details of an ARC harm experience that they had not disclosed earlier. These two young adults then disclosed something withheld up to that point which had had a deep and personal impact on them. Both participants described their respective ARC harm experience as one in which they felt at least partially responsible because they themselves were drinking at the time. Certainly, the alcohol consumed appears to have increased the participants' vulnerability to ARC harm in an environment they were unable to control.

The first of these participants had left the family home to go to university on an earlier occasion when he was younger. He had not been able to adjust to the pressures of the new environment, including those around alcohol, and had a breakdown and dropped out after one year:

"...it's not something that I'm proud of. It's something that's more to do with me. I actually went to university for a year when I was nineteen and, er, I had a bit of a

breakdown. I used to drink quite a bit then and I started to self-harm. I think generally, it was just a general depression that came over and then drinking obviously didn't help because it's a depressant, so like it didn't really help with anything. It was probably a catalyst, yeah, to be honest, it was probably the catalyst that caused it. To be honest with you, I'm actually really over it now anyway" (Frank, aged 22).

The second of these participants had experienced sexual pressure and had unintended sex with someone she had just met after leaving a club with him when she was very drunk:

"I don't even know how much I drank, like a lot, like there was deals everywhere. I was bad to the point of weeing myself in a club and throwing up, that's how... My friend was convinced that I was spiked... and I had sex with someone, er, that I never met before and that was completely out of character for me and I regretted it and it was purely because I'd drunk that much... like even when I would go out and boys would be quite touchy-feely, I'd be like 'no!' I know people do it, but that's just not me, and I just hated the fact that I'd done it and thought 'oh, god.' Yeah, he was drunk too, er, so both just drunk and stupid on a night out. Like who knows who this person was, do you know what I mean?" (Vivienne, aged 18).

These two late additions to the examples of ARC harm experienced by young adults provided an intimation of the potentially extreme nature and consequences of the types of ARC harms that participants had elected to censor. These two participants' accounts of their experiences as aberrations in their past, from which they were anxious to disassociate themselves in the present, may also provide a clue to similar ARC harms that remained undisclosed by others.

QUANTITATIVE DATA ANALYSIS IN PHASE II

6.14 Using quantitative analysis as an adjunct to Thematic Analysis

As detailed in Chapter 3, quantitative methods had predominated in Phase I, supplemented by qualitative analysis. As above, in Phase II, qualitative methods came to the fore and TA was the principle method of analysis. However, quantitative analysis also had a role to play. Preliminary content analysis, with mutually exclusive codes, was used in Phase II to summarise the qualitative data quantitatively and to compare the findings with Phase I.

Braun and Clarke (2013) advocate a broad role for estimating quantity within TA by emphasising that the codes used in TA should ideally be relevant to many facets of the subject under analysis: “... *most of your codes should be evident in more than one data item, and you want some that are evident in many if not most data items*” (Braun and Clarke, 2013, p. 211). Silverman (2006) goes further and suggests that some quantification of qualitative research findings can be useful in revealing the generality of the phenomenon being described. He cautions, however, that, to be consistent with the goals of qualitative research, any quantification undertaken should reflect the study participants’ perceptions of their experiences of the phenomenon under scrutiny. In accordance with this, the quantitative content analysis in Phase II was confined to quantifying the types of ARC harm identified from the study participants’ own descriptions of their ARC harm experiences and to the categories of ARC harm and themes derived directly from these, and the composition of the superordinate themes was not quantified.

As seen in Chapter 3, three procedures were used to obtain quantitative data to gain further insights into the frequency of young adults’ ARC harm experiences in Phase II of the study.

Firstly, in the latter half of each interview, participants were given the list of thirty types of ARC harms identified in Phase I and asked if they had experienced each of these. The resulting numerical hierarchy generated is shown in Table 6.1 below, *Phase II participant-reported experiences of ARC harms identified in Phase I*. Secondly, the ARC harms identified through coding the Phase II interview transcripts provided a further, more detailed numerical hierarchy of the ARC harms experienced by the interview participants. Thirdly, the coded ARC harms referenced most often by the participants during their interviews provided another quantitative perspective. The resulting categorised hierarchy is at Appendix 6.1, *Phase II: Semantic themes characterising ARC harm*. All three procedures conformed to Silverman's (2006) cautionary principle for the use of quantification in qualitative research.

6.15 Exploring frequencies: How often do ARC harms occur for young adults?

When the Phase II participants were asked whether they had experienced each of the thirty types of ARC harm identified in Phase I, their responses indicated multiple experiences of ARC harm. The majority of participants said they had experienced more than half of these ARC harms and all or almost all had experienced some of them. For example, all 25 participants had experienced the unsought responsibility of looking after a drunk friend, 23 participants had experienced pressure from drinking friends to drink alcohol and 24 had experienced unwelcome sexual attention from a drinker. The numbers and percentages for the participants' 'yes or 'no' responses for all these thirty types of ARC harm are shown at Table 6.1, *Phase II participant-reported experiences of ARC harms identified in Phase I*. Table 6.1 also shows the responses for each of the eight categories of the Phase I taxonomy. Briefly, the numbers of Phase II participants reporting experiences in each of these categories were: *Nuisance* 22; *Tolerance* 23; *Pressure* 25; *Unsought responsibility* 25; *Psychological harm* 24; *Physical harm* 7; *Relationship harm* 21 and *Undisclosed harm* 12.

The 30 individual types and eight categories of ARC harm identified in Phase I	Phase II participant reported experiences		
	Yes	No	% Yes
Category of ARC harm: 1. Nuisance/frustration/exasperation	22	3	88%
Disruption/nuisance: e.g. missed sleep/study due to noisy drunken friends/others	22	3	88%
Category of ARC harm: 2. Tolerance/adjustment /accommodation	23	2	92%
Staying away from places where people get drunk (city centre/pubs and clubs)	16	9	64%
Staying away from people who are drunk or drink too much (family/friends/others)	16	9	64%
Deception (pretended to drink alcohol/disguised soft drinks as alcohol)	10	15	40%
Category of ARC harm: 3. Pressure into unwanted situations	25	0	100%
Drinking friends pressure to drink /encourage drinking alcohol as 'normal' socialising	23	2	92%
Unwelcome attention/sexual behaviour on part of drinker	24	1	96%
Drawn into/caught up in an argument by a drinker	16	9	64%
Category of ARC harm: 4. Unsought responsibility	25	0	100%
Persuading drunk friends to moderate their drinking/drink water or soft drink	22	3	88%
Rescue of drunken friend from an argument	20	5	80%
Rescue of drunken friend from a fight	11	14	44%
Looking after friend who is drunk	25	0	100%
Looking after family members who are drunk	11	14	44%
Calling ambulance for friends in need of emergency health care	5	20	20%
Accompanying friends to A&E for emergency health care	4	21	16%
Caring for alcoholic/heavy drinker family members	4	21	16%
Category of ARC harm: 5. Psychological harm	24	1	96%
Pressure to drink to conform as required in university life (expected student norms)	18	7	72%
Drink driving (travelled in car with drunk driver /concern about potential outcome)	13	13	52%
Upset/stress caused by friends' drinking habits	19	6	76%
Victim of aggressive behaviour by drinker (fear/upset)	16	9	64%
Distressed by behaviour of heavy drinker/alcoholic family members	12	13	48%
Distressed by death of a drinker/heavy drinker/alcoholic (family member or friend)	5	20	20%
Category of ARC harm: 6. Physical harm/acute risk of physical harm	7	18	28%
Drawn into and injured in a fight by a drinker	4	21	16%
Injured in unsolicited attack by a drinker	3	22	12%
Drink driving (Involved and injured in an accident caused by a drunk driver)	2	23	8%
Category of ARC harm: 7. Relationship harm	21	4	84%
Negative effect on current or past relationships from friends' alcohol consumption	19	6	76%
Negative effect on current or past relationships from family alcohol consumption	13	12	52%
Adverse long term historical effect caused by friends' alcohol consumption	6	19	24%
Adverse long term historical effect caused by family alcohol consumption	11	14	44%
Current or historical effect from a chronic heavy drinker in the family/social circle	13	12	52%
Category of ARC harm: 8. Undisclosed harm	12	13	48%
Prefer not to say (shame/embarrassment)	12	13	48%

Table 6.1 Phase II participant-reported experiences of ARC harms identified in Phase I

Overall, the Phase II participants had experienced a mean number of 16 of the 30 individual types of ARC harm identified in Phase I. The participant reporting the lowest number of ARC harm experiences had experienced 7 and the participant reporting the highest number had experienced 22. The participants' responses also indicated that 21 of the 25 interviewees had experienced ARC harm in six or more of the eight categories of ARC harm identified in Phase I. As all the interview participants had met the purposive criterion for selection of at least one experience of ARC harm, these findings suggested that young adults who had experienced one ARC harm were also likely to have experienced several others.

6.16 *Exploring frequencies: Hierarchies for ARC harm from the Phase II coding*

The Phase II interviews added many new types of ARC harm to those identified in Phase I. Nevertheless, the coding of the ARC harms in the Phase II interview transcripts generated an overall characterisation that was generally consistent with Phase I. This held true for the types of ARC harms coded individually and for the categories of ARC harm designated as 'parent' codes using Nvivo (2012) and thence assimilated into semantic themes for the purposes of TA.

The seven parent code categories derived in Phase II revealed a similar picture to the eight categories in the Phase I taxonomy, with very high proportions of the participants' transcripts providing individual data items that were coded to most of these parent codes. Briefly, 23 of the 25 interviewees' transcripts were coded to *Nuisance*; 18 were coded to *Tolerance*; 24 were coded to *Pressure*; 25 were coded to *Unsought responsibility*; 25 were coded to *Psychological harm*; 20 were coded to *Acute harm* and 20 were coded to *Relationship harm*. The full numeric data for the coding of the types of ARC harm identified from coding interview transcripts are shown at Appendix 6.1, *Phase II: Semantic themes characterising ARC harm*. The total number of types of ARC harm identified from the coding in Phase II of the interview transcripts

was almost double (58) the number of individual types of ARC harm identified in Phase I. Nevertheless, the broad similarity between the Phase I taxonomy and the coded semantic themes in Phase II is evident in a comparison of Appendix 6.1 with the taxonomy at Table 5.6.

Appendix 6.1 also details another numeric insight into the frequency of the ARC harms experienced by the Phase II participants. This is the collated data on the number of times each of the 58 individual types and each parent code category of ARC harm was referenced by the interview participants. The ARC harm parent codes with the highest number of references were: *Psychological harm* (258), *Unsought responsibility* (231) and *Pressure* (212). While these references do not necessarily represent individual experiences of ARC harm, their frequency further emphasised the pervasiveness of ARC harm in the lives of the young adult participants. It is notable too that these three, most frequently referenced, categories represent ARC harms where the impacts on the victim were not visible to the world at large. An iceberg might therefore be an apposite metaphor for the phenomenon of ARC harm, with the larger and more dangerous portion of it lying unseen below the waterline. (See illustration in Chapter 11 at Figure 11.2, *The iceberg metaphor for the phenomenon of ARC harm*).

SUMMARY AND DISCUSSION

Thematic Analysis was used in Phase II to describe and characterise ARC harm through a systematic and comprehensive coding and interpretive approach. In adopting TA in the study, the researcher undertook to fulfil Braun and Clarke's commendation for its use:

"TA ... It can be used to develop a detailed descriptive account of a phenomenon; it can also be used to develop a critical, constructionist analysis which can identify the concepts and ideas that underpin the explicit data content, or the assumptions and meanings in the data" (Braun and Clarke, 2013, p. 178).

The analyses in this chapter began that process by providing a more comprehensive characterisation of ARC harm than could be derived from the Phase I survey dataset alone. The rich interview data and the use of TA enabled the researcher to represent ARC harm from the perspective of a population group of young adult students more critically, and to understand the phenomenon of ARC harm as revealed by the entire study dataset. Rather than seeking to test any existing theory, the researcher used TA to develop specific theories to explain ARC harm as experienced and described by the young adult participants.

The Phase I qualitative analysis fulfilled a two-fold purpose in Phase II. Firstly, the ARC harm categories determined inductively for the taxonomy in Phase I enabled Phase II to build on that initial categorisation of ARC harms. Phase II supplemented and complemented these foundations by using the rich descriptive interview data to derive deeper insights and ideas with which to characterise ARC harm and to develop themes. Secondly, the 30 types of ARC harm identified in Phase I provided a basis for content and frequency analysis in Phase II.

The additional detail and depth afforded by the interview data extended the conceptualisation of ARC harm and enabled a deeper characterisation. An important finding was that unseen ARC harms dominated the dataset much more clearly than had been apparent in Phase I. The themes that emerged explained the covert character of many ARC harms, showing how these represented a hidden and unseen dimension within the totality of alcohol-related harm.

Turning to the statistical findings on frequency, neither the findings from Phase I nor those in Phase II can provide precise measures of frequency for ARC harm experiences for either of the study samples. Nevertheless, the Phase II findings on frequency complement those of Phase I by strongly suggesting that multiples of ARC harms were commonplace in this young-adult

group. There were also several further indications that repeated incidents of ARC harm increased their impact. The Phase II findings also suggest that multiples of the ‘unseen’ types of ARC harm play a significant role in the cumulative impact of ARC harm overall. Even an ARC harm like *Nuisance*, that at first sight appeared to be a minor irritation, was transformed into a greater harm as the psychological impact built up through frequent repetition.

Overall, the quantitative and qualitative analyses in the chapter provide an impressionistic picture of multiple ARC harms that not only flourished, but were so familiar that they were routinely tolerated as an integral part of young-adult life. The high frequency of ARC harm experiences among the participants also indicated that these experiences were normalised in their social sphere. This may partly explain the equally high levels of tolerance and accommodation of ARC harms, seen in the various ways participants lived their lives around drinkers’ undesirable behaviours, even to the extent of coping with severe consequences from drinkers’ actions, such as the death of a friend or family member. The chapters that follow examine further why and how ARC harms seemed to be so prevalent and inescapable that they were integral to the lives of these young adults, to the point where they became unseen.

CHAPTER 7: PHASE II ANALYSIS AND RESULTS

THE CRADLE OF ARC HARM: ENVIRONMENTAL RISK FACTORS

Summary of Chapter

The next two chapters comprise the second stage in the process of triangulating the quantitative and qualitative findings from Phase I and Phase II of the study. In them, the analysis moves on from characterising the phenomenon of ARC harm experienced by these young adults to provide perspectives on how and why ARC harm occurs. How and why ARC harm occurs are pursued first by examining the domains of influence that bear on the participants' experiences of ARC harm and by assessing the roles played by the environmental factors within those domains in precipitating the ARC harms experienced.

7.1 Introduction

ARC harm does not occur in a void. As with other experiences in human development, it arises from the complex interplay of the characteristics of individuals, the specific contexts in which they live and from the prevailing cultures that govern those contexts. Patton described this interplay as "*the undigested complexity of reality*" (Patton, 2002, p. 463). The next two chapters aim to progress the understanding of ARC harm by systematically analysing how it occurs and is accommodated in the landscape of the participants' lives. These chapters present themes that seek to explain the relevant ecological factors in the study participants' experiences of ARC harm and the risks these entailed. Attention is therefore turned to the participants' descriptions of the various physical settings and psychological contexts where ARC harms occurred, and to their accounts of the normative social, cultural and regulatory influences active in those settings and contexts.

As in Chapter 6, the results presented derive from TA and the interview transcript data were probed rigorously, using Nvivo (2012) to code, manage and organise the relevant data items systematically. In accordance with Braun and Clarke (2013) codes for environmental risk factors were generated inductively by examining participants' accounts of their experiences of ARC harm to identify repeated factors and patterns of meaning. The focus was on drinkers' behaviours in participants' family and social settings and on participants' interactions with, and interpretation of, the relevant environments. As such, the settings and contexts analysed also included those arising from the life stage of the young adult participants and those from their shared normative culture. In accordance with Silverman (2006) the aims of the research drove the TA process and the analysis followed the six phases of TA set out by Braun and Clarke (2006). TA was used to capture the important elements of risk across the entire interview dataset and the latent themes presented derive from the patterns identified. The themes expounded bring together an interpretation of the characteristics and patterns of risk embedded in the ecological contexts that featured in participants' accounts of ARC harm.

In turning attention to how and why the phenomenon of ARC harm occurred for the study participants, the various domains of influence acting on their ARC harm experiences have been analysed to ascertain the relevant ecological factors acting on their lives. In the approach to the study of people in their environments, these analyses are indebted to Bronfenbrenner's *Ecological Systems Theory* (1977) as introduced in Chapter 2. Accordingly, the physical and psychological environments where participants lived, studied and socialised were examined for their potential to influence their ARC harm experiences. The ecological factors considered also encompass the relevant properties of the individual, which reside within the young adults themselves, alongside the properties of the physical settings and psychological contexts that they inhabit. The psychological contexts addressed include both the normative social

environments shaped by the young adults' own perceptions of alcohol and of ARC harm, and the proximal and distal influences shaped by the regulation and conventions of others.

Content analysis, with mutually exclusive codes, was used as an adjunct to TA to summarise the relevant qualitative data in quantitative form. As in Chapter 6, quantification was used, as Silverman (2006) advises, to reveal the generality of the phenomena being described. Counting and tabulating the coded factors also signals that the themes represented arose inductively from the entire Phase II dataset, and not from any isolated features derived from a single transcript to support preconceived ideas. However, frequency in the Phase II content analysis does not equate to statistical significance. Rather, it represents an impression of the extent to which the ARC harm risk factors portrayed were significant for the participants.

IDENTIFYING AND QUANTIFYING ENVIRONMENTAL RISK FACTORS

7.2 The domains of influence acting on ARC harm

In Phase II of the study, participants' accounts of their ARC harm experiences suggested that a variety of ecological factors were implicated in their susceptibility to ARC harm. These factors, described in conjunction with participants' ARC harm experiences, were identified and coded inductively and collated to identify patterns of meaning. Some of these factors were readily identifiable as linked to concrete physical settings where ARC harms took place. Others were linked to less-readily-identified abstract psychological contexts afforded by those physical settings, or by the young adults' own conceptions and interpretations of them.

As Bronfenbrenner observed, the study of people within their environment *“requires examination of multiperson systems of interaction not limited to a single setting and must take*

into account aspects of the environment beyond the immediate situation containing the subject” (Bronfenbrenner, 1977, p. 514). Accordingly, the various physical settings and psychological contexts described in participants’ accounts were organised into two overarching domains of influence. Two parent codes were established for these: *Concrete physical settings* and *Abstract psychological contexts*. Recurring factors and clusters of factors connecting each of these settings and contexts to ARC harm experiences were then coded systematically to these parent codes from the interview data. (See Figure 7.1 below).

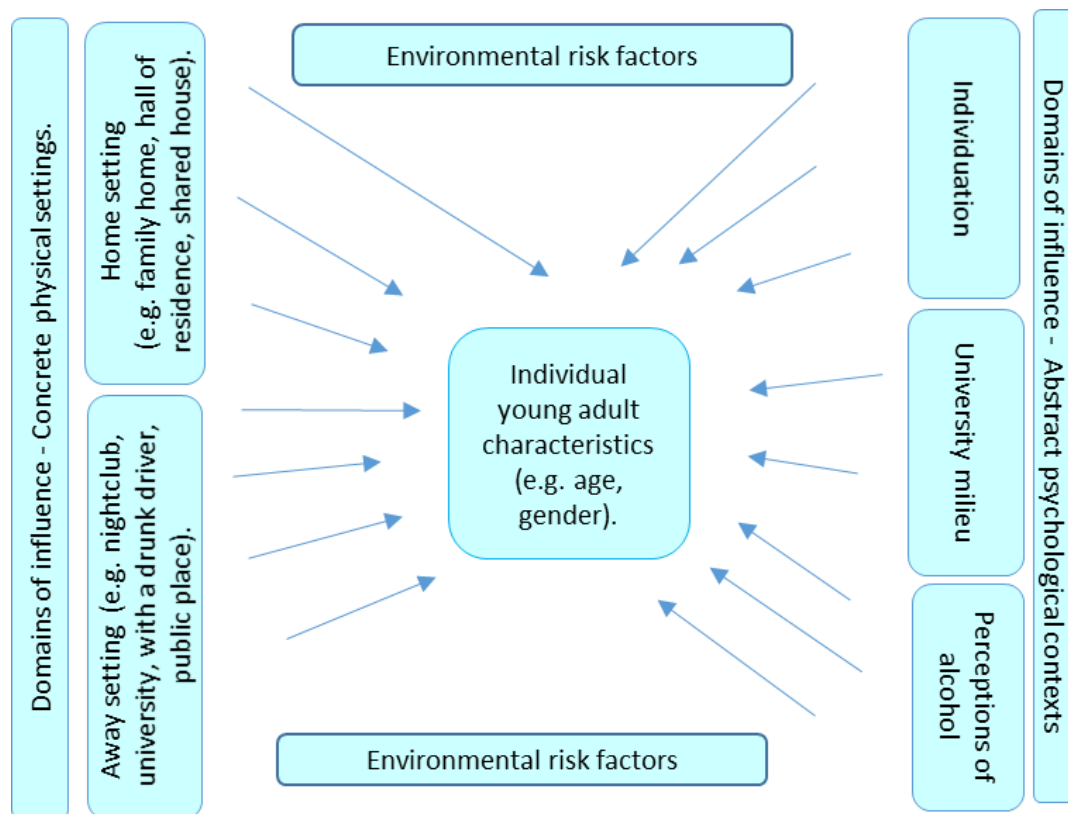


Figure 7.1. Domains of influence generating potential risk factors for ARC harm

These two overarching categories, were subdivided subsequently. The parent code of *Concrete physical settings* was divided into *Home* and *Away from home* settings to differentiate between ARC harm settings where the participants lived and the settings away from participants’ homes. Similarly, the parent code of *Abstract psychological contexts* was subdivided into three

contexts *Individuation*, *University milieu* and *Perceptions of alcohol*. This subdivision captured the three psychological contexts that recurred regularly in connection with the participants' ARC harm experiences. Figure 7.1 above illustrates the position of the study participant at the centre, with his or her own individual characteristics, in relation to the domains of influence identified for ARC harm and the environmental risk factors for ARC harm that these might generate. The hierarchy that emerged from coding all the relevant environmental risk factors is shown at Figure. 7.2, *ARC harm: Hierarchy of coding for environmental risk factors in Phase II*.

Once the coding of the ARC harm settings and contexts was complete, the relevant coded data items were subjected to further analysis. Qualitative analysis was used to examine how each of these settings and contexts played a part in the young adult participants' experiences of ARC harm. Content analysis was used to determine the frequency with which each of the coded settings and contexts occurred to provide a numerical hierarchy for them. Quantitative analysis of the coded ARC harm settings thus provided a background perspective to the process of interpreting the significance of these settings and contexts qualitatively. As detailed below, both the qualitative and quantitative data derived from the coded interview transcripts provided insights into the roles played by relevant ecological factors in establishing the overarching environmental risk factors.

7.3 Exploring frequencies: Concrete physical settings of ARC harm

The Phase I survey had provided some initial insights into the concrete physical settings where young adults experienced ARC harms. Such insights comprised occasional references to, for example, university halls of residence, nightclubs or the family home. However, in Phase I

there were insufficient data on these for either statistical or qualitative analysis from which to infer that such settings contributed to the likelihood of an instance of ARC harm.

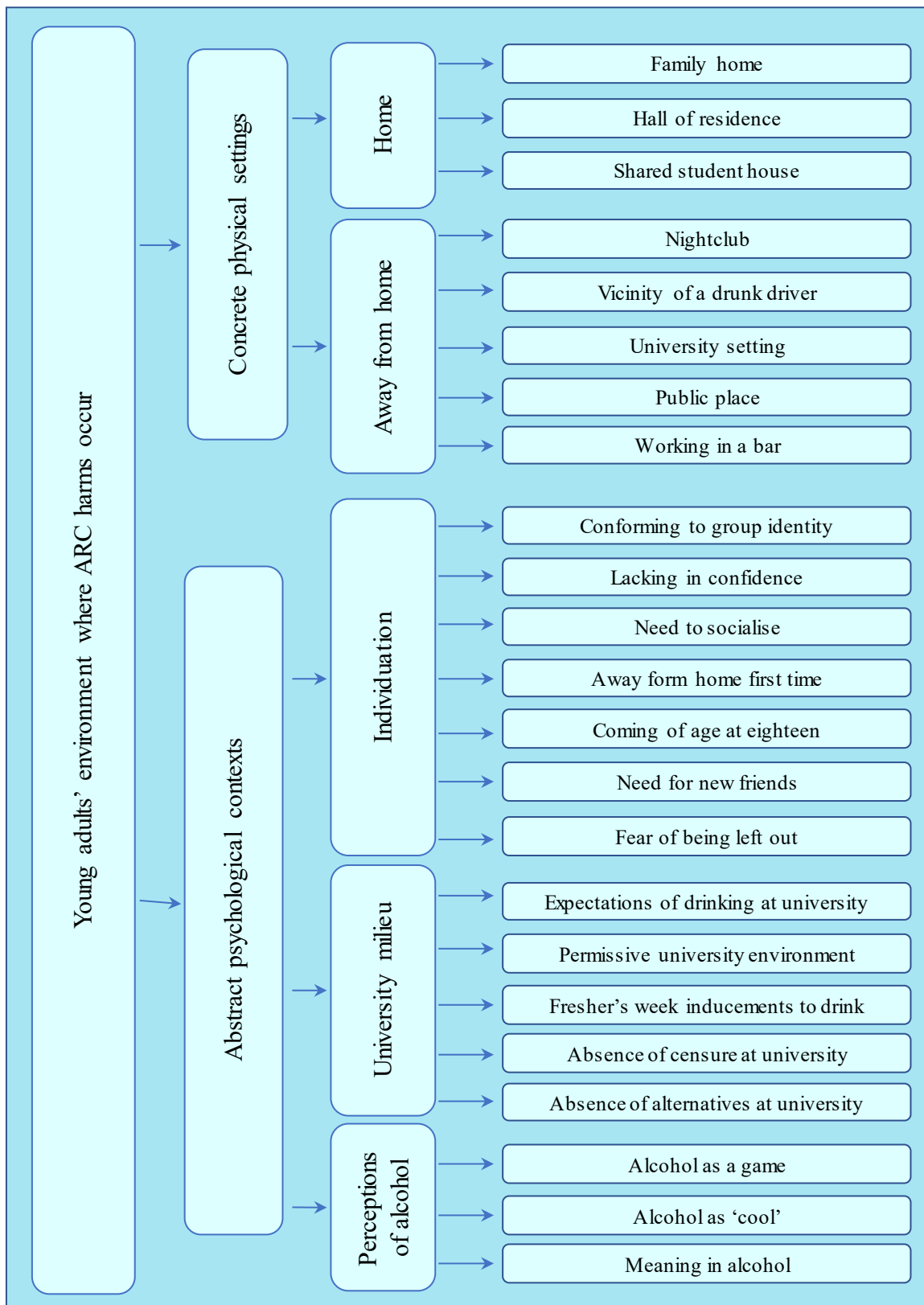


Figure 7.2 Hierarchy of coding for environmental risk factors in Phase II

In Phase II, the accounts of the various locations in which participants' experiences of ARC harm took place were identified and coded from the interview transcript data and interpreted using the systematic processes of TA. The interview participants' descriptions of the physical settings where they interacted with the perpetrators of ARC harms were coded inductively to capture the patterns of the different settings described. As different locations were repeated, data items were coded to the parent code of *Concrete physical settings*. Child codes of *Home* and *Away* were created within this to collate recurring clusters of factors. The coding details are at Appendix 7.1, *Phase II: Environmental risk factors for ARC harm - Concrete physical settings*.

Physical settings: Home and Away from home

The *Home* designation, represented ARC harms that had occurred where participants were living at the time of the interview, or where they had lived in the past, and data items were collated within this to the settings of *Family home*, *Hall of residence* and *Shared student house*. The *Away from home* designation represented locations where participants socialised, worked and studied that were connected to the ARC harms they reported. Within this, data items were coded to the following settings: *Nightclub*, *University*, *Public place*, *Working in a bar* and *Vicinity of a drunk driver*.

Overall, the frequency for *Away* settings for ARC harm was higher than for *Home* settings. All 25 participants reported at least one ARC harm in one of these locations, although the number of participants who reported ARC harm in a *Home* setting was also fairly high at 19. However, questions on family members' drinking brought forward into the interview schedule from the Phase I survey are likely to have contributed to the frequency of the references to *Family home* in the context of an ARC harm experience described in Phase II.

The chart at Figure 7.3, *ARC harm environmental risk factors: Concrete physical settings*, shows the numbers of participants who mentioned each of the different settings coded to *Home* and *Away* in the context of an experience of ARC harm. The most frequently described *Away* setting was *Nightclub*. This factor was mentioned by 23 of the 25 participants in connection with an ARC harm experience. The next most frequently mentioned setting was *Vicinity of a drunk driver*, which was mentioned by 18 participants, followed by *University* which was mentioned by 16 participants.

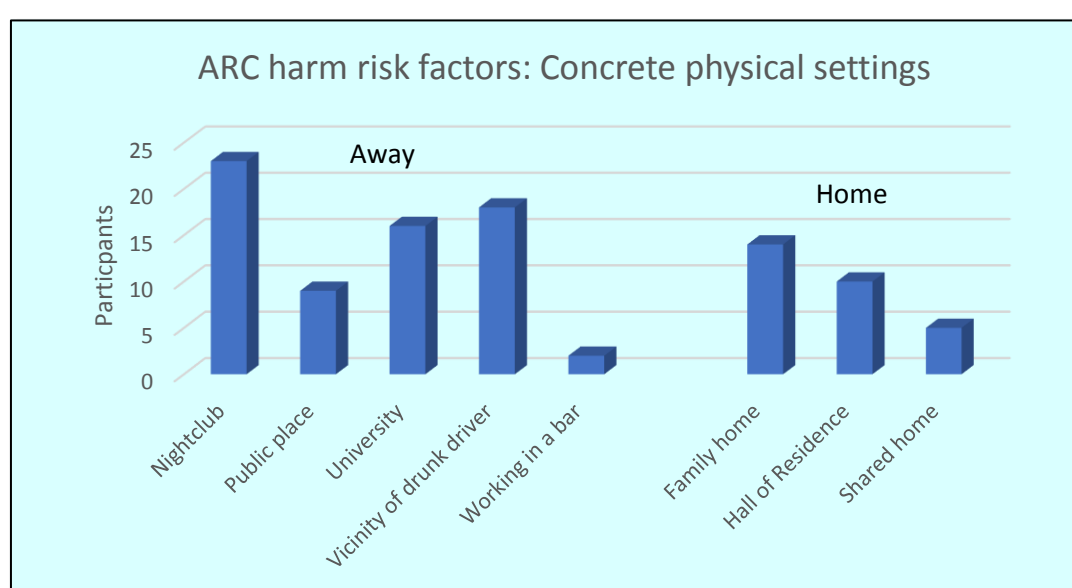


Figure 7.3 ARC harm environmental risk factors: Concrete physical settings

The frequencies were generally lower for *Home* settings with a less pronounced pattern of distribution. Fourteen of the 25 transcripts were coded to *Family home* and 10 were coded to *Hall of residence* as settings where ARC harms had taken place.

The coded transcript data also provided a further numeric insight into the frequency with which certain settings coincided with the ARC harm experiences of the young adult participants. This lay in the collated data on the number of times the participants referred to each coded type of

physical setting for ARC harm. The codes with the highest number of such references were: *Nightclub* (40 references), *Vicinity of a drunk driver* (39), *University* (36) and *Family home* (32). While these findings on the number of references do not represent the number of ARC harms in each setting, these references emphasise the link between specific settings and experiences of ARC harm for the young adult participants. As such, in a numerical hierarchy using these data, *Nightclub*, *Vicinity of a drunk driver*, *University* and *Family home* can be said to be the most conspicuous environmental risk factors for ARC harm associated with concrete physical settings.

7.4 Exploring frequencies: Abstract psychological contexts of ARC harm

The study participants' accounts of their ARC harm experiences indicated that these did not occur only in concrete physical settings; they were also framed within the everyday influences and experiences of their lives. As such, these young adults' descriptions of ARC harm were redolent with perceptions derived from the ecological systems that they inhabited, including their own young-adult norms. The recurring factors in participants' accounts that coincided with ARC harms were coded inductively and codes were created to capture the different abstract psychological contexts identified from participants' accounts. As coding progressed, clear patterns were distinguished from the repeated factors associated with ARC harms. Three parent codes, *Individuation*, *University milieu* and *Perceptions of alcohol* were created to collate the clusters of these factors and to capture the patterns. The coding details can be seen at Appendix 7.2, *Phase II: Environmental risk factors for ARC harm - Abstract psychological contexts*.

Psychological context: Individuation

Seven different factors portrayed by participants as connected to an ARC harm experience were coded to *Individuation*. This parent code represented factors that were bearing on the young adult participants at the transition point in their lives of leaving the parental home and entering university life. The seven risk factors associated with an ARC harm experience in this context were coded as: *Being away from home for the first time*; *Coming of age at eighteen*; *Fear of being left out*; *Group identity*; *Lacking in confidence*; *Need for new friends* and *Need to socialise*. Twenty-one of the 25 interviewees' accounts portrayed at least one of these factors. The chart at Figure 7.4 below shows the numbers of participants who mentioned each of these factors associated with *Individuation* in the context of an experience of ARC harm.

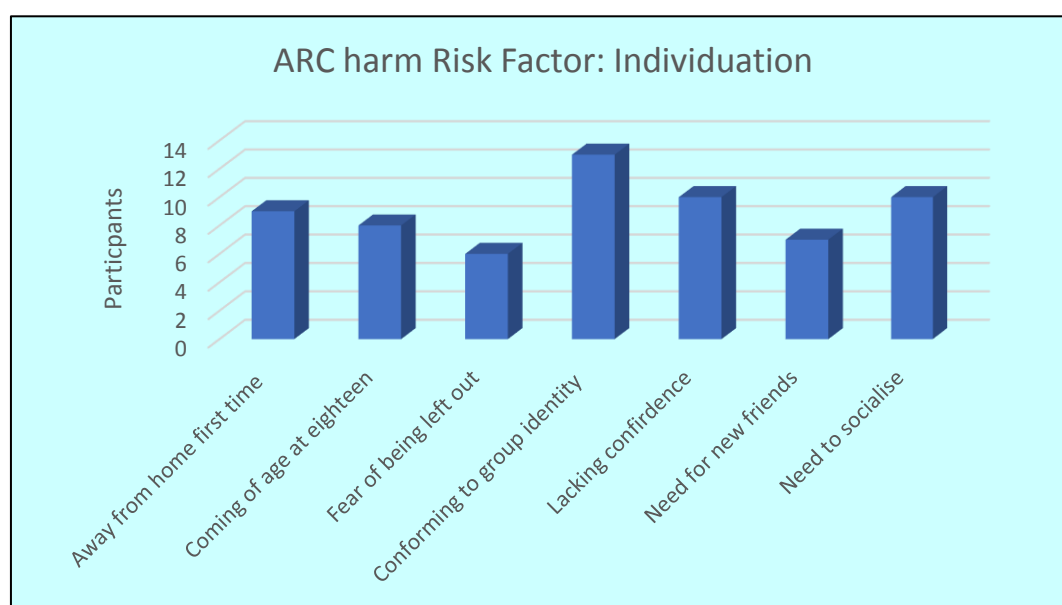


Figure 7.4 ARC harm risk factors: Abstract psychological contexts: *Individuation*

The aspect of *Individuation* portrayed most frequently was *Conforming to group identity*. This was mentioned by 13 participants and it encompassed participants' accounts of an ARC harm experience in the context of acquiring and conforming to a new and unfamiliar group. The next three most frequently mentioned factors were linked closely to this one. These were: *Need*

to socialise, *Lacking in confidence* and *Away from home for the first time* (mentioned by 10, 10 and 9 participants respectively). Details of the coding for *Individuation* are tabulated at Appendix 7.2, which includes frequencies for the number of the participants' references to each of the seven factors coded to *Individuation* in the context of an ARC harm experience.

Psychological context: University milieu

The parent code of *University milieu* emerged as circumstances that were distinct features of the university's psychological context recurred frequently in participants' representations of ARC harm. The relevant factors coded to *University milieu* were *Absence of alternatives*, *Absence of censure*, *Expectations of University*, *Freshers' week inducements* and *Permissive environment*. The chart at Figure 7.5 below shows the numbers of participants who mentioned each of these factors in the context of an experience of ARC harm.

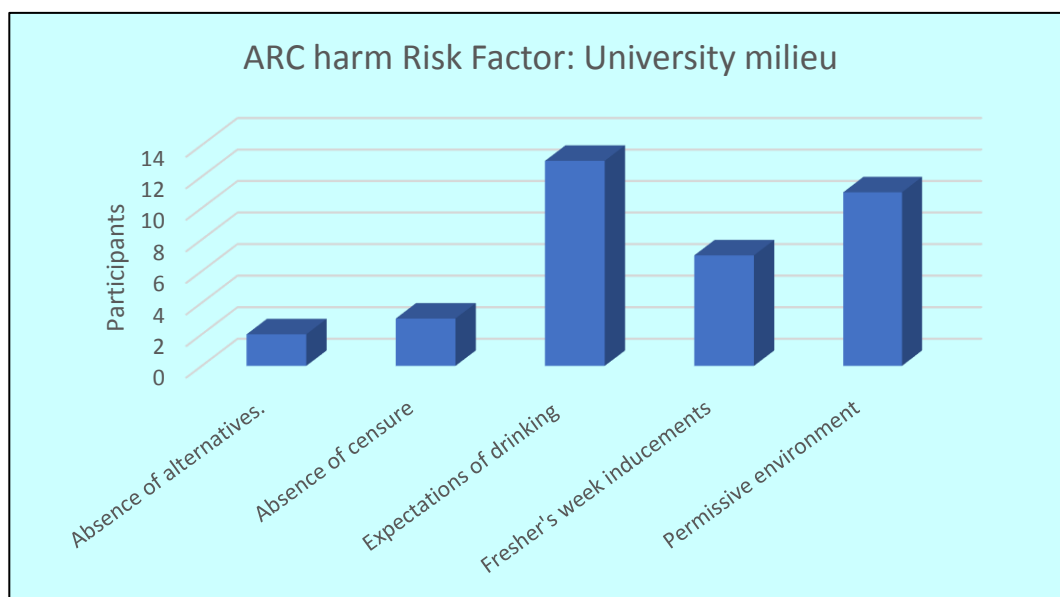


Figure 7.5 ARC harm risk factors: Abstract psychological contexts: *University milieu*.

Of these factors, *Expectations of drinking* featured most prominently and 13 of the 25 participants described an experience of ARC harm linked to their expectations of high levels

of alcohol consumption at university. The factor of *Permissive environment* was also notable, with 11 participants mentioning aspects of the permissive climate at university in their portrayal of an ARC harm experience. Seven participants made specific reference to Freshers' week at university in the context of an ARC harm experience, describing it in terms of another pressure to drink in addition to the generally permissive attitudes towards alcohol in the university environment. These participants portrayed their experience of 'Freshers' as a pervasive and unremitting pressure to go out and drink at the beginning of their university lives:

"One of the things that I hated was at Freshers' Fair in the Freshers' week or the two weeks that it was, everything involved going out clubbing or going out drinking, and, if you're not into that, then you don't really integrate into student life because you don't find friends. There are no events for you to meet people because you're just not a drinker and that kind of puts everybody into this one box of 'you-have-to-drink-or-you-don't-fit-in' and that's, that's really unfair, especially for people coming to university with a lot of insecurities" (Isabelle, aged 24).

Overall, 20 of the 25 participants portrayed experiences of ARC harm connected to their experience of university life. There were overlaps with the broader risk category of *Individuation*, but there were also identifiably separate risk factors linking ARC harm experiences to the circumstances in which the young adults found themselves at university. Full details of the coding for *University milieu* are tabulated at Appendix 7.2. These include the frequencies of participants' references to each of the factors coded to *University milieu* as linked to an ARC harm experience.

Psychological context: Perceptions of alcohol.

The third parent code to emerge as an abstract psychological context where ARC harms clustered was *Perceptions of alcohol*. This related to the young adults' particular association of drinking alcohol with the acquisition of adulthood and status and, simultaneously, as an inducement to play risky and potentially lethal games. Three factors of risk portrayed by participants were coded to *Perceptions of alcohol*. These were: *Alcohol as a joke or game*, *Alcohol as cool* and *Meaning in alcohol*. Fifteen of the participants' accounts featured at least one of these factors. Of these, *Alcohol as a joke or game* was the most prominent of with 12 of the participants' accounts featuring alcohol as a joke or game linked to an ARC harm experience, with *Alcohol as 'cool'* and *Meaning in alcohol* featuring five and three times respectively. Full coding details for the theme of *Perceptions of alcohol*, including the number of references for each factor, are shown in Appendix 7. 2.

SUPPLEMENTING PHASE I RISK FACTORS IN PHASE II

7.5 ARC harm risk factors brought forward into Phase II:

In Phase I of the study, the statistical analysis of the survey data had suggested four key factors associated with ARC harm as potential risk factors. These invited further investigation in the context of the greater breadth and depth brought by the data generated in Phase II. Accordingly, in Phase II of the study, these potential risk factors determined deductively in Phase I were brought forward and examined alongside relevant findings that had arisen inductively from the systematic coding and analysis of the interview transcript data.

As seen in Chapter 5, in Phase I of the study the statistical analysis of factors associated with ARC harm suggested four key potential risk factors for ARC harm:

- *Female gender*
- *Aged over eighteen*
- *Close family who drink every day*
- *Friends and family influence drinking.*

The first two of these Phase I risk factors suggested that characteristics of the individual were significant. The second two factors suggested that external influences were in play and acting on the individual. Each is considered below, together with the relevant data that emerged in Phase II. In this way, risk factors derived from both phases of the study were incorporated into the Phase II analysis.

ARC harm risk factor brought forward into Phase II: Female gender

The statistical analyses in Phase I data suggested that the young women in the study were at significantly greater risk of ARC harm than the young men (OR= 1.62, 95% CI 1.01-2.62). The proportions of male and female participants reporting the different categories of ARC harm in Phase II were therefore compared for any further insights this might provide. The additional analysis revealed no significant numerical evidence of any exclusively-gendered categories of ARC harm, and considerable homogeneity. This suggests that young women may be more generally vulnerable to ARC harm, although there were a few insights into potential gender preferences.

The Phase II ARC harm categories with the greatest gender differences are set out in Table 7.1. From the table, it can be seen that a higher proportion of young men reported the ARC harms

of relationship degradation with family and with friends. However, a higher proportion of young women reported the ARC harm of relationship degradation with their partner and the ARC harm of stress caused by the partner's drinking behaviour.

	Male participants (7)		Female participants (18)		
Coded category of ARC harm	Sources/ Participants	Percentage	Sources/ Participants	Percentage	Percentage Difference
Degradation relationship (friend)	5	71%	5	27%	44%
Lost study (due to noisy drunken friends or neighbours)	1	14%	10	55%	41%
Degradation relationship (partner)	0	0%	7	38%	38%
Degradation relationship (family)	5	71%	6	33%	38%
Setting: Hall of Residence	1	14%	9	50%	36%
Stress-distress-pain partner's drinking behaviour	0	0%	6	33%	33%
All percentages rounded down.					

Table 7.1 Gender differences in experiences of coded categories of ARC harm.

Higher proportions of young women also reported ARC harms in university halls of residence and ARC harm having a negative impact on their studies, which suggests a greater susceptibility to late night ARC harm disruptions to sleep among the female participants. These data provide some impressions of gender differences in the participants' experiences of ARC harm. However, it would be highly speculative to draw any statistical conclusions from these data due to the small number of participants in the Phase II sample and the low cell populations for young men.

Nevertheless, the qualitative analysis in Phase II provided supplementary information on gender differences. For example, as described in the previous chapter, young women were portrayed as experiencing the ARC harm of sexual pressure from drunks much more frequently than young men. One male participant also elected to raise this as an issue on behalf of the young women of his acquaintance:

“I know from having female friends that in clubs there’s a lot of unwanted male attention and it affects them a lot where they can’t go to a club without having it... they’ll have guys come up to them and grab their butt and try and grope them sort of thing and tell them stuff like ‘I really want to f you’, that kind of stuff and that... So, it’s a common view that’s held like that, almost that guys feel like it’s expected that they can go and do that” (Edward, aged 22).

There were also indications in participants’ accounts that their own, young adult, assessment of ARC harms was that young women experienced more ARC harms more often:

“...it’s much more dangerous for you, and you have to be much more aware. Even like... say with boys having spiked drinks, it’s much, it’s much, much less, you know. It’s girls normally that have spiked drinks” (Whitney, aged 20).

In this way, while the quantitative analysis of the Phase II data provided a mixed impression, the qualitative analyses of the Phase II data tended to confirm the Phase I statistical finding. That is, that female gender was a significant factor in determining the risk of ARC harm and the young women in the study appeared to be at greater risk of ARC harm than the young men.

ARC harm risk factor brought forward into Phase II: Aged over eighteen

For age, the Phase I data analysis suggested a significant increase in risk after the age of eighteen (OR=2.61, 95% CI 1.57-4.34). The Phase I data also suggested that the transition point of leaving the parental home and entering university life was significant, suggesting that the increase in risk was a function of age, domicile and entering higher education. These findings suggested that the relevant ‘age’ characteristic of the individual participants was augmented by environmental influences acting on each of them at this stage in their lives.

In Phase II, the inductive coding of data and the further qualitative analysis provided deeper insights into this transition point in young adults' lives. Analysis of the interplay of relevant environmental, behavioural and societal influences complemented the Phase I deductive finding on the significance of age as a risk factor. As seen above, in Phase II, the parent codes of *Individuation*, *Perceptions of alcohol* and *University milieu* emerged from the analysis as psychological contexts relevant to ARC harm. The extensive range and quantity of qualitative data coded to each of these abstract psychological contexts supplemented and added depth to the Phase I statistical analysis. The coded category of *Individuation*, in particular, was revealing in this context. It brought together relevant qualitative data on the ways that participants' ARC harm experiences at this point in their lives were associated with factors like *Being away from home for the first time*, *Needing to socialise* and *Conforming to group identity*.

ARC harm risk factors brought forward into Phase II: Close family members drink every day / Friends and family influence drinking

Two further Phase I potentially significant risk factors from the statistical analysis in Phase I were examined reflexively in Phase II and supplemented by the Phase II qualitative findings. These were: "*Close family members drink every day*" (OR=2.65, 95% CI 1.49-4.69) and "*Friends and family influence drinking*" (OR=2.03, 95% CI 1.32-3.10).

As described in Chapter 3, the Phase II participants were invited to reflect on their own Phase I survey responses to four questions relevant to friends and family. This aimed to secure greater depth and detail in these areas during the interviews for subsequent coding of the relevant data items from the transcripts.

The four questions reintroduced in Phase II from the Phase I survey were:

- *Do you think that the drinking habits of anyone else affect your own decision to drink or not to drink (e.g. friends, brothers/sisters, other family members)?*
- *Do you think that parents' drinking ever puts their children at risk?*
- *Do you think it is OK for a woman to drink when she is pregnant? and*
- *Do you think that children are more, or less, likely to drink if their parents drink?*

Inductive coding of the relevant data items arising from participants' reflections on these four questions, and from relevant data items in the remainder of the interview transcripts, revealed the interplay of potential harms and influences from parents, other family members and friends. The additional insights arising from the qualitative analysis of participants' reflections on each of these four reintroduced questions are set out below.

Reintroduced question: *Do you think that the drinking habits of anyone else affect your own decision to drink or not to drink (e.g. friends, brothers/sisters, other family members)?*

Eighteen of the 25 interviewees stated that they were influenced by the drinking habits of members of their close family and friendship groups. Also, those participants who said they were not influenced by others tended to say that they had been influenced at a younger age:

“When you're younger, when you first go to university and you're trying to make friends and this seems to be the way that everybody's doing it, you do it. I was eighteen, nineteen going to university.... I would say it wasn't until I reached twenty-two that I really felt – maybe twenty-one – and then I felt quite happy and comfortable not joining in with this”
(Queenie, aged 24).

Reintroduced question: *Do you think that parents' drinking ever puts their children at risk?*

All 25 of the interviewees stated that parents' drinking put their children at risk. Some participants gave second-hand or hypothetical examples in support of their response. Others gave accounts of their own ARC harm experiences at the hands of parents who drank regularly, giving examples of the direct harms and the long-term effects to themselves that had arisen from their parents' drinking habits. Some of these accounts illustrated potential risks to their safety when they were children:

"I just think retrospectively there were probably quite a few nights when we were with her and she was too drunk to actually to be looking after us as children. You know, our parents split up when I was five, so it was me and my sisters, like five and seven-year-olds in the house and she'd be, you know, quite drunk" (Annie, aged 21).

Some accounts described potentially serious ARC harm risks to a participant's safety as a child:

"I remember a time when my dad's been so drunk, he's like passed out and not been able to wake up, and some man tried to come into our house and my sister bravely, like, basically told him to f. off... and her friends said 'please can we wake your dad up, this isn't funny' But my sister, she was like 'no, he's not going to wake up anyway, there's no point' so she's sort of dealt with it. Luckily nothing came of the situation, but obviously both me and my sister were at risk there because my dad wasn't mentally... like, he wasn't.... he wasn't... awake to look after us" (Yvonne, aged 19).

Some accounts illustrated straightforward childhood incidents of ARC harm:

"My dad... took me up to the park once, when he was having a drink and I broke my nose because he was on a seesaw and he went down too hard and I went over the seesaw" (Edward, aged 22).

Other accounts suggested a longer-term, chronic ARC harm to the participant as a child:

“I did not want to go anywhere near my father when he was drunk, so, obviously, it affected me in that sort of respect.... I wasn’t afraid of him.... more, more just being uncomfortable being, like anywhere near him” (Nathan, aged 19).

Interestingly, participants’ accounts of parents who drank frequently and had visited ARC harms on them also tended to describe these parents in terms of holding down jobs and leading otherwise normal lives, with even occasional admiration for parents’ drinking:

“My parents probably drink more than me, which is saying something really, especially my mother, she can really handle it...” (Frank, aged 23).

This suggests that frequent drinking, drunkenness and the ARC harms perpetrated were normalised in the family home. Just one of the participants who reported experiences of ARC harm at the hands of parents used the term ‘alcoholic’ when describing the parent in question.

Reintroduced question: *Do you think it is OK for a woman to drink when she is pregnant?*

All but one participant stated that pregnant women should not drink alcohol at all and one young man suggested that fathers should also stop drinking during the pregnancy as a token of support for the mother. One participant gave an account of a young child with Foetal Alcohol Syndrome who was known to her whose mother had consumed alcohol throughout the pregnancy. The child was in Local Authority care awaiting adoption, but he had multiple disabilities and adoptive parents were proving hard to find.

This question, seeking young adults’ views on drinking in pregnancy, was included in the study as harm to the foetus is the only ARC harm addressed currently in official harm prevention

messages for alcohol (DH, 2016c). Despite these messages, many participants advised that they had only learnt about alcohol-related harm to the foetus since coming to university. There were no more data items in the interview transcripts relating to ARC harms to the foetus from drinking in pregnancy. This aspect of ARC harm from parental drinking was therefore pursued no further.

Reintroduced question: *Do you think that children are more, or less, likely to drink if their parents drink?*

Twenty-one of the 25 participants stated that children were more likely to drink if their parents drank. However, this was often qualified by stating that, if the parent were an alcoholic, the children might then be discouraged from drinking. Some participants' accounts of their own drinking habits mirrored those they described for their parents and others were consciously trying to avoid this:

"I have a colourful history with alcohol with myself as well. That's something like I've been trying to get out of" (Edward, aged 22).

One participant described how her father's habit of drinking every day had influenced both her own and her brother's drinking, but in opposite directions. Her account of her seventeen-year-old brother described him as teetotal, repeatedly trying to stop their father drinking and pouring their father's alcohol down the sink. However, she described herself as taking another path:

"I've sort of seen him drinking always, and it's like on a daily basis. It never, like never occurred to me before I was older that this is like... this is not normal. So, that's the way I learnt to treat my problems. Like, if I'm sad or stuff like that I drink to make myself feel more relaxed or better, so I think that came from home" (Lara, aged 22).

Overall, the Phase II qualitative analysis of the interplay of relevant environmental, behavioural and societal influences complemented the Phase I statistical findings on the significance of the risk factors of *Close family members drink every day* and *Friends and family influence drinking*. In Phase II, the inductive coding of data and further qualitative analysis provided insights into the participants' experiences of ARC harm in the family home and with their peers. The Phase I findings for these potential risk factors were complemented by both the extent and quality of the data in Phase II. Phase II therefore added considerably to the Phase I statistical findings by identifying and illustrating the influences of close friends and family as key factors in determining the risks of ARC harm for these young adults.

The next chapter aims to further interpret and explain the complex multitiered reality of how and why ARC harm occurred for the study participants and themes are developed and defined for environmental risk factors. The factors considered in these themes address both the relevant inherent properties of the individual, that reside within the young adult participants themselves, and the properties of the physical settings and psychological contexts that they inhabit. The themes developed are founded in the parent codes described above that emerged in Phase II and they therefore encompass the physical settings of *Home* and *Away from home*, and the psychological contexts of *Individuation*, *University milieu* and *Perceptions of alcohol*. Discussion of the findings in both these chapters is at the end of the next chapter.

CHAPTER 8 PHASE II: ANALYSIS AND RESULTS

IDENTIFYING THEMES FOR ENVIRONMENTAL RISK FACTORS

Summary of Chapter

This chapter continues the examination and characterisation of environmental risk factors for ARC harm begun in Chapter 7. The properties of the domains of influence acting on the study participants when they experienced ARC harm are examined further here and themes for environmental risk factors are presented. The themes presented aim to capture and interpret the latent meanings and patterns in the interview dataset. Themes for concrete physical settings are presented first for the *Home* and *Away from home* settings, followed by themes for abstract psychological contexts for the contexts of *Individuation*, *University milieu* and *Perceptions of alcohol*. Relevant data extracts from the participants' accounts are again used illustratively and critiqued in the narrative of the chapter to inform the analyses of the potential risk factors. The discussion and conclusions at the end of the chapter also speak to Chapter 7.

THEMES FOR KEY ENVIRONMENTAL RISK FACTORS I:

CONCRETE PHYSICAL SETTINGS

8.1 ARC harm risk factors in concrete physical settings

The risk factor themes for the *Home* settings (*Family home*, *Hall of residence*, *Shared student house*) lie in the first element of Bronfenbrenner's (1977) theoretical system; the microsystem, the element where individuals live and have the majority of their social interactions. The risk factor themes for the *Away from home* settings (*Nightclub*, *University*, *Public place*, *Working in a bar* and *Vicinity of a drunk driver*) lie within the macrosystem element of Bronfenbrenner's (1977) system. These settings bear on the young adults in the study and are, in part, created by

them through the cultural norms and societal expectations in which they live. Summary definitions and illustrative examples for the themes that emerged are at Appendix 8.1, *Themes for environmental risk factors: Concrete physical settings*.

Key ARC harm risk factors: *Home settings*

8.2 Risk factor theme: Hall of residence “*Making loads of noise, didn’t really care*”

Participants’ accounts of the ARC harms that occurred in their home setting of a hall of residence suggest that both the perpetrators and victims of ARC harms conformed to accepted social norms for behaviour in that permissive environment. Most accounts of living with ARC harm in halls of residence spoke of acceptance and resignation:

“You kind of got used to it after a while, because there’s like six of you in a flat, so it’s likely that one of you or two of you’s going out, like almost every night” (Melinda, aged 19).

In the absence of censure, ARC harms arising from drinkers’ carelessness and irresponsibility were depicted by the victims as not only unpleasant incidents when they occurred, but also as experiences to be endured and grudgingly tolerated as part of conforming to the perceived norms of living in halls of residence. ARC harms were thus experienced as a double imposition; firstly, the initial disturbances and secondly the psychological costs of adjusting to, and living with, the consequences:

“There was two of us in our flat that were having exams and the other three weren’t and two of them they’d go out quite a lot and so be coming in at three or four, drunk, making loads of noise, didn’t really care, and obviously, that was like exhausting, and then we had to get up in the morning” (Vivienne, aged 18).

Some participants described leaving halls of residence as the ARC harms were intolerable. Some returned to the parental home to avoid them. Others, who had tolerated the halls for a time before moving on, looked back at their time there quite good humouredly, if resignedly:

“Knowing the rest of your housemates are out clubbing, and not going to get back until three, knowing you’re going to be woken up, because they’re going to be really loud, shouting, goodness knows who they’re bringing home with them, sort of thing and that has happened. [Laughter].... Yeah, it wasn’t... the best of times” (Olivia, aged 23).

8.3 Risk factor theme: Family home *“I wish my mum didn’t drink so much”*

Statistical analysis in Phase I of the study suggested that younger students who were still at college and living in the family home were less at risk of ARC harm than those who were not. At the same time, the Phase I statistical analysis showed a strong association between ARC harms and parents who drank every day. Analysis in Phase II provided qualitative insights into how the family home could be the source of ARC harms for some young adults. Also, the high frequency of ARC harms mentioned by Phase II participants in the context of the family home suggested a significant link to this setting for more than half of them.

The qualitative analysis of participants’ accounts in Phase II suggested that some parental homes were permissive environments where ARC harms might occur and, in others, that the parents themselves were the direct source of ARC harm:

“Some of my friends’ parents they’d sort of be drinking and stuff. And we were always allowed to sort of drink there and one of my friends was a heavy drinker, and those were her parents. So, when we’d go there, like under-age, they wouldn’t mind, so ... we’d just get absolutely smashed. So, I mean, that was probably, definitely putting us

all at risk really, but because they were doing it or they were out doing it, they weren't aware or they didn't mind, I guess" (Stella, aged 19).

There were a few accounts that depicted a childhood blighted by ARC harm in the family home:

"I didn't know my dad if he wasn't drunk...in my entire time that I knew my dad, I've only ever had one conversation with him when he was sober" (Edward, aged 22).

There were also accounts where the participant's description of a parent's drinking represented an ongoing chronic ARC harm that the participant was still coping with in the present:

"Through pretty much my whole life I've seen my dad... Like, he's been drinking every night and like sometimes I find it difficult to have a conversation with him, and then if I need to get on with something else, I'll be annoyed because I can't even talk to my dad past a certain time in the evening...it's like, it's almost he's like a different person.... You know, when I was studying for my A-levels or something, I'd feel frustrated because I'd be thinking about that. I mean again like I'd only let it affect me for a while and then I'd sort of tune out of it, if that makes sense?" (Yvonne, aged 19).

Key ARC harm risk factors: *Away from home settings*

8.4 Risk factor theme: *Nightclub* "Almost that guys feel like it's expected"

Phase II participants' accounts were redolent with ARC harms experienced in nightclubs. As described in Chapters 6 and 7, these ARC harms included being drawn into fights and arguments, sexual harassment, drink spiking and being the victim of other antisocial and irresponsible behaviours perpetrated by drinkers. Participants' descriptions of the ARC harms experienced in nightclubs suggested that this environment was more than permissive of such

antisocial and irresponsible behaviour from its clientele. The nightclub setting appeared not only to condone, but also to legitimate ARC harms:

“Like if you’re just walking down the street they’d never do it, but in a nightclub it seems to be a normal thing to happen. Like, if I go out on a night out, I definitely wouldn’t expect to come home without somebody trying something. (Betsy, aged 23).

Just as participants’ accounts tended to excuse and tolerate undesirable drunken behaviour generally, the scale of the excuse extended to unacceptable behaviours was greatly amplified in the nightclub environment. However, the nightclubs described by participants were crowded social environments where drinkers were unavoidable and where multiple social interactions took place. In addition, participants invariably described nightclubs as the last stop of a night out after extensive earlier drinking, where they themselves and others were usually drunk. So, although the density of ARC harm incidents described implicates nightclubs, it is not feasible to attribute these solely to the nightclub setting. Rather, it is likely that the connection lies in the place of the nightclub in the young adults’ ecological environment, embedded in the interplay of social norms, expectations and interactions, and as exacerbated by a generally high level of inebriation amongst its clientele.

8.5 Risk factor theme: *University* “I kind of felt a bit like a fish out of water”

The Phase I data suggested that the transition point of leaving the parental home and entering university life were associated with experiences of ARC harm. Qualitative analysis in Phase II provided insights into how the experience of entering the permissive university environment had increased the risk of ARC harms for some participants:

“I remember when I first got here...we were told by the Uni that we only needed 40% and a pass for everything in the first year.... quite a lot of my friends thought ‘Yay! We

can all go out all the time and it doesn't matter because all we need to do is pass'. So, of course, you sort of get caught up in that, even if you don't think the same, if everyone's going out and they're having pre-drinks at your flat, you do tend to end up sort of going out anyway. Last year, definitely missed a lot of my lectures. I think it definitely affects going to lectures...lectures don't happen in first year [Laughter] at all. Some people do manage to go, but a lot of people didn't [Laughter]" (Helen, aged 19).

Accounts from slightly older students who had negotiated the initial transition showed traces of recognition of the ARC harms to themselves and to their studies at that transitional point:

"The first year it was obvious that we could go out quite a lot because it didn't go towards our final grade and like it was basically about passing the year. In hindsight, it probably would have been good to start studying more in that year [Laughter]" (Peter, aged 20).

8.6 Risk factor theme: *Vicinity of a drunk driver* "Horrendous, really horrendous"

Most of the data items coded to *Vicinity of a drunk driver* involved stress experienced while travelling in a car with a drunk driver, typically followed by realisation and regret:

"One of the most severe times where I was affected... I was like, I mean I got into the car because I was drunk at that point as well, like obviously I didn't really judge the situation either... but that was probably the first time where I acknowledged it and realised that for myself, and I was like 'that was probably the wrong thing to do'" (Melinda, aged 19).

The students often described themselves as drunk at the time and suggested that travelling with a drunk driver was their only means of getting home and/or that they had not realised the driver

was drunk until the erratic driving alarmed them. Sometimes the drunk driver's intent seemed to be frightening his passengers deliberately:

"I probably wouldn't have done that had I not been quite tipsy myself. And, I didn't realise how much he'd been drinking or I wasn't aware of it until I saw him...he was sat out of the window sort of controlling the car with his feet and his hands and I thought... It hit me then, I thought 'this is really stupid, really, really stupid'. ... and I've never done that since, and I would never do that again" (Queenie, aged 24).

Not all the drunk drivers in participants' accounts were fellow students, some were parents:

"She got quite drunk and she wanted to drive home. Me and my brother said that she shouldn't because she'd had too much to drink and she had insisted that she was absolutely fine. So she started to drive home and she was just.... it was.... Yeah. And she shouldn't have been driving, so we swapped. My boyfriend drove instead, but, yeah, she shouldn't have been driving" (Betsy, aged 23).

In these instances, although reckless driving and near misses were described, the ARC harms had been confined to the psychological stresses involved and participants reported that they were lucky that nothing more had happened. However, participants also reported serious car crashes caused by drunk drivers. One of these, in which a close friend of a participant died, is cited in the previous chapter. Another further illustrates the extent to which the impact of ARC harm from such incidents radiates out to affect many people, beyond the shock and bereavement for the immediate friends and family. The participant gave an account of two girls from her school who were killed when the one driving crashed their car into a tree when drunk. The school had been in mourning for a week. The participant also expressed disappointment with the school's reaction, because no mention was made of alcohol:

“It sort of transpired afterwards in the media that they had been drinking. That was never mentioned by the school at all. ...obviously, the whole school was in shock, but, afterwards, I thought that was such a bad way to handle it. Understandably, you need to feel grief and remorse and sorry for the lives that have been lost, undoubtedly. But the fact that their case wasn’t used as a lesson and that it was glossed over so much I thought was very, very telling.... They just chose not to” (Queenie, aged 24).

Some participants expressed concern about the risk of on-street encounters with drunk drivers as they tried to walk drunk friends home safely. One young woman’s account of her (sober) friend’s fate at the hands of a drunk driver provided a graphic description of what could happen to young people walking home late at night when drivers may have been drinking:

“He’s one person who doesn’t drink, and we were walking home and he was...further back and he got hit by a car when he crossed the road. That was quite... you know... That driver was drunk...it turned out later. ...and that affected him you know for years. Like even like now, he’s kind of OK, but for years and years... it really, really affected him you know, for ages you know... the kind of post-traumatic stress... teeth knocked out, broken jaw, cracked ribs. Luckily, he landed on his face, not the back of his skull, because he flew quite a way across the road... That was a big shock for everyone. It would have been even more easy for it to be someone who was drunk ‘cause you’re already vulnerable” (Annie, aged 21).

In another account, a fellow student from the participant’s school was killed as the victim of an ARC harm by a drunk stranger.

“He was on the curb outside this house, and... a man and his two daughters were in the back in car-seats and he drove onto the... He was drunk...he drove onto the

pavement, and killed him. Didn't kill him at the time...ambulance came and he died ... early hours in the morning... And the guy got a couple of years in jail, which is nothing really, and considering he could have killed both his little girls as well... When you saw like how many people it affected in our year group as well, it was just horrendous, really horrendous" (Vivienne, aged 18).

One participant reported volunteering on the Student Union's Safety Bus to prevent such ARC harm incidents. This operated through the night on club nights by transporting vulnerable and drunk students to a safe place. However, the researcher learned subsequently that the bus cost some £30,000 per annum, from monies that would otherwise be spent on providing non-drinking activities like film nights for students. Ironically, an intervention to prevent ARC harms to students effectively created another ARC harm in the form of an opportunity cost: the loss of those alternative activities.

THEMES FOR KEY ENVIRONMENTAL RISK FACTORS II:

PSYCHOLOGICAL CONTEXTS

8.7 ARC harm risk factors in psychological contexts

The psychological contexts of the cultural norms described by the young adults in the study were regularly connected to their ARC harm experiences. As for risk factors in physical settings, risk factor themes for the abstract psychological contexts identified fall within the participants' respective microsystems and macrosystems, but also in the final element, the chronosystem, of Bronfenbrenner's theoretical system (1994). This encompasses the cumulative experiences of a person over the course of a lifetime. These psychological themes represent the conceptual environments of the participants, comprising their accumulated social

and cultural norms, perceptions and beliefs, insofar as they were connected to their experiences of ARC harm. The key themes emerging for psychological contexts were *Individuation*, *University milieu* and *Perceptions of alcohol*. Summary definitions and examples for these are at Appendix 8.2, *Themes for environmental risk factors - Abstract psychological contexts*.

8.8 ARC harm risk factor context: Individuation “You never really know what to do”

The Phase I statistical analysis had suggested an increase in risk as a function of age, domicile and entering higher education. The theme of *Individuation* in Phase II captured the various factors at play at this vulnerable transition point in the lives of the study participants that were relevant to their experiences of ARC harm. The theme encompasses the seven risk factors identified as connected to the ARC harms described in the Phase II interview transcripts:

- Away from home first time (unfamiliar surroundings);
- Coming of age at eighteen;
- Fear of being left out;
- Group identity (acquiring and conforming to a new group);
- Lacking in confidence;
- Need for new friends;
- Need to socialise.

The Phase II participants’ accounts captured a pattern of anticipation and vulnerability on entering university life, with alcohol depicted as easing the transition:

“There’s definitely the sort of time that you first start uni, I think it’s kind of like an ice-breaker and you feel like you have... You feel like...it’s a bit of peer pressure, but then also it’s kind of do you want to have fun and you want to get to know people and you’re learning, you’re meeting new flat-mates and meeting new people, so I think the drink kind

of makes that less awkward and less embarrassing for you, because you kind of feel like you are getting more confident as you drink” (Kristie, aged 18).

Many participants’ accounts described alcohol as a means to gaining confidence and an aid to socialising and making friends and their accounts indicated that they had been impressionable and vulnerable on first arriving at university.

“With student life, you never really know what to do and you want to be accepted, so you kind of go along with it” (Isabelle, aged 24).

Some participants described the ARC harm of pressure to drink to excess in the context of the need to make new friends and conform to a new group at university.

“At first at university that’s how people kind of get to know each other a little bit, and they feel like they’re bonding by getting really drunk and crying in the toilets together” (Annie, aged 21).

8.9 *ARC harm risk factor context: University milieu “Oh, my god, Freshers’ year”*

Cultural norms of the university milieu as described in the young adults’ accounts were regularly connected to their ARC harm experiences. Given that all the Phase II participants were university students, this was to be expected. However, the patterns that emerged from coding the transcript data suggested that this environment provided specific cues for ARC harms. The five properties below were determined for this theme:

- Absence of alternatives at university;
- Absence of censure at university;
- Expectations of university;
- Freshers’ weeks inducements to drink;

➤ Permissive university environment.

Self-fulfilling expectations of excess drinking at university were depicted in participants' accounts as fostering the image of an alcohol-fuelled university milieu before students arrived:

"I remember it being like the summer before we all came and everyone was like "oh, my god, Freshers' year, Freshers' week is going to be absolutely crazy" and all that. So that I think maybe it's just that expectation from, I don't know... Maybe just through the media and stuff maybe. Like you always hear like the Freshers' week sort of horror stories, don't you? And I think everyone expects it to be sort of just like that, maybe. So, when they come, that's what they expect, so they make it into that maybe" (Stella, aged 19).

Some participants discerned an absence of alternative social activities at university and criticised of this as an indirect pressure to drink, or to go out with drinkers, even for non-drinkers:

"If universities offered better options for students, for alternative activities, then people would get a lot more out of it, I think. And there wouldn't be... I don't think there would be as much drinking. Because I remember reading the post that was put on the Freshers' page, people were saying 'well we don't drink, so that does mean that we don't have anything?'" (Isabelle, aged 24).

Some participants, who were on their second attempt at university, depicted the accumulated ARC harms encountered on their first attempt at navigating the permissive university environment as overwhelming:

"I did sort of what usual kids do, I went from college straight to uni and I had my student loan and everything and I.... We got involved with the party crowd and we'd go out drinking almost every night of the week and it sort of ended up that I would.... I kind of

neglected my studies and so, you know, didn't show up for lectures, didn't show for exams, stuff like that, mainly because of hang-overs. ...so then I ended with dropping out and that was quite a big impact... that was within the first year” (Betsy, aged 23).

8.10 ARC harm risk factor context: Perceptions of alcohol *“You know how students are”*

The patterns that emerged from coding the participants' accounts of ARC harm implicated the participants' perceptions of alcohol in their ARC harm experiences. All these perceptions appeared to nurture the pressures on these young adults to drink and to drink to excess. Three properties were determined for this theme:

- Alcohol as a joke or game;
- Alcohol as 'cool'
- Meaning in alcohol.

Many participants' accounts featured 'drinking games' all of which created the ARC harm of pressure to drink heavily that was hard to avoid. Some male participants gave accounts of the greater pressure involved in 'initiations' which invariably led to alcohol poisoning for all those taking part; and, in some cases, to hospitalization. The ability to consume large quantities of alcohol and to get drunk deliberately was not only depicted as part of these games, however. Excessive alcohol consumption was also described as a symbolically desirable end in itself:

“You know, you don't go to parties in order to meet people... My course mates, they're saying they go in order to get drunk, and if they didn't get drunk, then they see the party as a failure...” (Dan, aged 22).

Drinking alcohol, and to excess, were also depicted as the epitome of on-trend and 'cool', and maintaining that image was portrayed as paramount:

“I’ve had water and drunk it out of a straw so people don’t think I’m stopping drinking, because I don’t want them to think I’m a bit pathetic...so I just pretend it’s alcohol”
(Ursula, aged 19).

Many participants’ accounts of their ARC harm experiences equated drinking alcohol with becoming an adult. This was particularly evident in participants’ accounts of their younger selves. This symbolic meaning for alcohol was just registering with some participants:

“It’s apparently, not really the thing to do to ask someone ‘can you buy me a lemonade’ Doesn’t sound as well as ‘can you buy me a wine’. People would have wine or cocktail or beer or something, not a lemonade...if you’re grown up and can drink alcohol”
(Rosa, aged 20).

Alcohol consumption was also depicted as integral to being a normal young adult, and thus being a non-drinker did not fit the accepted cultural stereotype:

“It’s normal for our age bracket, you know. Between eighteen and twenty-five you’re expected to drink, right. People expect you to. And if you don’t you’re kind of ... um....”
(Annie, aged 21).

Significantly, being drunk was regularly portrayed by participants as an excuse that they extended to ARC harm perpetrators for their otherwise unacceptable behaviours:

“And I’ve told them ‘please be quiet’ and I’ve begged with them, but... And I do believe that they would, but I think that they lose all their inhibitions and possibly... yeah, possibly forget. Not really care probably, because they’re drunk and they’re having a good time” (Tess, aged 19)

In addition, participants' accounts depicted the problem of drunk perpetrators of ARC harms as intractable. Despite the association of drinking alcohol with adulthood, the ARC harm perpetrators were readily accepted as incapable of taking responsibility for themselves:

“Where I live my flatmates, when they come in after a night out, the amount of noise they make just wakes you up and there’s nothing that you can really do about it because they’re all drunk, so for sure, it’s annoying in that respect” (Nathan, aged 19).

The public health message to ‘drink responsibly’ seems to have no purchase in the context of such perceptions:

“I mean you know how students are, first year, second year, even in third year. They like to go out and party, drink way too much, and then at the end they’re like, they’re incapable of taking care of themselves” (Dan, aged 22).

THE INFLUENCE OF YOUNG ADULTS’ NORMATIVE BEHAVIOURS

8.11 Conforming to group norms around alcohol and ARC harm

The earlier sections of this chapter have illustrated the importance of environment in the form of the physical settings and psychological contexts inhabited by the young adults in the study. They have shown how these environments were influential in precipitating ARC harms for the study participants, inasmuch as they afforded ARC harms the latitude to flourish, reinforced ARC harm behaviours and sometimes effectively legitimated ARC harms. These physical settings and psychological contexts in participants' accounts of ARC harm have thus been shown to be risk factors for the ARC harms experienced by these young adults.

However, it was also clear from the participants' accounts that these young adults were not unresponsive objects, passively experiencing ARC harms in those environments. Rather, they

were active participants within those environments and their own perceptions and behaviours influenced their ARC harm experiences. As Bronfenbrenner observed, when people are studied in their ecological environments, those people play an active role in interpreting those environments: *“The relevant features of the environment include not only its objective properties but also the way in which it is perceived by the research subjects”* (Bronfenbrenner, 1977, p. 516). Accordingly, this next section of the chapter focuses more closely on participants’ perceptions and actions. It examines how they perceived themselves and their peers within the physical settings and psychological contexts of their everyday environments and how their perceptions of themselves, of alcohol and of their ARC harm experiences influenced their behaviours.

Alcohol as the gatekeeper to young adult student society

Many participants described themselves as lacking in confidence when they arrived at university, stating that they used alcohol as an ‘ice breaker’ or as ‘Dutch courage’ to overcome this to meet people and to make new friends at this time of transition. However, participants’ descriptions of drinking behaviour at university went well beyond a few drinks to calm any such apprehension:

“Here it’s very much sort of go out, spend as little money as possible and get as drunk as you can” (Betsy, aged 23).

This cast participants perception of alcohol use in a different light. As described previously, alcohol and alcohol-related activities were portrayed as desirable, adult and ‘cool’ by the great majority of participants. Those participants who reflected on their own and their peers’ actions described behaviours that appeared to be largely predicated on normative influences around

alcohol and around the symbolic status that they attributed to it. These influences appeared to work in concert with the participants' need to fit in and be accepted by their peer group:

"People not wanting to feel like they're missing out and also not wanting to like disappoint anybody, you know... You don't want to... lots of people probably didn't want, don't want to let somebody... don't want to be boring, I guess...I guess all that peer... like how you're perceived and you want to be seen as a big-fun-time-person"
(Whitney, aged 20).

Conversely, not drinking, not joining in with the required alcohol-focused activities of the group and not drinking to excess were portrayed as undesirable. Participants reported implicit and explicit social pressures to conform to the new social milieu at university where pre-drinks, drinking games, frequent heavy drinking and drunken clubbing were the perceived norm:

"It's definitely, it's not just my peers, say, it's the whole collective, it's the whole university. And that's not just in [this university] it's the whole of the UK. Like, I've got friends who go different universities, it's the same there, and Facebook the same, showing images of the club nights out, talking about drinking, drinking... all that kind of thing"
(Edward, aged 22).

Participants' accounts of themselves and others indicated that young adults who did not conform, who either wished not to drink, or did not wish to drink to excess, were likely to be isolated and that these young people would find it difficult to make friends:

"Like, in our flat, we had one girl who didn't want to do that. And she moved out because she felt so, yeah like different to us, in that she didn't want to get involved with the drinking, when it was rowdy, when we'd come back and wake her up. So, it was like, if you weren't involved in that, then you'd be waking up as well. And you'd... yeah,

you wouldn't be able to talk, socialise with anyone, because by the time everyone's gone all out at the club they would have known each other and...so it's very difficult if you don't, if you didn't want to do that, because you'd be left out" (Edward, aged 22).

Non-drinkers or moderate drinkers who conformed to the extent of socialising within the prescribed alcohol-centred activities, outings or events, were then invariably exposed to the pressure to drink and to drink heavily:

"I've found that my social life has just been cut significantly because when I do go out with friends I do find they do just want to go out and get drunk and when you decide you're not drinking it's quite difficult to enjoy the night when everyone else is drunk and you're not. And, yes, I do feel if I do go out there is a pressure to drink and that I should be drinking..." (Betsy, aged 23).

Participants who resisted the pressure to drink to excess, and did not 'join in' initially, then experienced further ARC harm pressure to drink when peers became drunk, frequently accompanied by belittling comments:

"Sometimes people are like 'ah, why are you stopping drinking, it's only like one in the morning?' and like 'ah, you're so boring'" (Ursula, aged 19).

Pressure to conform was also portrayed as increasing as peers became more drunk:

"...that's the other thing with alcohol, the more the people drink the more the peer pressure builds up. It's, that's another way in which it influences like human interaction negatively... I would say there's like an initial pressure to drink in the first place because everyone is doing so. But then everyone keeps drinking and the more drunk people are, the less they are afraid of saying like 'why aren't you joining in?'" (Peter, aged 20).

In addition, participants described occasions where light drinkers or non-drinkers were not invited to be part of those social activities or outings. So, for these young adults who did not want to drink to excess, not conforming to the group norm resulted in being excluded from it. Their options for socialising and making friends were thus limited to a choice between two different ARC harms; pressure to drink to excess or exclusion from the group:

“I thought well, you know, it’s not very fair really. You know, I could easily have gone to that and could have had two drinks or three. I didn’t have to have ten to be able to go to that event” (Carl, aged 21).

The study participants, also described several instances of young adult males who conformed to more dangerous social norms around alcohol to compete with one another. In these cases, the young men had succumbed to pressure to compete in so-called ‘initiation’ rituals where the objective was not only to drink to get drunk but to drink to the point of knowingly risking severe alcohol poisoning. At least one interview participant had spent the night unconscious in A&E after taking part in this extreme variant of heavy-drinking conformity, and that participant’s description of the experience indicated that few others who also competed for group status on that occasion had escaped unscathed:

“I was the only one to A&E, but I think out of the fourteen, fifteen people there, only three people made it out of there because it was quite a rough night. ...Yeah. I don’t think there was a single person there that didn’t throw up, which was... horrible” (Peter, aged 20).

The participant’s account suggested a degree of awareness that he and others were conforming to a group norm when taking part in such rituals. Nevertheless, he and the other young men had not hesitated to conform to be part of the in-group:

“It’s like not... because it’s almost a way of, like, not trying to stand out, as strange as that sounds. Of, like, a way of wanting to fit in” (Peter, aged 20).

The pervasiveness and extent of the pressure to conform and join the ‘in-group’ of heavy drinkers was also illustrated in the participants’ accounts of the reactions of students from overseas to ‘normal’ UK students’ drinking behaviours. One first year participant, who was an overseas student, stated that she had been shocked initially, on arrival at university in the UK, by the ‘normal’ behaviours of young female students: *“I was quite shocked, at the beginning... I was like ‘oh my god what’s happening?’”* (Georgia, aged 19).

Although her shock had abated subsequently, she continued to express puzzlement and distaste at the behavioural norms to which her female peers conformed:

“I’ve come to believe that most of the girls here are drunk on Fridays and Saturdays and Sunday nights and I don’t think that this should happen. If you’re a lady, you should not be on the street and talk with strangers, do really bad things, so I can’t understand this behaviour” (Georgia, aged 19).

Another participant’s description of two of her friends who were overseas students, one Spanish and one Saudi-Arabian, gave a further indication of the weight of the pressure to conform to the social norms of the other students at university, where they would be exposed to ARC harms:

“I’ve had that with another friend as well, she’s Saudi-Arabian... She sort of doesn’t see it as normal at all, she’s like.... it’s very strange to them. ...well, less now. I think now they’re, kind of... First year they found it strange, but now they’re kind of similar to us, so they do drink now, so... especially the one from Saudi-Arabia. She can’t drink at

home, so she drinks... I think it's illegal, but I don't know. But she does, she does now drink" (Melinda, aged 19).

Although the great majority of examples in participants' portrayals of conformity to an alcohol-centred social group related to the university milieu, there were other examples. There were some accounts of participants looking back at their younger selves and describing conformity to other, earlier young-adult norms around alcohol, such as underage drinking:

"We used to go to gigs, to go and see a live band, like at our local student union... I sort of got involved in them, like with that group of friends, and they'd always go to this little off-licence, corner-shop place and buy a bottle of Vodkat. Not even vodka. Vodkat. Vodkat. Tasted like hairspray... it was the most disgusting thing ever, but they would just go and buy one of them, sit in the park, drink that bottle and then go. And so, I think, I just sort of, thought 'because it's the norm that they do, I might as well join in as well'" (Olivia, aged 23).

Nevertheless, conformity to the norms of a heavy drinking social environment at university was portrayed as a trend in young adults' behaviour that was widespread across the country:

"It's like a British cultural thing that you sort of, before you even come to university, you realise that, like drinking is such a big part of that. You go to it to drink and be silly sort of thing... even before you go that's like the expectation. And it's definitely ingrained that, when you get there" (Edward, aged 22).

Overall, participants' accounts included many descriptions of experiencing ARC harms as they negotiated the pressures to conform to an accepted norm for alcohol-related behaviour in their

social group. Yet, despite this, a few participants also indicated an awareness that the perceived norm was a manufactured misconception, and not an accurate reflection of reality:

“But, especially at university, it is seen as that’s like, obviously, you’ve got to do work, but that’s the other part of it, you know, this big drinking fest that everybody’s just mad for. But actually, everybody’s not mad for” (Whitney, aged 20).

SUMMARY AND DISCUSSION OF CHAPTERS 7 AND 8

Chapters 7 and 8 have shown how thematic analysis was used in Phase II of the study to identify environmental risk factors for ARC harm and to interpret and explain the role played by physical settings and psychological contexts in precipitating ARC harms. The findings, in the two chapters complement the Phase I findings. They show how certain risk factors for ARC harm lay primarily in the individual characteristics of the victims themselves, whilst others lay in the domains of influence acting on them. Qualitative analyses ascertained the overall patterns and risk factor themes whilst quantitative analyses of the various risk factors identified provided an impression of their relative importance.

Some of the physical settings associated experiences with ARC harm were *permissive*. That is, afforded participants settings where there were few, if any, restrictions on the drunken behaviours of ARC harm perpetrators. Some settings were also shown to be *reinforcing* or *legitimizing* for behaviours that caused ARC harm. That is, in addition to being permissive, they offered the young drinkers inducements to drink to excess and to indulge in antisocial drunken behaviours that would not be permitted in other circumstances. Participants also reported a paucity of suitable, non-drinking, alternative settings and activities that would offer equivalent socialising opportunities where there was no risk of ARC harm.

Unsurprisingly, most participants' portrayals of ARC harm were seen to be framed within the microsphere of their current home and social life settings. However, participants also reported historical experiences of ARC harm from the time when they were still school or college students. These accounts described how they began to learn drinking behaviours and were influenced by other drinkers among their friends and family before commencing university. Such findings resonate with other studies on the acquisition of drinking habits in young people:

"The young person learns social behaviours, including drinking behaviours, during the socialization process by ongoing interactions with significant others - parents, older siblings, and peers who play an increasingly important role during adolescence"
(Collins et al., 1990, p. 139).

More surprisingly, there were accounts of childhood and young adolescent experiences of ARC harm in the family home setting, where parents or other close family members were the perpetrators. Some participants' parents or other family members with whom they no longer lived remained sources of ARC harm for them. Their accounts indicated that ARC harms originating in the family home were not escaped by leaving it. These examples of ARC harm in the family home setting, in particular, suggested that ARC harms experienced in the past had longevity and persisted as ARC harms in the present. As such, these ARC harms were firmly established in the participants' chronosystems as cumulative negative experiences in their lives.

The two chapters have shown that the study participants were at high risk of ARC harms as they moved between the microsystems of their lives at school and in the family home to their new microsystems at university. Alcohol played a prominent role in the psychological contexts of their lives as they were making that transition and negotiating the process of individuation into adulthood. On entering the university milieu, participants' accounts indicated that they

experienced considerable insecurity as they were uncertain of their status or of how to behave. Making new friends and gaining social acceptance were described as priorities, and alcohol was shown to play a key role in obtaining both of these. This role for alcohol in making friends and establishing friendship groups is a familiar one, observed in other research:

“... young people are selected to be friends because of their drinking habits and their attitudes towards alcohol; and young people, as well as adults, select their friends in accordance with their own drinking preferences. These processes lead to a certain compatibility with regard to alcohol in networks of friends. When alcohol determines much of the style and content of a person’s life, it also becomes a major determinant of friendship networks” (Klingemann and Gmel, 2001, p. 4).

The development of participants’ perceptions and behaviours around alcohol and ARC harm has been examined as they socialised and interacted with their young adult peers. The participants portrayed alcohol and alcohol-centred activities as having a powerful symbolic meaning, strongly associated with status and respect and, particularly, with becoming an adult. Their accounts showed that this symbolic meaning for alcohol exerted a strong influence on the social norms of their young-adult group. The participants’ perceptions and behaviours and those of their peers around alcohol demonstrated that largely unwitting conformity played an important role in their exposure to settings and contexts where the risk of ARC harms was high:

Most macrosystems are informal and implicit - carried, often unwittingly, in the minds of the society’s members as ideology made manifest through custom and practice in everyday life” (Bronfenbrenner, 1977, p. 515).

To be part of the ‘in-group’ of young-adult society and to be accepted as normal was to socialise with heavy drinkers and to be exposed to the pervasive ARC harms that entailed. Participants’

descriptions of their perceptions and behaviours also showed them conforming to social norms based on their expectations of university and their observations of others' behaviours, both of which featured heavy drinking and socialising with heavy drinkers.

The participants portrayed themselves engaging in alcohol-centred activities, and doing so to relax and have fun. However, significantly, they also described this as mandatory behaviour for making friends and for social acceptance in their young-adult group. That is, their accounts indicated that they would find it extremely difficult to choose to do otherwise. Opting not to join the company of heavy-drinking peers was portrayed as risking ARC harm in the form of exclusion, initially from individual invitations and outings and, ultimately, from the social group, and thereby from the group identity and the social status it conferred. Rose noted these same pressures towards conformity in the context of social influence and behaviour change around patterns of drinking behaviour:

"... social pressures make it hard for individuals to behave very differently from the norm for their group" (Rose, 1992, p. 143).

The participants' accounts of themselves and their own social groups indicated that they were conforming through the phenomenon of social referencing, whereby people attune their behaviour to match what they observe others doing. Such behaviour in conforming to social influence has been observed in social psychology since at least the studies of Muzafer Sherif dating from the 1930s and the later studies of Solomon Asch in the 1950s. (See for example Sherif (1966) and Asch (1952)). Their experimental work showed that the large majority of people will conform and follow even patently incorrect judgements and actions if these are espoused by other members of a group. Their studies consider that social conformity derives from two influences: *informational influence*, which arises from people's wish to show that

they have correct information and *normative influence* which derives from people's wish to be liked, accepted and not ridiculed within a social group. These psychological forces seem likely to have been influential in driving the participants' strong tendency to conform to the model of alcohol-centred socialising. That alcohol-centred socialising in turn exposed all those participants who did conform to the physical settings and psychological contexts that comprised high-risk environments for ARC harm. There were thus external encouragements and personal incentives to accept and join the group where all social activities centred on alcohol and on drinking to excess.

The extent of conformity portrayed by participants indicates that alcohol was the *de facto* gatekeeper to all the activities where these young adults met socially and made friends. ARC harms were the automatic concomitants, and acceptance of ARC harms was the price paid for entrance. These drivers of the participants' social behaviours around alcohol also echo observations of Rose:

"Social norms rigidly constrain how we live, and individuals who transgress the limits can expect trouble" (Rose, 1992, p. 90).

The study participant's experiences of ARC harm showed that they were paying a high price for conformity. This was because to conform to the expected social norms that they perceived for their young-adult group was to be repeatedly exposed to the contexts and to the people that posed a high risk of ARC harms. The study participants chose conformity, but their perception was that they did not have a genuine choice, as that choice entailed choosing between having friends, status and a social life or having none of these. To choose the former was to run the gauntlet of ARC harm risk, but to choose fun too. To choose the latter entailed the prospect of losing status amongst one's peers and, potentially, of isolation, friendlessness and exclusion.

Participants' descriptions of the more extreme pressure on young men to conform by taking part in competitive heavy-drinking showed how this entailed the almost inevitable ARC harm outcome of severe alcohol poisoning. Such behaviour is far from being unique to the study participants. Competitive drinking behaviour, to the point of deliberate self-poisoning, among young men is a familiar expression of bravado. Pernanen, in Klingemann and Gmel (2001), describes this phenomenon among the social consequences observed for young people around alcohol consumption:

“Risky drinking is a relatively standard feature in these initiations and death and near deaths from alcohol poisoning and alcohol-related accidents have been reported”
(Klingemann and Gmel, 2001, p. 56).

One might argue that those who participated knew the risks and chose to take part freely. However, as described by the study participants, to do otherwise would be tantamount to social suicide in such circumstances. That is, given the choice of two ARC harms, alcohol poisoning or loss of peer-group status, they chose alcohol poisoning.

The conformity observed in the Phase II study findings on participants' behaviours is likely to be linked to the Phase I findings that ARC harm was not significantly associated with whether the participants drank alcohol or with how much alcohol they consumed. This is because all the Phase II participants, including the non-drinkers and moderate drinkers amongst them, reported that they conformed by socialising with the heavy drinkers. They had done this to make friends and to participate in the socialising opportunities that this offered. Even when the non-drinkers and moderate drinkers regularly found themselves taking on unsought and unwelcome responsibilities as minders and carers for their drunken peers, this was evidently preferable to the prospect of loneliness and exclusion from the group. In this way, whether or

not the participants were teetotal or moderate drinkers or heavy drinkers, they shared the same physical settings and psychological contexts where the risk of ARC harm was high.

Overall, the quantitative and qualitative analyses in these two chapters have provided an extensive impressionistic picture of environmental risk factors for ARC harm in the physical settings and psychological contexts of the participants' lives. Participants' accounts indicated that these settings and contexts not only permitted, encouraged and legitimated ARC harms; but, significantly, rendered them hard to avoid. The high frequency of the ARC harm experiences reported, and their familiarity, indicated that they were integral to the settings and contexts where the study participants lived and socialised every day.

When portraying the prohibitionists' attempts to address the societal problems caused by drinkers, Dingle (1980) described society in 19th century England as follows:

"...a society in which drink and the drinking place performed a wide variety of indispensable functions without offering any practicable substitute" (Dingle, 1980, p. 221).

Dingle's description might, perhaps, equally be applied to the 21st century and to the study group of students and to their young-adult society.

CHAPTER 9: ANALYSIS AND DISCUSSION

COPING WITH ARC HARM: TOLERANCE, RESPONSIBILITY AND EXCUSES

Summary of Chapter

This chapter analyses the ways the study participants coped with their ARC harm experiences. It extends the analysis of how and why ARC harms occurred for these young adults by first examining the way the participants portrayed the victims and perpetrators of ARC harm. The patterns in participants' coping strategies for ARC harm are then identified and analysed from their descriptions of the interactions between the victims and the perpetrators of ARC harm. The significance of the participants' coping strategies for ARC harm is considered, including how these contributed to the ARC harms experienced being unseen.

9.1 Introduction

The importance of examining the coping strategies of victims to understanding the impact of drinkers' harms to other people has been expounded in the extensive research of Orford and his collaborators (Orford, 2001; 2008; 2012, Orford et al., 2005; 2010, Velleman and Orford, 1990; 1999). As introduced in Chapter 2, Orford theorised the *Stress Strain Coping Support Model* to capture the situations where one person's drinking behaviour impacts profoundly on that drinker's whole family. Orford's model captures the unwelcome behaviours of drinkers, the acute and chronic impacts of those behaviours on drinkers' partners and children and the adaptations made by the drinkers' families to cope with those behaviours. Orford's focus is on the family and on the harms perpetrated by heavy and dependent drinkers. Nevertheless, his model has wider relevance for understanding the impacts of the harms that drinkers inflict on

other people. An examination of the coping behaviours of ARC harm victims is therefore included here to capture the full extent of the impact of ARC harm on the study participants.

The interview dataset was examined for recurring patterns of coping in the participants' beliefs, perceptions and behaviours around alcohol and ARC harm. The relevant patterns observed in participants' accounts at the time the ARC harms occurred were then analysed. The analysis was taken forward by examining participants' portrayals of themselves as victims, and as perpetrators, of ARC harm and then by examining their portrayals of their coping behaviours. The coded data items from the Phase II interview transcripts were re-examined systematically to identify these perpetrator and victim characteristics and coping behaviours. The transcripts were also reread and reflected on in their entirety. This reacquaintance with the coded data items and the text of each transcript ensured that the Phase II analysis was not confined by overreliance on the coding software. This accords with a caution from Bazeley and Jackson (2013) to avoid any "*tendency to code to the exclusion of other analytic and interpretive activities*" (Bazeley and Jackson, 2013, p. 6). It also respects their accompanying admonition, that the value of pre-computer-age analytical practices should not be discounted in the process of computer-based coding.

The previous two chapters have shown how ARC harm was hidden in plain sight by its everyday familiarity within the physical settings, psychological contexts and social norms of the participants' young-adult lives. This chapter examines the covert nature of ARC harm further by focusing on the participants' coping behaviours, as expressed through their beliefs, perceptions and behaviours, as both victims and perpetrators of ARC harm. These coping behaviours were observed in participants' apparent readiness to accommodate the ARC harms

visited on them, in their willingness to take responsibility from the perpetrators of ARC harm and in the alacrity with which they exonerated the ARC harm perpetrators from guilt.

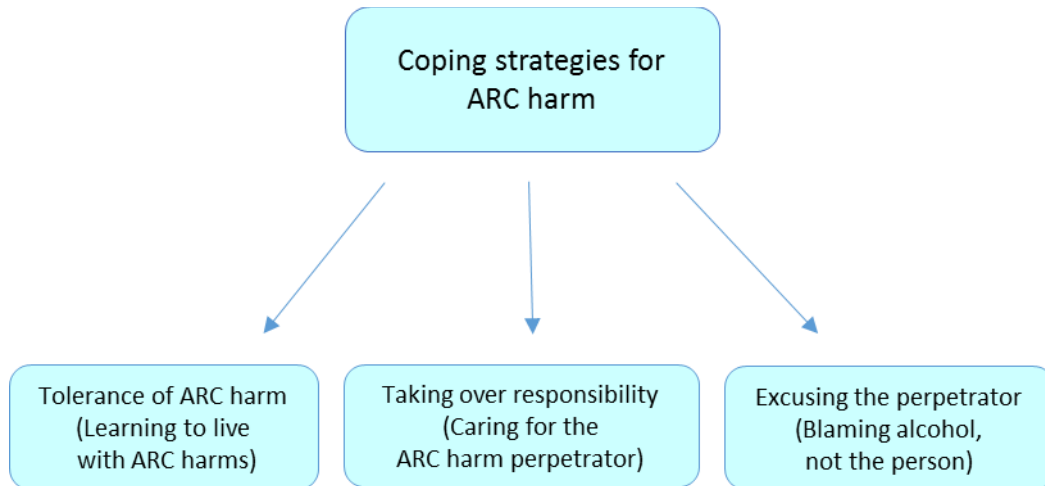


Figure 9.1 Study participants’ coping strategies for ARC harm.

Three main coping strategies were thus identified as: *Tolerance of ARC harm*, *Taking over responsibility* and *Excusing the perpetrator*. (See Figure 9.1 above). The three strategies are examined below, with observations on participants’ accounts of themselves as perpetrators of ARC harm and on how their coping behaviours contributed to ARC harm remaining hidden and unacknowledged.

9.2 ARC harm victims may also be perpetrators

As shown in the preceding chapters, the study participants portrayed their young-adult society as one in which alcohol played a critical role in making friends and socialising. All the participants socialised with drinkers, and all but one had drunk and enjoyed alcohol. Yet, the participants also described their young-adult society as a domain where they adjusted their lives around several unwelcome behaviours from drinkers that caused physical and psychological harms. Alcohol was simultaneously friend and foe. Two apparently irreconcilable conditions.

The terms *perpetrator* and *victim* were introduced in Chapter 6, with the person who caused an ARC harm referred to generically as a *perpetrator* and the person who experienced the ARC harm referred to as a *victim*. Given the context of the study, it was unsurprising that participants were most often the victims in their accounts of ARC harms. ARC harm perpetrators were depicted as irresponsible, demonstrated by participants' reports of drinkers' behaviours that were, by turns, demanding, careless, selfish, fractious and helpless. Conversely, participants portrayed ARC harm victims as responsible young adults, demonstrated by reports of victim behaviours that were competent, caring and altruistic towards the ARC harms experienced.

However, as noted previously, *perpetrator* and *victim* are not mutually exclusive terms. Although participants most often portrayed themselves as the victim, all the Phase II participants who drank alcohol answered 'yes' when asked directly if their own drinking had ever adversely affected other people. Participants thus acknowledged, when asked, that their own behaviour when drinking had caused ARC harm on at least one occasion. A few participants also voluntarily alluded to instances of ARC harm where they had been the perpetrator, and recognised the consequences for others: "...*obviously when I've been drunk and had friends looking after me ...it's ruined their night*" (Nathan, aged 19).

Examples of participants as perpetrators of ARC harm were not limited to such relatively mild examples of ARC harm. However, the extent to which the participants grasped the impact of the ARC harms they themselves had perpetrated was usually less clearly articulated. For example, five of the participants advised that they had been admitted to hospital with severe alcohol poisoning, but their descriptions seemed not to acknowledge that other people had experienced ARC harm as a consequence. That is, the friends and paramedics who cared for them initially and had taken them to hospital and the clinicians and nurses who treated them,

quite aside from the other patients who had then waited longer in A&E for treatment. This indicates a lack of awareness of the consequences for others, or an unwillingness to recognise them, on the part of the participants. The existence of this lack of awareness on the part of the participants is significant in itself. What is perhaps more surprising is that the blind spot persisted, even in the context of being interviewed about ARC harm.

Thus, although the study participants' reported perceptions of ARC harm were much more highly developed for themselves as victims rather than as perpetrators, the participants may be either *victims* or *a perpetrators* of ARC harm, depending on the circumstances. Given the pervasiveness of ARC harm in the participants' social milieu, it would have been more surprising had they claimed otherwise. In the sections of the chapter that follow, this dichotomy can be seen to have played a role in how ARC harm was perceived and how participants reconciled the two opposing roles of victim and perpetrator.

9.3 Coping with ARC harm: Tolerance of intolerable behaviours

As seen in Chapters 5 to 8, the study participants reported tolerating a wide range of carelessness and irresponsibility in the form of drinkers' undesirable behaviours. *Tolerance* in response to such drunken behaviour was normalised to the extent that brooking selfish and inconsiderate behaviour from drinkers was integral to the participants' young-adult world. This tolerance was often illustrated through accounts of the adjustments participants had made to their lives, in contrast to what they might otherwise have been doing. The range in the levels of tolerance and adjustment required was as extensive as the range of the ARC harms that were tolerated. The life adjustments described by participants as ways of coping with ARC harms were, accordingly, small, moderate and large, in line with the severity of the types of ARC harm perpetrated by the drinker. Smaller life adjustments included coping by managing with

less sleep in the setting of university accommodation, as reported by 18 of the 25 participants:

“If you’re in halls, you never got a good night’s sleep” (Melinda, aged 19).

Eleven of the 25 participants reported coping in terms of managing studies around disruptions caused by inconsiderate drinkers:

“I lived in first and second year in halls... it was always quite noisy and there was always people tempting you to go out because everyone’s on a different schedule and someone’s always going to have their night off, but again there I was quite determined to do well enough in first year” (Peter, aged 20).

In some cases, the effect of the repeated ARC harms of lost sleep and disturbed study accumulated to become chronic stressors as the unwelcome behaviours continued. Some participants reported coping by moving out of their dedicated student accommodation to avoid further repetition of these ARC harms:

“Being disturbed by people coming in after a night out, and when we were having exams. And then we had to get up in the morning... Couldn’t wait to move out of there” (Rosa, aged 20).

In social settings, the participants described coping with the ARC harm of peer pressure to drink to excess either by succumbing to the pressure or resisting it. The former coping strategy entailed participants describing themselves as drinking more than they wished and tolerating the consequences of alcohol poisoning. The latter coping strategies entailed tolerating ridicule and loss of status among peers, and frequently acting as carer for intoxicated peers. In nightclub settings, coping, for young women in particular, also entailed the ARC harm of tolerating

regular, endemic sexual harassment from male drinkers and the consequential feelings of violation.

Participants were more restrained in describing the unwelcome behaviours of parents who drank frequently than they were for their peers. Nevertheless, some participants described tolerating ARC harm at the hands of such parents in terms of coping by growing up with a parent who had provided unreliable care when they were children:

“I just think retrospectively there were probably quite a few nights when we were with her and she was too drunk to actually to be looking after us as children” (Annie, aged 21).

Others referred to the frequency of their parents’ drinking as problematic and described coping with the ARC harms caused by such parents in terms of complete emotional severance: *“It’s his problem”* (Lara, aged 22).

One participant described coping with the profound childhood ARC harm experienced in terms of tolerating a parent who did not fulfil the role of parent:

“So, he never had a relationship with me or my sister or my mum. He only had a relationship with a bottle” (Edward, aged 22).

When the ARC harm described involved the death of a family member or friend caused by a drinker, the cost of tolerance in coping with such losses was demonstrably high. The distress of those participants who had experienced the ARC harm of bereavement was apparent when this arose in their interviews. Participants’ attempted stoicism, and seemingly phlegmatic accounts, belied the evident effort involved in regaining their composure:

“I just... I find it really difficult to accept it, and I think about her a lot, and her family as well, about her family quite a lot...” (Betsy, aged 23).

In these ways, the victims described themselves absorbing the impacts of ARC harms and devising strategies to accommodate and tolerate them. Notably, a consequence of these coping actions was that the ARC harms incurred few repercussions for the perpetrators whereby they might recognise the harm they had done. Across the range of ARC harms, perpetrators were not aware that people had moved out of halls of residence to avoid them, nor that others were still coming to terms with a bereavement they had caused. So, since the victims made the adjustments in each case, the victims’ tolerant, accommodating responses to the perpetrators’ irresponsible behaviours contributed a further factor to ARC harms going unremarked.

In addition, some participants were living with undisclosed ARC harms. Twelve of the 25 interview participants reported that they had experienced at least one further ARC harm about which they declined to give any information. It is likely that these ARC harms were concealed for reasons of personal shame or embarrassment on the part of the victim. Speculatively, such concealment by victims may well have masked more extreme examples of ARC harm than those participants did elect to disclose. For participants who were the victims of such ARC harms, the act of concealing them appeared to be part of a coping strategy to suppress the memory of these unwelcome experiences. Also, since the victims were keeping them secret, these ARC harms may not have been recognised by their perpetrators. Whatever the nature of the undisclosed ARC harms, their initial impact and the ongoing costs to the participants who were endeavouring to tolerate and cope with them remain unknown. Such ARC harms thus contributed to ARC harms remaining unseen, simply by being hidden deliberately.

9.4 Coping with ARC harm: Taking over responsibility for the drinker

As seen in Chapter 6, all 25 of the Phase II participants' accounts included at least one instance of the ARC harm of taking on an *unsought responsibility* for a drinker. For example, all 25 of the participants had looked after a friend who had become too drunk to look after themselves and 22 of the participants had attempted to persuade drunk friends to moderate their drinking when they were drinking too much. Participants' often described taking on such unsought responsibilities in terms of an obligation to care for drunk friends. There were also several examples of reciprocal arrangements for such care within friendship groups:

"If you see someone completely drunk then you have to look after them, that's the only choice you have, unless you want them just to get into trouble or do something that they'll regret afterwards...And to be fair I've done it as well so people have looked after me before" (Nathan, aged 19).

However, the participants' accounts showed that some young adults were much more likely than others to experience ARC harm by taking on the role of carer within a friendship group. The carers described in participants' accounts tended to be the more moderate drinkers:

"I've made new friends now, but I think that I have the same role of helping them. Maybe it's because I've never been drunk, and I'm really cautious about what I'm doing and drinking or... I'm really happy they're not doing anything really stupid because I would regret that. It was my concern to take care of them" (Georgia, aged 19).

Other young adults were portrayed as deliberately abdicating personal agency by drinking to get drunk and to relinquish responsibility for themselves. Such young adults were thus more likely to need help and care subsequently. A few participants indicated that they themselves sometimes actively abdicated personal responsibility and sought care by getting drunk:

“If I’m with my boyfriend, I’ll probably drink loads, but that’s because I know he’ll look after me, so I feel more comfortable with drinking more because I know that I’m kept safe because he’s always looking after me, if that makes sense?” (Yvonne, aged 19).

Some of the examples in participants’ accounts of taking on responsibility for drunk friends involved a relatively small inconvenience to the carer:

“It does mean you’re sort of the one who’s looking after everyone because like you obviously have more of an awareness of what’s going on. Like, for example, someone like broke a glass and everyone was just walking over it and I was like having to clean it up because, obviously, no one else really knew like that it needed to be cleaned up... I didn’t really mind. Someone’s got to do it” (Jenna, aged 19).

However, more often, participants’ descriptions indicated that their experiences of unsought responsibility involved difficult, stressful and onerous duties, not least because the person being cared for would frequently be incapacitated and suffering from alcohol poisoning:

“We ended up getting in another taxi... to take us back to halls and she was sort of asleep and I just said to the taxi guy, just stop, like just stop, and I opened the door and she sort of projectile vomited all over the road and so we had to... luckily, it didn’t go in the taxi, my goodness knows how much we would had have to pay, but I sort of carried her the rest of the way back to halls. I think it took us like forty-five minutes, an hour because she was just sort of a dead weight” (Stella, aged 19).

Participants tended to describe their behaviour in taking on these ARC harms of unsought responsibility as altruistic care for drunken friends. Nevertheless, participants’ accounts of such caring interventions also indicated that they experienced considerable stress at these times,

as they saw their friends as dangerously out of control and helpless. There were several examples of participants acting impulsively to rescue friends from potentially violent encounters, at not inconsiderable risk to their own safety. Twenty of the 25 participants reported rescuing drunk friends from arguments and 11 participants reported intervening to break up drunken fights. Their accounts of these experiences indicated that they experienced stress in the form of an obligation to intervene and to take responsibility for their drunk friends, regardless of the risks to themselves:

“I’ve had to look after people that have been very drunk and hard to handle... Putting your own safety at risk if a friend, for example, has gone out in the middle of the road when cars are coming, or have got into fights or things, because normally I’m the one that stays sober because, everyone calls me the mum so... I’m normally the one who’s looking after everyone and stopping them from harm, getting harmed, but then when you’re trying to stop people you could also get in the firing line as well so...” (Kristie, aged 18).

ARC harms coded as *unsought responsibility* thus involved the transfer of responsibility on to the ARC harm victim, with the perpetrator successfully abdicating responsibility for him, or her, self. Whatever the motivation, there appeared to be a balance between the amount of personal responsibility relinquished by the drinker causing the ARC harm and the extent of the unsought responsibility taken on by the ARC harm victim acting as their carer.

9.5 Coping with ARC harm: Excusing the perpetrator

Klingemann and Gmel (2001) note that the pharmacological effects of alcohol are often cited in mitigation or excuse for the irresponsible behaviour of drinkers. However, they conclude that the public do not generally accept this as an excuse:

“Although it is generally believed that alcohol is considered a mitigating factor regarding the attachment of blame or responsibility for the high-risk activities and socially disruptive behaviour associated with such drinking, recent surveys show that the general public does not regard drunkenness as a valid excuse for such behaviour” (Klingemann and Gmel, 2001, p. 4).

In this study, the young adults appeared not to concur with this view of the general public represented by Klingemann and Gmel (2001). Rather, the participants’ accounts indicated that they did regard alcohol as a valid excuse for the ARC harms that they described. The participants condemned the unwelcome behaviours of drinkers and the resulting ARC harms, but also repeatedly excused the perpetrator, expressing the belief that the drunk person was not responsible for his or her harmful action, and would not have done it, had they been sober.

In some instances, the excuse of drunkenness was extended to several peers simultaneously for the impact of ARC harm from generally rowdy or disruptive behaviour: *“I just think if people hadn’t been drinking that just wouldn’t happen”* (Vivienne, aged 18). More often, the excuse was for one person’s inconsiderate and disruptive behaviour:

“He was very disruptive. ...he was inconsiderate and he wasn’t thinking of others at the time, maybe that’s because he was drunk...” (Xavier, aged 19).

In some instances, participants offered drunkenness as an excuse for the hot-tempered behaviour that caused an ARC harm:

“She was so drunk and she was just, didn’t really know what she was doing. So, she didn’t like do it on purpose, but, like, you can like, some people do, turn a bit like violent without meaning to when they’re drunk” (Jenna, aged 19).

Sometimes the excuse given by the participant was in acceptance of the inevitability of particular and regular ARC harms that took place when peers got drunk:

“Where I live my flatmates, when they come in after a night out, the amount of noise they make just wakes you up and there’s nothing that you can really do about it because they’re all drunk” (Nathan, aged 19).

In other examples, where the participant reported attempting to remonstrate with late night revellers who returned home and disturbed the sleeping household, the confrontation had elicited the same excuse from the drinkers themselves for the ARC harm caused: *“‘Be quiet, do you know how loud you are?’ ‘No, we’re drunk.’”* (Edward, aged 22).

Participants’ accounts did not limit the excuse of drunkenness to instances where the ARC harm in question was relatively mild:

“One of my friends has been in hospital... because someone picked up a bar stool and hit them ...and cracked their head open, but again the other guy was blinded drunk at the time” (Vivienne, aged 18).

Young women who regularly endured the ARC harm of sexual harassment in nightclubs, seemed convinced that the young male perpetrators would never do it if they were sober:

Some guys, some men, don’t have any... like, no sense of decency or what’s, what’s not appropriate when they’re drunk” (Lara, aged 22).

In some instances, the young women’s accounts showed awareness of the different rules that applied when young men were sober and in other settings:

“I think like in clubs the culture of guys coming up to, coming up to girls and they just, will just touch a girl anywhere and the girl will sort of accept it, whereas if that happened in the street in the middle of the day it would be like “oh, my God!” or “what the hell?” (Ursula, aged 19).

There were also instances where the participant described using the ‘drunk’ excuse themselves when they had intervened to defuse a volatile and potentially violent situation:

“And the man tried to push my friend. So, I had to go in the middle of them and told the man ‘he’s drunk,’ like forgive him, and let’s move on, and then we got off the bus next stop... It was fine after that” (Nathan, aged 19).

Participants often portrayed drinkers as helpless when they were drunk, thus effectively extending the excuse that they were not capable of being responsible for, or looking after, themselves. At other times, drunks were also portrayed as casually excusing themselves for their uncaring and irresponsible behaviour to others who were helpless and drunk:

“Bad things can happen under everyone’s noses, like someone could just be, like, too drunk to function ...and everyone else is too drunk and sort of thinks ‘that’s not my problem’. And, also the culture of drinking sort of means that that happens quite often, so people are desensitised...” (Helen, aged 19).

Participants’ accounts also indicated that they believed their peers used the ‘drunk’ excuse in advance. Such young adults were portrayed choosing to get drunk with the deliberate intention of relinquishing responsibility for themselves:

“I think as well sometimes people who struggle with lots of different things choose to get drunk more than others... lots of people would go out and get drunk and they don’t care

if they go home with somebody, or kiss somebody, or throw up in the toilet, or somebody else has to walk them home, you know, because it doesn't, it sort of, it doesn't matter... you know, they really use that as, you know, a platform to just do whatever” (Whitney, aged 20).

For peers, the drunk was portrayed as the person who committed the ARC harm act. Thus, the same person, when sober, was not responsible for it. In this way, moral issues of guilt and personal responsibility for ARC harms did not arise, as the perpetrator no longer existed the morning after, when the drunk person might also have conveniently forgotten his or her actions:

“Oh, they usually find it funny, ‘Oh really? I did that?’ ‘Yeah, you did that’. They sometimes don’t, yeah, recall that moment” (Georgia, aged 19).

Participants were also largely unjudgmental about ARC harms experienced as a result of their parents’ or older family members’ drinking habits. Here, again, participants tended to blame the alcohol rather than to hold the parent responsible. This excuse was applied even in the most extreme circumstances: *“If alcohol didn’t exist, I kind of believe, like, he’d still be here and I’d still have a father”* (Edward, aged 22).

However, for parents, the excuse was less automatic than it was for peers. Participants expressed mixed, stressed and confused emotions about parents’ drinking habits and the ARC harm impacts on themselves:

“I would worry about my dad and I would be worried to leave him... I do worry about him, I worry about him all the time... I don’t want... Because you know I’ve found him face-flat on the floor with like blood and like you know the first thing I thought was ‘Oh my God, like’...” (Yvonne, aged 19).

Participants frequently displayed unease at recounting the ARC harms visited on them by parents and sought to exonerate them immediately afterwards, and to describe them as leading normal lives:

“But she’s got a good job. She holds down a job. She has a relationship, you know, she’s coasting fine, you know, like, it’s not, it’s not really having a huge effect on her life.... as such” (Annie, aged 21).

Only one participant expressed anger about the ARC harms of the alcohol-related parenting shortcomings experienced whilst growing up, and that participant had received counselling for those chronic ARC harms.

SUMMARY AND DISCUSSION

As this and earlier chapters have shown, the study participants expressed substantial dislike of the ARC harms they experienced, and their accounts described the perpetrators of ARC harms as acting irresponsibly, abdicating responsibility for their behaviour, and not owning those harms. However, significantly, the study participants’ accounts showed ambivalence, in that they also accommodated, took on responsibility for, and consistently excused, those same unwelcome behaviours by drinkers. The reported level of acceptance of ARC harms was such that the participants showed little indication that they held the perpetrators of ARC harms responsible for their actions. Even when describing parents’ or other, older adult family members’ ARC harms, although there was evident discomfort, there was no blame.

The effects of heavy or alcoholic parental drinking on children have been researched extensively by others. For example, Klingemann and Gmel (2001) observed that:

“... parental drinking can seriously harm a child’s development, although its modes of action have been only partially elucidated. They involve abuse, neglect isolation and insecurity, or inconsistent parental behaviour and demands, which are much more common in the families of alcohol abusers than in others” (Klingemann and Gmel, 2001, p. 5).

Also, the seminal work by Orford and his collaborators (e.g. Orford et al., 2010) focused on the harm to families caused by parental alcohol consumption and Maffli, in Klingemann and Gmel (2001) also cites findings from Velleman and Orford (1990) on drinkers’ children:

The children of drinkers recalled many more negative experiences from their childhood. Their social life had been very limited and they had frequently been left to their own devices. They more often had to assume responsibilities inappropriate to their age, such as having to put one of their parents to bed or otherwise look after them. (Klingemann and Gmel, 2001, p. 82)

The study participants’ accounts resonate with many of these earlier research findings on the social consequences of parental alcohol consumption. However, such research findings of Klingemann and Gmel (2001) and Velleman and Orford (1990) concern the families of alcoholics and ‘alcohol abusers’, that is, harms perpetrated by heavy, dependent drinkers. The level of parental drinking portrayed by the study participants was generally somewhat lower than this, with just one participant using the word ‘alcoholic’ to describe a parent’s level of alcohol consumption. Yet, some participants described ARC harms caused by their parents’ drinking in terms of quite extreme psychological avoidance. Others reflected, seemingly dispassionately, on the risks and the actual ARC harms they had experienced as a child, and two described parental ARC harms that constituted personal tragedy. There were also accounts

of participants' attempts to care for drunk parents or to parent the drinking habits of their parents or of other older family members.

These findings for the study participants' experiences of parental and older family members' ARC harms echo those other research findings for alcoholics and 'alcohol abusers'. In particular, descriptive phrases such as 'left to their own devices' and 'responsibilities inappropriate to their age' echo in the study findings and indicate that study participants had coped with similar harms. However, where, formerly, such harms have been attributed to alcoholic or alcohol-abusing parents, the study findings suggest that the occurrence of ARC harm is not confined to this minority group of heavy or alcoholic drinkers. Rather, the findings suggest that ARC harms visited on children may not be the sole preserve of parents who are heavy drinkers or alcoholics. ARC harms were described in the study in terms that clearly indicated that some participants had coped with significantly deficient, or, on occasion, directly harmful, parenting by parents whom one might class as regular, or frequent, social drinkers, rather than as alcoholics.

Nevertheless, despite the experiences of parental ARC harms described, these participants consistently sought to exonerate their parents from blame. It is likely that, by excusing their parents in this way, these participants had experienced cognitive dissonance and were attempting to reconcile the conflict between the parental ARC harms described and their love for their parents and their belief that their parents were 'good people'. Leon Festinger coined the term 'cognitive dissonance' (Festinger, 1957) to describe the uncomfortable cognitive state that arises when people recognise an inconsistency in their actions, attitudes or beliefs. He theorised that people have a desire to harmonise their various cognitions and will strive to restore equilibrium if tension between them causes discomfort. Although the participants

excused their parents by blaming alcohol for the ARC harms, their discomfort suggested that the effort of reconciling such cognitive conflicts, prompted by parents who perpetrated ARC harms, was not a straightforward matter. Such ARC harms may have been regular, or chronic and inescapable during childhood, so might be expected to be hard to leave behind.

Amongst their peers, the participants reported intervening on impulse to extricate drunk friends from a variety of ill-judged and potentially dangerous situations and acting as carer for those suffering the self-administered effects of alcohol poisoning. Speaking as the ARC harm victims in these instances, the participants portrayed themselves not only accepting and tolerating their peers' unwelcome drunken behaviours, but frequently taking over complete responsibility for the drinkers, despite the difficulty, stress and risks that this entailed. Although the participants tended to portray such impulses to rescue and care for 'helpless' drunk peers as altruistic, their actions may also have been an attempt to alleviate the stress of finding themselves caught up in these chaotic situations. This resonates with similar unwitting coping behaviour observed by Lewis (2013) for people who are under stress:

“When under stress, the effort to maintain control in your life makes you significantly more vulnerable to a whole host of impulses, many of them unhealthy or even life-threatening” (Lewis, 2013, p. 180).

Participants' 'altruistic' interventions may then also be interpreted as ARC harm victims attempting to cope with chaos and distress by taking control of the situation, and thereby aiming to make the experience less stressful for themselves.

In contrast to the discomfort that participants displayed when describing parents' who perpetrated ARC harms, this was entirely absent when describing peers' ARC harms. Peers'

ARC harms were automatically excused by the participants and peer perpetrators were portrayed as completely blameless. When peers perpetrated ARC harms on the participants, there was no apparent evidence of any cognitive dissonance. Since peer perpetrators of ARC harm were also victims, just as the participants who drank alcohol were themselves both victims and perpetrators, any potential dissonance may have resolved more easily. Ironically, although study participants' accounts indicated that the consumption of alcohol had a powerful symbolic meaning for them in that it conferred adult status, all the participants portrayed drunkenness in their peers as an excuse for irresponsible, and effectively childish, behaviours. This too seemed to cause no dissonance.

Participants excused young-adult perpetrators of ARC harms solely because they were drunk. Typically, study participants followed a description of an ARC harm visited on them with a rider that the perpetrator would not have committed the harmful act had they not been drunk. Moreover, the excuse seemed not to be attributed to the relative degrees of cognitive impairment caused by alcohol. Rather, the excuse appeared to be founded in a perception that the drunk person and the sober person were completely separate individuals, with the drunk person dictating the actions and the sober person having no responsibility for them. In the context of the young-adult society that participants described, the state of drunkenness authorised drunks to enact behaviours that impacted adversely on others, and to do so with impunity. The participants' accounts repeatedly distinguished the drunk person enacting the ARC harm from that same person when sober. Perpetrators of ARC harms were also described excusing themselves in the same way. The effect of this was to confer freedom on all these young adults to commit ARC harms freely and, simultaneously, not to be responsible for them.

The participants' accounts of excusing ARC harm perpetrators echo the well-known cognitive reorientation observed in Milgram's experimental subjects in the 1950's, whereby those subjects entered an agentic state and reported that they were simply obeying orders. In Milgram's experiments, the large majority of his experimental subjects were content to deliver electric shocks to others in circumstances where they felt that another person was in control, and that that other person, and thus not themselves, was responsible for delivering those shocks (Milgram, 1974). The participants' accounts suggest that the perceptions of the young-adult perpetrators of ARC harm in this study were similarly reoriented and that they were not seen as responsible for the ARC harms they had committed. In this way, not only were the perpetrators blameless for the ARC harms they committed; but, significantly, the participants would in turn not be responsible for their own ARC harms. By dint of being drunk, the young-adult perpetrators of ARC harms were automatically excused and absolved of responsibility for their actions. That is, to all intents and purposes, both perpetrator and ARC harm thus effectively ceased to exist.

In this chapter, the study participants' accounts have shown these young adults coping with ARC harms by tolerating them, excusing them and taking over responsibility for them. The overall effect of these coping behaviours was that the victims absorbed the ARC harms. In this way, the participants' coping strategies for ARC harms contributed to ARC harms remaining unseen. In the next chapter, this is brought together with the other factors identified in the study that appeared to contribute to ARC harms remaining unseen. Themes are then advanced with a view to explaining the hidden nature of ARC harm.

CHAPTER 10: ANALYSIS AND DISCUSSION

WHY ARC HARM IS UNSEEN AND BRINGING IT INTO THE OPEN

Summary of chapter

This chapter brings together and discusses the themes advanced from the analyses in earlier chapters to explain why ARC harm remains so resistant to being seen. The chapter then considers the unseen nature of ARC harm further and how it might be addressed. Consideration is given to the potential for using the study findings on ARC harm as experienced by young adults to bring ARC harm into the open and to mitigate its impact through raising its profile.

10.1 Introduction

Over the course of the preceding chapters, this thesis posits ten themes for how and why ARC harm remains largely unseen within the totality of alcohol-related harm:

- The absence of a recognised name for ‘ARC harm’;
- The alcohol policy focus on health harms to the individual drinker;
- Negligible and diminishing policy notice of alcohol-related harms to society;
- The alcohol policy focus shapes the public view of alcohol-related harm;
- The covert nature of the majority of ARC harms, as identified in the study;
- ARC harm victims consciously concealed some ARC harms;
- ARC harms were embedded in the environments where they occurred;
- ARC harm victims tolerated and accommodated ARC harms;
- ARC harm victims excused ARC harm perpetrators;
- ARC harm victims took over responsibility for ARC harm perpetrators.

The first four of these themes derive from the background and historical review of Government policy on alcohol harm prevention, as addressed in Chapters 1 and 2. The remaining six themes derive from the analyses of the empirical study data on ARC harms as reported by the young adult participants in Phase I and Phase II. Each theme advanced acts alone and in concert with others to contribute to ARC harm remaining covert and unacknowledged.

The study analyses have shown how the covert nature of the great majority of the types of ARC harms identified contributed to ARC harms remaining unseen. These analyses also show how the frequency and familiarity of the ARC harms experienced normalised such harms to the extent that they were routinely tolerated as an integral part of young-adult life. The origin and analyses for each of the ten themes have been advanced in earlier chapters. These are drawn together below and these themes are also summarised at Appendix 10.1, *Ten themes for how and why ARC harms remain unseen*.

WHY ARC HARM IS UNSEEN: TEN THEMES

10.2 Theme 1: The absence of a recognised name for ARC harm

The general public will be familiar with the name ‘passive smoking’ for the phenomenon whereby irresponsible smokers visit negative impacts on other people by sharing the harmful effects of their smoke. In contrast, the general public has no collective name to identify the range of harms that drinkers cause to the people around them. The absence of a recognised, universally acknowledged name and composition renders the phenomenon less visible by making it difficult to describe or discuss. These factors also make it impractical to target effectively with interventions. Moreover, the absence of a collective name and a recognised composition means that the many different manifestations of such harm are not recognised as

the same single phenomenon. As seen in Chapter 1, this issue persists into the research community, where, although the harms that drinkers cause to the people around them are increasingly identified collectively, the phenomenon has no one agreed name or composition. To address the absence of a recognised name for this multifaceted phenomenon, this study has introduced the term Alcohol-Related Collateral harm, ‘ARC harm’.

Several common manifestations of ARC harm will be known to the public, but these are not recognised currently as a single collective entity. That absence of a common name robs them of a vital connection. For example, the public may be familiar with drink driving, but will not recognise it as the same phenomenon as alcohol-fuelled domestic violence. An example of the former can be seen at Appendix 10.2, *Media example: Drunk drivers who kill could face automatic jail terms*. Similarly, neither of these will be recognised as the same phenomenon as Foetal Alcohol Syndrome. Foetal Alcohol Syndrome in turn will not be recognised as the same phenomenon as harm visited on children by neglectful, drunken parents. An example of the latter can be seen at Appendix 10.3, *Media example: Mother is jailed over toddler’s bath death*. Likewise, predatory sexual behaviour by drunk men on young women will not be linked to any of the above harms, nor to the injuries sustained by young men in violent, drink-fuelled street attacks. None of the aforementioned harms will be recognised as a part of the same collective phenomenon until they can all be corralled into a single portmanteau name; and a name that is universally acknowledged and has the same currency as *passive smoking*.

10.3 Theme 2: The alcohol policy focus on health harms to the individual drinker

As set out in Chapter 2, since the *Health of the Nation* White Paper (DH, 1992) the Government has focused on the clinical issues around alcohol that relate to health. Accordingly, the policy focus for preventing alcohol-related harm has been directed away from the challenging

socioeconomic problems caused by alcohol in the population and towards the health-related risks for the individual drinker. Also, since these alcohol-related health problems tend to manifest in later life, the policy focus is effectively narrowed still further to the health-related risks for older adults, and thus not those of young adults. The alcohol-related risks for young adults are effectively ignored as public health messages that focus on the drinker neither target young adults nor resonate with them:

“... a risk which has not materialized within the individual’s own experiences is unlikely to be regarded seriously” (Rose, 1992, p. 56).

Although the Government message is to ‘Drink responsibly’, this is interpreted in terms of the number of units of alcohol an individual drinker can consume without significant risk to his or her own long-term health. Moreover, the interpretation of this message is tightly controlled, and ‘Drink responsibly’ is not presented as a message to drinkers to consider other people by way of being a responsible citizen whilst drinking. Neither is it presented in terms of being a responsible parent to one’s children or acting responsibly to any other people in a drinker’s home or social circle. The personal and social ARC harms that are perpetrated by drinkers on families, friends or strangers are thus largely ignored and less visible because of this narrow focus on the health of the individual drinker.

10.4 Theme 3: Negligible and diminishing policy notice of alcohol-related harms to society

Chapter 2 details the way recent UK Government actions have demonstrated increasing reluctance on the part of the State to acknowledge, or to intervene at, the population level of alcohol-related harm to society. The chapter also shows how this is in stark contrast to the history of earlier State interventions on alcohol harm. Unlike the current narrow focus on the health of the individual drinker, earlier interventions from the sixteenth century onwards,

targeted the negative effects of alcohol on social order and society as a whole. That is, they did not target the drinker, they targeted the harm done to others by the drinker; they targeted ARC harm. Dingle, for example, described the aim of Government interventions against alcohol use at the end of the 19th century as: “... *to improve drinking habits and ensure the maximum prevention of misconduct*” (Dingle, 1980, p. 224).

In contrast, the current government in England has eschewed opportunities to intervene at the societal level, despite evidence of the potential efficacy of such an approach in preventing alcohol-related harm. For example, the Government’s evidence-based plans to introduce the population-level intervention of a minimum unit price for alcohol in England, announced in 2012 (Home Office, 2012) were abandoned the following year. These plans were conceived in the light of government-commissioned evidence on the efficacy of such an intervention (Home Office, 2011, Booth et al. 2008a; 2008b) but the plans were abandoned nevertheless.

In addition, existing population-level measures to prevent alcohol-related harm, like licensing hours that were inherited from previous administrations, have been repealed. Also, the ‘alcohol escalator’, that progressively increased taxation on alcohol, was removed, and the duty levied on alcohol was lowered in the budgets of 2015 and 2016 (HM Treasury, 2015; 2016). In 2017, the Government increased the duty rates on tobacco by 2% above retail price index (RPI) inflation, whilst alcohol duty rates remained in line with RPI inflation (HM Treasury, 2017). The limited State recognition of alcohol-related harm at the population level tends to be expressed in financial terms alone, and only as tenuous estimated costs of alcohol to the NHS or to the economy and not in terms of the impact at a personal level:

“Society is paying the costs – alcohol-related harm is now estimated to cost society £21 billion annually” (Home Office, 2012, p. 3).

This financial representation of alcohol-related harms effectively depersonalises the societal harms by transmuting them into monetary considerations and thus renders them less visible.

10.5 **Theme 4: The alcohol policy focus shapes the public view of alcohol-related harm**

As above, Chapter 2 showed how the Government focus for addressing alcohol harm is currently directed at the individual drinker and how scant and diminishing attention is paid to the wider alcohol-related harms to society. Chapter 8 then discussed how the focus of human attention on any one area effectively directs attention away from other areas and other issues. Thus, the Government's advice and messaging on responsible drinking, that directs the public attention towards the potential health harms for the individual drinker, directs attention away from the harms that drinkers do to other people in the population. In this way, whether by accident or design, the Government's policy focus sets the public agenda and directs the public gaze away from the ARC harms that drinkers cause to people around them, and away from any potential need for population-level interventions by Government.

Whatever the Government's motivation for the policy focus on the drinker, the focus away from societal concerns is enthusiastically underpinned and perpetuated by the alcohol industry whose interests lie elsewhere:

"It is reasonable to suppose that the social welfare of Britain may not be the most pressing concern of such organisations" (Plant and Plant, 2006, p. 148).

This drinker focus permits the alcohol industry and popular media pundits to proclaim that any Government advice to curb alcohol consumption is an infringement of the personal liberty of the drinker and to rail against the 'nanny state'. It is also unlikely to be coincidental that any population-level interventions mooted are particularly prone to attack on 'nanny state' grounds

by the industry and in the media. Their common line in such cases is that the majority of drinkers drink responsibly and so should not be ‘punished’ for the ‘irresponsible few’. This is in direct contradiction of Rose’s statistical analyses which show responsible and irresponsible drinkers to be part of the same continuum:

“...the number of heavy drinkers in a population keeps almost perfect step with the alcohol consumption of Mr and Mrs Average, and hence there seems to be no way of reducing the dire problems of alcoholism that does not involve a general reduction of intake in the population as a whole. This is hard on Mr and Mrs Average, who presumably enjoy their moderate drinking, but it is the price of being members of a society rather than solitary individuals ... Similar principles of collective response and responsibility apply to most health-related behaviours” (Rose, 1992, p. 144).

The public view of alcohol-related harm, may thus also be shaped by the influence of the alcohol industry lobby on the government policy focus. Plant and Plant (2006) suggest that this influence may be the origin of such past initiatives as the liberalisation of alcohol licensing in 2005, which repealed earlier legislation enacted to mitigate alcohol-related harms to society. They further suggest that it may be a factor in the paucity of policy interventions that have a strong impact at the societal level, such as taxation, in favour of weaker ones like public education:

“That the influence of industry is weighty indeed is not surprising. This influence appears to be at least a factor in the Government’s unwillingness to acknowledge the effectiveness of stricter control options such as taxation and its emphasis on largely ineffective strategies like education” (Plant and Plant, 2006, p. 123).

This industry influence on Government and thereby on the public, may also be in evidence in the continuing, incremental erosion of alcohol duty in the Budgets of 2014, 2015, 2016 and 2017. Such measures will always be popular with the public, as well as with the industry, just as societal interventions in public health will always be unpopular:

“The health of society is integral, and the supposedly ‘normal’ majority needs to accept responsibility for its deviant minority – however loth it may be to do so” (Rose, 1992, p. xiv).

10.6 Theme 5: The covert nature of the majority of ARC harms identified in the study

Chapters 5 and 6 describe how few of the types of ARC harm identified in the study were immediately visible or easily recognised. Rather, the great majority of ARC harms described in victims’ accounts were unseen and chronic in nature. The ARC harms that were more easily recognised tended to be either the minor ARC harms, such as instances of late night noise and sleep disturbance, or the short-lived ARC harms, such as instances of aggression or injury. It is notable too, that those visible short-lived ARC harms often resulted in invisible longer-term ARC harms if they occurred repeatedly or were sufficiently serious as to cause chronic consequences. An example of the former was the frequent repetition of minor ARC harm stressors like sleep disturbance which had resulted in chronic and unseen psychological harms for the participants. Examples of the latter, more serious, instances of injury causing chronic harm were the injuries and deaths caused by drunk drivers where participants described long-term invisible psychological consequences.

10.7 Theme 6: ARC harm victims consciously concealed some ARC harms

As seen in Chapters 5 and 6, some ARC harms experienced by the study participants were so sensitive in nature that they declined to disclose any details of them. In general, the participants were open and forthcoming about their ARC harm experiences, but these other experiences of

ARC harm remained known only to the victim. These ARC harms were thus unseen by virtue of the participants' deliberate concealment, presumably prompted by their embarrassment or shame about the nature of the unspoken ARC harm experience.

Such concealment may have masked extreme examples of ARC harms experienced by the young adult participants. Indeed, two examples of participants' ARC harm experiences that were disclosed only at the eleventh hour hint at the nature of what might have been concealed. These examples emerged at the point at the end of the interviews when participants were asked directly if they had experienced any ARC harms that they felt unable to relate. One participant then reported a mental breakdown in a pressured university drinking environment and another reported succumbing to pressure to have unintended, and regretted, sex. The ARC harms that remained concealed by the participants, and the costs in suppressing them, endure and continue to be unknown and unseen.

10.8 *Theme 7: ARC harms were embedded in the environments where they occurred*

Chapters 7 and 8 set out how and why the ARC harms described in the study were embedded in the physical settings and psychological contexts in which they occurred. Participants' accounts indicated that these settings and contexts encouraged, permitted and legitimated ARC harms and rendered them hard to avoid. The high frequency of the ARC harm experiences reported in these settings and contexts and their familiarity indicated that they were integral to the everyday environments where the study participants lived and socialised. That same frequency and familiarity of these ARC harm experiences rendered them commonplace and unremarked in the background, and thus hidden in plain sight.

10.9 Theme 8: ARC harm victims tolerated and accommodated ARC harms

Chapter 9 has described how the established cultural norms of young adult participants precipitated the toleration and accommodation of ARC harms. Participants' accounts of themselves as victims of ARC harms portray ARC harms as intractable and inevitable within those cultural norms. As a response to this inescapability of ARC harm, tolerance and accommodation of a range of drinkers' harmful behaviours had become normalised. In the same way, ARC harm itself and its impact had become normalised and unremarkable since the victims coped with the ARC harms they experienced by absorbing them.

10.10 Theme 9: ARC harm victims excused ARC harm perpetrators

In Chapter 9 participants' portrayals of themselves as victims of ARC harm showed them repeatedly accepting alcohol and drunkenness as an excuse for drinkers' harmful behaviours. Peers who committed ARC harms were automatically excused and not held responsible for their harmful actions. Parents who had visited ARC harms on the participants as children were also excused, although for parents there was discomfort and the excuse was less automatic. Nevertheless, the deficiencies in parenting described were blamed on the alcohol consumed at the time. Perpetrators of ARC harms themselves were also described by the study participants as using alcohol and drunkenness as an excuse for their irresponsible behaviours and for the ARC harms they committed whilst drunk. The use of the 'drunk' excuse thus rendered ARC harms invisible, as the ARC harms effectively ceased to exist for both victims and perpetrators.

10.11 Theme 10: ARC harm victims took over responsibility for ARC harm perpetrators

Chapter 9 describes how the study participants portrayed themselves as ARC harm victims stepping in to take over responsibility for their drunk peers. The ARC harms experienced as a consequence involved several unsought responsibilities. Most often these involved providing

health care and social care for their severely intoxicated peers, extricating drunk peers from arguments and intervening, at not inconsiderable risk to themselves, to rescue drunk peers from fights. In this way, these peer perpetrators of ARC harms were not only excused for the ARC harms they had committed because they were drunk, they were also portrayed as incapable of being responsible for themselves and their harmful actions. Some ARC harm perpetrators were also described as getting drunk to abdicate responsibility for themselves deliberately. In this way, the ARC harms again effectively evaporated as the ARC harm victims absorbed the ARC harms and the ARC harm perpetrators were not held responsible.

ADDRESSING THE INVISIBILITY OF ARC HARM

10.12 Hidden in plain sight

Participants' portrayals of ARC harms in Chapters 6, 7 and 8 revealed ARC harms to be part of the fabric of their everyday young-adult lives. ARC harms were unremarkable within the ecological environments where the ARC harms took place because experiences of ARC harm were an ever-present part of the background to these young adults' lives. In this way, ARC harms were integral to the concrete physical settings and abstract psychological contexts of the participants' lives to the point where they were unremarked and effectively unseen. Chapter 9 described the high levels of tolerance and accommodation for ARC harms perpetrated on the study participants. These appeared to be rooted in the young adults' cultural norms, where ARC harms were simultaneously portrayed by participants as keenly felt and taken for granted. The high frequency of ARC harm experiences among the participants was thus masked by the normalisation of the ARC harm experiences in their home, study and social spheres.

The concept of ‘Hidden in plain sight’, as introduced in Chapter 8, is not new. Psychologists since at least the nineteenth century Gestalt theorists have written extensively about human perception and distinguishing some objects or events in the foreground whilst others fall into the background. These include the observation that people experience difficulty in seeing what is directly in front of them. Bronfenbrenner (1977) invoked Goethe to sum up this concept:

“Was ist der Schwerste von allem? Was dir das Leichteste dünket, mit den Augen zu sehen, was vor den Augen dir liegt.” (What is the most difficult of all? That which seems to you the easiest, to see with one’s eyes what is lying before them)” (Goethe, cited in Bronfenbrenner, 1977, p. 517).

In a more recent addition to the research canon in this field, Zerubavel (2015) has theorised that people have a *collective focus of attention*, with a *shared sense of relevance* and that the implication of these factors is that people also have a common understanding of irrelevance:

“...at the macrosocial level, it typically assumes the form of a common ranking of issues in terms of their collectively perceived relative salience. While some of them become part of the so-called ‘public agenda’, others remain off our collective radar screen” (Zerubavel, 2015, p. 70).

The study findings set out in this and the foregoing chapters suggest that ARC harm was indeed off the collective radar screen for young adults in the study.

A notable exception in the study findings that was not hidden in plain sight by its familiarity was the ARC harm caused by drink driving. For the study participants, the *vicinity of a drunk driver* was a familiar ARC harm setting and the great majority of their accounts included at least one instance of travelling with a drunk driver. Nevertheless, the risks associated with

alcohol when participants were in the vicinity of a drunk driver were not lost in the background. Rather, participants portrayed being in the vicinity of a drunk driver as a situation where they were fully aware that they were at acute risk of an alcohol-related harm from a drunk driver. This is likely to be attributable to the regular information campaigns, legislation and formal penalties that identify this particular ARC harm and keep it in the public eye. The established legislation makes drink-driving illegal and it can include criminal prosecution for manslaughter when drunk drivers cause a death. The legislation is also complemented by recurring public information campaigns and the roadside admonitions to ‘Think! Don’t drink and drive’. Together, the messages these send seem to have achieved their objective by placing the potential ARC harms that drink driving may cause in the foreground of the participants’ collective focus of attention.

Participants’ accounts of their ARC harm experiences from travelling with drunk drivers tended to be apologetic, even remorseful, often including a commitment never to travel with a drunk driver again. Their accounts thus indicated that they knew the warnings, and knew when they had ignored them. Many participants also used the term ‘over the limit’ to describe drunk drivers, showing an awareness of the drink-driving legislation, and one called for more swingeing penalties for death or injury caused by drunk driving. The risk of ARC harm in the setting of *vicinity of a drunk driver* was clearly not hidden from the participants by its familiarity. Whether recognition of the risk inherent in this setting would deliver on participants’ expressed intentions to avoid it in future remains a moot point. However, this particular risk of ARC harm figured in the foreground for them. The messages conveyed by the legislation and regular admonitions had equipped them with knowledge and a level of awareness that could help them avoid this high-risk setting for ARC harm, should they choose

to do so. It is interesting that these messages are promulgated by the Government under road traffic provisions, and not for public health reasons.

As seen above and in Chapter 1, the Government's current public health messages on alcohol-related harms set an agenda that is focused on health harms to the individual drinker. These messages are silent on the harms that drinkers cause to the people around them. The agenda has thus been set for the public, including young adults, to see alcohol-related harm in accordance with that convention. In addition, binge-drinking and rowdy, risk-taking, irresponsible behaviour by students is normalised and trivialised in the media, including in the social media that are now a central feature of such young adults' lives. Such normalisation is particularly prevalent in these social media, where the alcohol industry has a high profile and pervasive presence. Zerubavel (2015) observed the following on the influence of the media:

"... in telling us what to think about, the media are implicitly also telling us what not to think about. As such, they always play a critical role in both the production and maintenance of our collective blind spots" Zerubavel (2015, p. 71).

His observation about the media might equally be applied to the Government's public health messages on responsible drinking. Whether intentionally or not, directing the public towards potential health harms to the individual drinker effectively directs attention away from the harms that drinkers cause to the people around them. As Chabris and Simons (2010) observed:

"... attention is essentially a zero-sum game: If we pay attention to one place, object or event, we necessarily pay less attention to others" (Chabris and Simons, 2010, p. 38).

10.13 How might the study findings be used to mitigate ARC harm?

As there is currently negligible recognition of ARC harm in policy circles, it is unsurprising that there is no guidance on how to protect oneself from ARC harm or on how to cope with it. This last section of the chapter therefore considers how bringing ARC harm out of the background and into the foreground might be a first step in developing a policy to address it.

How might the study findings help to inform interventions to prevent or mitigate ARC harm? The foregoing discussion and conclusions regarding the covert and unseen nature of ARC harm suggest that simply naming and describing ARC harm could help to refocus the attention of young adults so that the harms caused by drinkers were no longer ignored. The study findings might also be used in information initiatives to help put ARC harm on the radar screen for young adults, and potentially for the wider public. These might include:

- Suggesting an accessible, mainstream name for ARC harm;
- Describing the key components of ARC harm;
- Describing the key risk factors for ARC harm; and
- Reframing the public and policy understanding of alcohol-related harm.

An accessible, mainstream name

Currently, there is no publicly recognised name for ARC harm in the mould of ‘passive smoking’. The general public has no name for ARC harm and although the research community recognises the phenomenon, it uses several different, disparate names when describing it. Examples include: *Social Consequences* (Klingemann and Gmel, 2001); *Negative externalities* (Cabinet Office, 2003); *Externalities* (Greenfield et al., 2009); *Passive drinking* (Donaldson, 2009b); *Collateral damage* (Giesbrecht et al., 2010); *Alcohol’s harm to others* (Room, et al., 2010); *Harm from Others’ Drinking* (WHO, 2011); *Second-hand drinking*

(Greenfield et al., 2014); *Collateral harm* (Seid et al., 2015). To date, none of these have captured the public imagination.

This matters as giving something a name fundamentally alters the way it is perceived (See Sapir-Whorf hypothesis in Hogg and Vaughan (2014)). For the purposes of this thesis, the term ‘Alcohol-Related Collateral harm’ (ARC harm) was introduced in Chapter 1 to highlight and address this issue. The term ‘ARC harm’ devised for this study may well fare no better than others with the general public. Nevertheless, the use of ‘ARC harm’ in the thesis highlights how the absence of an agreed, publicly-recognised name renders the phenomenon difficult to discuss or target. Also, mentioned earlier, the absence of a mainstream name means that the many different manifestations of ARC harm are not recognised as the same phenomenon. A mainstream, portmanteau name for all the harmful drinking behaviours and negative impacts on other people would enable the components to be corralled, discussed and targeted together.

Describing key components and risk factors

As seen in Chapter 1, determining and agreeing the components of ARC harm is not a straightforward matter. Drinkers exhibit many behaviours that are harmful to other people and those behaviours result in many different harms of varying severity. Any research or public health test or intervention for ARC harm involves a choice between targeting specific concerns or populations or attempting to capture the whole, with all its attendant complexities.

This study has elected to target young adult students and the components of ARC harm presented in the study findings derive entirely from inductive analysis of the examples of ARC harm volunteered by the young adult participants themselves. The novel taxonomy and the

themes developed in the study thus represent the ARC harms as experienced by, and directly relevant to, these young adults. In addition, the risk factor themes expounded for ARC harm in the study provide detailed information about the nature of ARC harm for these young adults and the circumstance in which it occurred. The taxonomy and themes developed for ARC harm thus present potential openings for targeted interventions to mitigate the ARC harm experiences and risks faced by young adults. The study findings may also have the potential to widen and reframe the public and policy understanding of the totality of alcohol-related harm for such young adults.

Widening and reframing the public and policy understanding

The study findings on the unseen nature of ARC harm indicate that prevention interventions for ARC harm might usefully focus on increasing knowledge in the first instance. In line with the aims set out by Rose (1992) for health education, the objectives would be:

“... to inform, to challenge, to encourage independent judgement and (arguably) to persuade” (Rose, 1992, p. 149).

Information to make ARC harm visible and raise its profile could widen the current understanding of alcohol-related harm. As discussed in Chapter 1, the concept of ‘responsible drinking’ is tightly controlled and its focus is the prevention of lifestyle diseases for drinkers. This current conception does not address the prevention of harm to the people around the drinkers or the wider harms to society; the use of the word ‘responsible’ notwithstanding. The Government message, ‘*Please drink responsibly*’, appears on alcohol product labels next to the UK CMOs’ advice on the lower-risk number of units for alcohol consumption and it is widely understood in terms of personal alcohol consumption. The only current, if somewhat oblique, advice to drinkers to consider any other person lies in the advice to women not to drink in

pregnancy (DH, 2016c). There are no messages to protect the baby after it is born, or older children and young people from parents' drinking behaviours; in stark contrast to the numerous warnings on parental smoking. Increasing knowledge about the totality of alcohol-related harm, to include the element of ARC harm within it could help to reframe the prevailing interpretation of the Government message to 'drink responsibly'.

Increasing knowledge of ARC harm for young adults might be approached by targeting the risk factors identified in the study. For example, given the finding that the risk of ARC harm increases after the age of eighteen as a function of age, leaving home and entering higher education, this vulnerable stage of individuation in young adults' lives might be targeted. Simple, frank examples of young adults' ARC harm experiences given to school leavers or first year students could raise the profile of ARC harm for them. One participant's description of a school's preventive drink-driving talk showed the potential efficacy of such information:

"We had a like a don't-drink-and-drive, sort of session... and they had people come in who'd been affected, like they'd lost a child, or there was a man who was like severely disabled after being hit by like a drunk driver.... that had quite a like personal impact on me because it was just so shocking... I think that had quite a big effect on everyone in our year really to be honest" (Stella, aged 19).

Similar, vivid information across the range of ARC harms identified in the study as relevant to young adults could have a comparable impact. Such an intervention could raise young adult students' level of awareness of ARC harm, enable them to recognise specific ARC harm risks and help them understand how they might become ARC harm victims. Such information could also address any expectations and pre-conceptions about drinking behaviours at university. It might also help counter the targeting of young adults by the alcohol industry, despite the "gross

imbalance between the small resources available for health education and the huge resources devoted to promotional activities by the purely commercial interests of the food and drinks industry” (Rose, 1992, p. 116).

Similarly, the study findings which suggest that young adults automatically excuse ARC harm perpetrated by their peers might also be targeted for an intervention that challenged this norm. Interventions might include questions to challenge norms directly. For example, the question ‘Who decides how much you drink, you or your mates?’ might weaken the impact of peer pressure to drink heavily. Such interventions could provide the basic ammunition to help young adults to prepare for the ARC harms they might encounter and to use their independent judgement to negotiate an easier path through them. Ultimately, information about ARC harm could begin to change young adults’ attitudes about drinkers’ irresponsible behaviours. They might then be persuaded that the current understanding of the message to ‘drink responsibly’ should be expanded to include responsibility to other people; not just to oneself.

10.14 How effective might interventions to prevent or mitigate ARC harms be?

It is unlikely that information to raise awareness alone would be sufficient to change the behaviour of drinkers who perpetrate ARC harms. Knowing about ARC harm may make it easier to see, but it will not make the issues exposed any more palatable to people whose social norms rely on it remaining unseen. Plant and Plant (2006) discuss and sum up the findings of research on the limitations of educational information as a tool for alcohol harm reduction. They conclude that it has some efficacy in improving awareness and changing attitudes, but is largely ineffective in changing peoples’ alcohol-related behaviours. The National Audit Office reached a similar conclusion on the efficacy of education:

“Education Campaigns cannot usually show a direct and measurable impact on people’s behaviour, but it is possible to measure changes in consumer awareness of a campaign’s messages” (National Audit Office, 2008, p. 24).

Plant and Plant (2006) also voice concerns that the limited efficacy of information campaigns may be a politically expedient concession to alcohol industry lobbying, insofar as the available evidence shows these to be one of the least effective means of preventing alcohol-related harm. They cite the following from the Portman Group website, commenting that it ‘should be taken as a statement of self-interest’, since it does not chime with the evidence from the scientific research community:

“An ‘educate and prevent’ approach is more effective than blanket controls. Alcohol harm reduction measures should target the minority who misuse alcohol rather than the responsible drinking majority” (Portman Group website, cited in Plant and Plant, 2006, p. 147).

In addition, the drinker-focused and health-harm-oriented approach of current alcohol harm policy in the UK effectively directs attention away from ARC harm. That being so, political and commercial objectives, as well as people’s personal proclivities are all likely to militate against unwelcome interventions that recognise the impact of ARC harm on society.

The limitations of information campaigns notwithstanding, the naming of ARC harm as a concept and the provision of information about it would be a useful first step, given the covert nature of the large majority of ARC harms. Also, the research of Asch (1952) on conformity indicates that a different voice giving a different message can counteract conformity. One participant reported the effect of such a different perspective on her own:

“You think it’s normal until someone else tells you like ‘This does not happen’ like ‘In Spain, people don’t pre-drink or go out and get really, really drunk like you lot’. So, I think you do see it as normal until someone else who isn’t a part of it says like it’s not normal” (Melinda, aged 19).

The dissemination of information about ARC harm could encourage independent judgement by making young people aware of ARC harm and the motivational and decision-making processes that cause its victims to conform. This in turn could help challenge the cognitive processes that shape the current levels of tolerance and acceptability for ARC harm.

Plant and Plant (2006) and the National Audit Office (2008) conclude that information may not change the undesirable behaviours of drinkers. However, interventions that explicitly name those behaviours and make them less acceptable to victims and potential victims, have the potential to change attitudes over time. Just as drink driving legislation and the accompanying campaigns do not stop all drinkers behaving irresponsibly by driving when they are over the legal alcohol limit, they do serve to make the general public more aware of this type of ARC harm. This in turn focuses public disapproval on such behaviours and engenders calls for increased efforts by the Government to curb them. An example of this in action can be seen in the newspaper article at Appendix 10. 2 *Drunk drivers who kill could face automatic jail terms*.

Other, more direct, preventive interventions for ARC harm might be based around the study findings on the high-risk environments identified for ARC harm. These might target directly the settings where ARC harms cluster for young adults. The permissions currently extended to drinkers who practice antisocial behaviours in such settings might then be curtailed.

Risk factors associated with young adults' cultural norms or with environmental settings and contexts could be amenable to preventive interventions. However, in bars and nightclubs, the permissive legitimating environment for ARC harm found in this study may align with their commercial interests. These are likely to preclude, or at the least inhibit, direct interventions to tackle the pervasive ARC harms, such as sexual harassment, that occur regularly on their premises. A wider public health campaign might draw attention to unacceptable behaviour by drunks in nightclubs however. A local Drinkaware campaign in Nottinghamshire (Drinkaware, 2016) touched on this. The associated research conducted for Drinkaware concluded that, in the context of a drunken night out, sexual harassment and molestation had become normalised. The campaign message to challenge this behaviour was: *'If you wouldn't sober, you shouldn't drunk'*. Another relevant local initiative, *'#RU2Drunk?'* was funded by the Police and Crime Commissioner of Devon and Cornwall and implemented by local police in liaison with Exeter University (University of Exeter, 2015). Breathalysers were introduced for entry to nightclubs in Torquay to persuade prospective clubbers to drink less alcohol before arriving. This resulted in a 39% drop in violent crime in the vicinity and a subsequent rollout of the initiative in Weymouth (University of Exeter, 2016).

While these two initiatives fall short of recognition of ARC harm as such, the first challenges the widely-held belief among the study participants that being drunk was an excuse for irresponsible and otherwise unacceptable behaviour. The second initiative makes the connection between heavy drinking and ARC harm crimes of violence. Also, given the high level of awareness for the ARC harm of drink-driving amongst the study participants, the use of the breathalyser brings ARC harm into the foreground by establishing a link to drink-driving. This sends an additional, and potentially persuasive, subliminal message.

Using the study findings for the setting of *university*, universities might reduce the risks of ARC harm by providing a less permissive environment. Actions might include, for example, reducing the pervasive presence of alcohol by not granting concessions for off-licence sales of alcohol to on-campus shops. Alcohol-focused promotions could be limited at Freshers' fairs and more opportunities for non-alcohol-based or low-alcohol recreational activities might be offered to help encourage students to meet and make friends in less risky settings. ARC harm might also be confronted indirectly in halls of residence, by placing students on the same course, with the same work schedule, together to counteract ARC harm conflicts when some students had study deadlines or exams and others felt free to drink and party noisily.

More directly, explicit information might be disseminated in students' welcome packs or in introductory seminars on arrival at university. These would bring the subject of ARC harm into the open and alert new arrivals to the ARC harms that students experience. Importantly, such information could challenge their pre-existing expectations of a permissive university environment for ARC harm. It would also encourage independent judgement by providing a different voice with a different message and, potentially, inculcate a higher level of consideration for fellow students:

"To challenge is to emphasise both the importance of the issue and the individual's own responsibility for decision. It seeks to strengthen the personal right of choice, not to invade it. It is a proper component of health education" (Rose, 1992, p. 151).

The motivation and potential benefits for universities themselves from such interventions might be a student population less pressured by alcohol-related activities and their concomitant ARC harms and an improvement in the overall student experience.

CHAPTER 11

SUMMARIES AND DRAWING CONCLUSIONS

Summary of chapter

This chapter outlines how the study's objectives have been achieved and how the study contributes to existing knowledge on the harms that drinkers do to the people around them. It summarises the key findings that characterise ARC harm for the young adult participants and underlines their significance and implications. The chapter then sets out the limitations of the study and considers the potential for generalizing the findings to other schools, colleges or universities and to other young adult populations. ARC harm is then considered as a potential public health target and the chapter ends with recommendations for further research in the field.

11.1 Meeting the study objectives

In Phase I, ARC harm was introduced as a public health issue and empirical quantitative and qualitative data were collected and analysed from students aged 16-24 on their experiences of ARC harm and on relevant demographic and public health lifestyle factors. Quantitative data were subjected to descriptive and inferential statistical analyses and systematic analysis of the qualitative data was used to create a novel taxonomy of ARC harm.

In Phase II, a purposive sample of Phase I survey participants was interviewed and qualitative data on their experiences of ARC harm were audio-recorded and transcribed. These data were subjected to thematic analysis to characterise ARC harm and to consider relevant domains of influence. Quantitative and qualitative data analyses from both phases of the study were brought together to characterise ARC harm and to consider its impact. This triangulation process enabled risk factors suggested by the statistical analyses and the taxonomy in Phase I

to be considered reflexively in the context of the Phase II findings. The analytical and historical review completed in tandem with the data collection established the position of ARC harm through history and as a societal and public health issue. It showed how the perception of alcohol-related harm has changed, how recent developments in lifestyle concerns have made ARC harm harder to see and how commercial and political interests divert attention away from it. Superordinate themes brought together insights from the historical and theoretical review with the survey and interview findings to explain how the participants coped with ARC harm and why ARC harm remains largely unseen within the totality of alcohol-related harm.

11.2 Key issues from the historical and analytical review

Until the late twentieth century, the UK Government viewed alcohol-related harm almost exclusively in terms of the harms that drinkers cause to society. The focus was on ARC harm and interventions were population-based. Currently, the Government focus is on the alcohol-related health harms to drinkers. This has supplanted the historical understanding of alcohol-related harm as a burden on society. Further, since the concept of alcohol-related harm has been arrogated in this way, drinkers perceive the admonition to ‘drink responsibly’ as a licence to drink with responsibility to themselves alone. Drinkers are encouraged to disregard their responsibilities towards their children, partners, friends and other people who may be affected by their drinking habits. This effectively gives drinkers freedom to harm the people around them. Yet, as Mill (1859) argued, liberty entails freedom to act, but only if that is not to the detriment of others. Sen’s modern interpretation of this argument shows that it has lost none of its potency with the passage of time:

“We have to consider both the freedom of action and the nature of the consequences and outcomes to have an adequate understanding of liberty” (Sen, 2009, p. 316).

The current policy approach to alcohol-related harm also contrasts markedly with the approach to smoking-related harm, where many preventive interventions target smokers' responsibilities to people who may be affected by their smoking habits. There are no equivalent preventive interventions that focus on drinkers' responsibilities to people who may be affected by their drinking habits. Preventive policies for smoking harms follow the guiding public health principle invoked by Rose (1992). Preventive policies for alcohol harms do not.

"We are all responsible for all" (Dostoevsky, cited in Rose, 1992, p. 130).

The harms that drinkers do to the people around them represent a relatively new field of research. This is evolving internationally since these harms were recognised by the World Health Organization (WHO, 2011). Yet disparate understandings of the composition of these harms and the different approaches in different countries preclude satisfactory estimations and comparisons of the extent of these harms. In the UK, there are no national data collections that focus on ARC harm, only fitful references to it, incidental to data collected for other purposes such as violent crime statistics (ONS, 2015a).

Data on the prevalence of alcohol-related harms to other people in the UK are found in just two regional research studies. Gell et al. (2015) analysed survey data collected in Scotland and the North West of England from adult members of the public, reporting levels of 51.4% and 78.9% respectively. Balance North East (2016) surveyed adults in the North East and reported a level of 57%. Differences between these studies mean that the levels of harm reported are not directly comparable, but the high percentages convey the significance of the issue. Research in other countries reports mixed and often high levels of harm from other people's drinking, e.g. Norway 40% (Rossow and Hauge, 2004), USA 60% (Greenfield et al., 2009), Canada 33% (Giesbrecht, Cukier and Steeves, 2010), Australia 70% (Laslett et al., 2010), New Zealand,

71% (Casswell et al., 2011), Switzerland 52% (Marmet and Gmel, 2017) and Ireland 28% (Hope, 2014). However, comparisons between countries are similarly hampered by methodological differences (Room et al., 2010).

PHASE I: SUMMARIES OF KEY FINDINGS AND IMPLICATIONS

11.3 The prevalence of ARC harm

The Phase I findings comprise precise statistical findings and a novel taxonomy of ARC harm derived from 450 surveys. The first key finding was that 64% of the sample population had experienced ARC harm. This was determined by asking participants if their health or safety had been put at risk by others' drinking or if they had been affected adversely by other peoples' drinking in another way. These broad questions allowed the young adults to decide what comprised a harmful experience for them. The level of ARC harm determined thus represents only those ARC harms that the young adults themselves considered significant.

The prevalence of ARC harm was higher for some groups of participants. For young women it was 69%, for university students it was 69%, for young adults aged over 18 it was 72%, and the highest level of 80% was reported by participants with close family members who drank alcohol every day. The overall percentage of participants who had experienced ARC harm may also be higher than 64%. This is because the point where pressure to drink to excess became an ARC harm could not be distinguished satisfactorily from participants' personal volition to drink, so this pressure was not included in the total. There was considerable tolerance of ARC harm whilst at the same time its effects were felt keenly. This left an unresolved tension between the desirable effects of alcohol, sought by the 79% of participants who reported that alcohol played a role in their lives, and the numerous undesirable

consequences they reported from other people's drinking. This dichotomy was considered further in Phase II in the light of the greater depth of data afforded by the interviews.

Both drinkers and non-drinkers experienced ARC harms, and ARC harms were not associated with the quantity of alcohol consumed by the participants. Abstainers, moderate drinkers and heavier drinkers all experienced similar levels of ARC harm. These findings are counter-intuitive and they contrast with some other studies that have reported associations with the amount of alcohol consumed (e.g. Greenfield et al 2015; Seid et al., 2015). However, the participants' accounts showed that they were all routinely in the presence of drinkers in their homes and social lives, regardless of their own state of sobriety or drinking proclivities. That is, the frequency of the participants' exposure to other drinkers was significant and their own alcohol consumption was not important. This suggests that key precipitating factors for ARC harms for these young adults lie in their exposure to the normative environments and social settings where ARC harms occur. Qualitative analyses in Phase II investigated this further.

The lack of association of ARC harm with the amount of alcohol consumed also contrasts with the alcohol-related harms that drinkers do to themselves, which are positively correlated with the quantity of alcohol consumed (Home Office, 2012; DH, 2016a). Similarly, there was no association with ARC harm for participants' other three lifestyle risk factors of smoking, diet and exercise, nor with their overall health. Unhealthy behaviours in these other lifestyle risk areas did not precipitate ARC harms, but neither did leading a healthy lifestyle confer any protection. This indicates that neither the healthy nor unhealthy lifestyle behaviours of the participants were relevant to their experiences of ARC harm. This in turn indicates that the public health lifestyle advice currently available offers no protection from ARC harm.

11.4 The four main drivers of ARC harm

Using logistic regression, four key predictors were identified for ARC harm: female gender; being aged 19 or over; having close family members who drink every day and friends or family who influence drinking decisions (See Table 5.3). These indicated the importance of both immutable characteristics in the participants themselves and of external influences.

Risk factor: Female gender

The statistical findings strongly suggested that young women were at greater risk than young men. The gender bias in experience of ARC harm was significant and the relative risk ratio was surprisingly high (OR=1.62, 95% CI 1.01-2.62). This finding contrasts with some studies that report a more mixed gender division (e.g. Laslett et al., 2011; Ramstedt et al., 2015). However, other studies also report higher levels of ARC harm for young women (e.g. Rossow and Hauge, 2004; Huhtanen and Tigerstedt, 2012). Reflexive consideration of the gender divide in Phase II found negligible indications for any types of ARC harm exclusive to either male or female participants. It seems likely, however, that the endemic sexual harassment of young women by drunks in nightclub settings contributed to the statistical findings on gender.

Risk factor: Aged over 18

The findings on age suggested a significant increase in the risk of ARC harm for participants after the age of 18. An increased likelihood associated with age was anticipated, in line with the longer exposure to risk. However, the step-wise change between the 16-18 and 19-24 age groups is significant (OR=2.61, 95% CI 1.57-4.34). This coincided with collinear factors observed for changing domicile and moving to university, which suggested that the increased risk was a function of age, domicile and entering higher education. These findings indicated that this period of transition and change in status for young adults was likely to be a time of

very significant risk for ARC harm. The theme of *Individuation* that emerged from thematic analysis in Phase II complemented these statistical analyses.

Risk factor: Family members drinking

The findings on the effects of family members drinking habits were notable as they indicated the importance of the frequency of drinking by others in the family home. While there was no association between having close family members who drank alcohol and ARC harm (OR=0.99, 95% CI 0.50-1.99) there was a very strong association when participants had close family members who drank alcohol every day (OR=2.65, 95% CI 1.49-4.69). These findings strongly suggest that close family members' drinking frequency was a significant risk factor for the ARC harm among these young adults.

Risk factor: The influence of others' drinking habits

The fourth main driver rests on whether the participants' decisions to drink or not to drink were influenced by the drinking habits of their friends or family. Seventy-three percent of the participants who reported that the drinking habits of friends or family affected their own decision to drink had experienced ARC harms, compared with 51% who said they were not influenced in this way. There was a significant statistical association, supported by logistic regression (OR=2.03, 95% CI 1.32-3.10). This suggests that participants' susceptibility to others who influenced their decisions to drink was a significant risk factor for ARC harm. These findings may also indicate that these participants were more generally suggestible and thus more easily pressured into unwanted situations where the risk of ARC harm was greater.

11.5 The novel taxonomy of ARC harm

The taxonomy of ARC harm was determined inductively from the examples volunteered by the young adult survey participants. It is important because it represents the participants' personal experiences of ARC harm. Just as participants could decide whether or not they had experienced harm from other peoples' drinking that put their health or safety at risk or affected them in any other way, no assumptions were made about the nature of any ARC harms they had experienced. Participants did not choose from a predetermined list of potential ARC harms, they volunteered details of their own experiences of harm. The inductive coding and categorisation of these examples thus represents the ARC harms that were directly relevant and important to the participants. This approach ensured that the novel taxonomy of ARC harm was germane to these young adults.

ARC harms described varied in severity, from relatively minor harms to life-changing events. All the nuanced examples of ARC harm described were corralled into the taxonomy of eight ARC harm categories, comprising, briefly, *Nuisance*, *Tolerance*, *Pressure*, *Unsought responsibility*, *Psychological harm*, *Physical harm*, *Relationship harm* and *Undisclosed harm*. Each category was defined and illustrated with selected quotes from participants. (See Table 5.6). In the 'undisclosed' category participants had experienced ARC harms, but explicitly declined to give examples. Defining this category other than speculatively was not possible. Nevertheless, it indicated considerable sensitivity around ARC harm in this population group.

PHASE II: SUMMARIES OF KEY FINDINGS AND IMPLICATIONS

The findings in Phase II from the series of in-depth interviews supplemented and extended the Phase I findings on ARC harm by adding depth and addressing the questions of why and how ARC harm occurs. Relevant illustrative quotes from participants were integral to the findings.

11.6 *Themes for the character of ARC harm*

As seen in Chapter 6, the additional level of detail afforded by the interview data facilitated a deeper characterisation of ARC harm. The range and scale of physical and psychological experiences of ARC harm identified are represented as themes, together with descriptive statistics of categorical data. Semantic themes generated using thematic analysis characterised the ARC harms the participants described. Two themes, *Nuisance* and *Physical harm*, represented the most immediate and easily seen characteristics of ARC harm. Five themes represented the more covert ARC harm characteristics of *Tolerance*, *Pressure*, *Unsought responsibility*, *Psychological harm* and *Relationship harm*.

Findings from the categorical data contributed details on the frequency of the ARC harms identified. These suggested multiple experiences of ARC harm and that multiples of the same ARC harm were commonplace. (See Appendix 6.1, *Semantic themes characterising ARC harm*). Qualitative findings showed that even relatively minor ARC harms like being woken at night by revellers, where the impact seemed trivial at first, were transformed incrementally into greater harms by repetition. The qualitative and quantitative findings together provided an indication of the total burden of ARC harm.

The Phase II findings altered the overall pattern in the characterisation of ARC harm and unseen ARC harms dominated the narrative more clearly than in Phase I. The coding in Phase II also increased the number of identifiable types of ARC harm experienced by young adult students, almost doubling the number identified from the Phase I survey. This further emphasised the wide range of harms that other peoples' drinking habits may cause. Nevertheless, the semantic themes that emerged in Phase II largely confirmed the categories determined in the Phase I taxonomy. This indicates that, despite the numerous and disparate manifestations of ARC harm, a satisfactory characterisation of ARC harm for these young adults can be captured by a taxonomy that comprises a modest set of categories. This finding is important for considerations of how the profile of ARC harm might be raised. Firstly, it indicates that the complexity of ARC harm can be condensed into a relatively straightforward representation of its principle components. Secondly, given the covert nature of many of the individual types of ARC harm, grouping them together conceptually has the potential to make them easier to see. Figure 11.1, *The iceberg metaphor for the phenomenon of ARC harm*, illustrates how this facilitated a visual representation of ARC harm, with the unequal distribution of unseen ARC harms represented by the lower portion of the iceberg.

11.7 Themes for domains of influence and risk factors

Chapters 7 and 8 advanced theory to explain the role played by environmental factors in precipitating experiences of ARC harm. Informed by Bronfenbrenner (1977) and Room et al. (2010), themes captured latent meanings to explain the relevant properties of the domains of influence acting on participants' experiences of ARC harm. In Phase I, statistical findings had suggested predictors for ARC harm that raised questions about the nature of the external influences exerted on the participants. Analysis of the domains of influence in Phase II

complemented these findings by providing insights into risk factors in the physical settings and psychological contexts of the participants' lives.

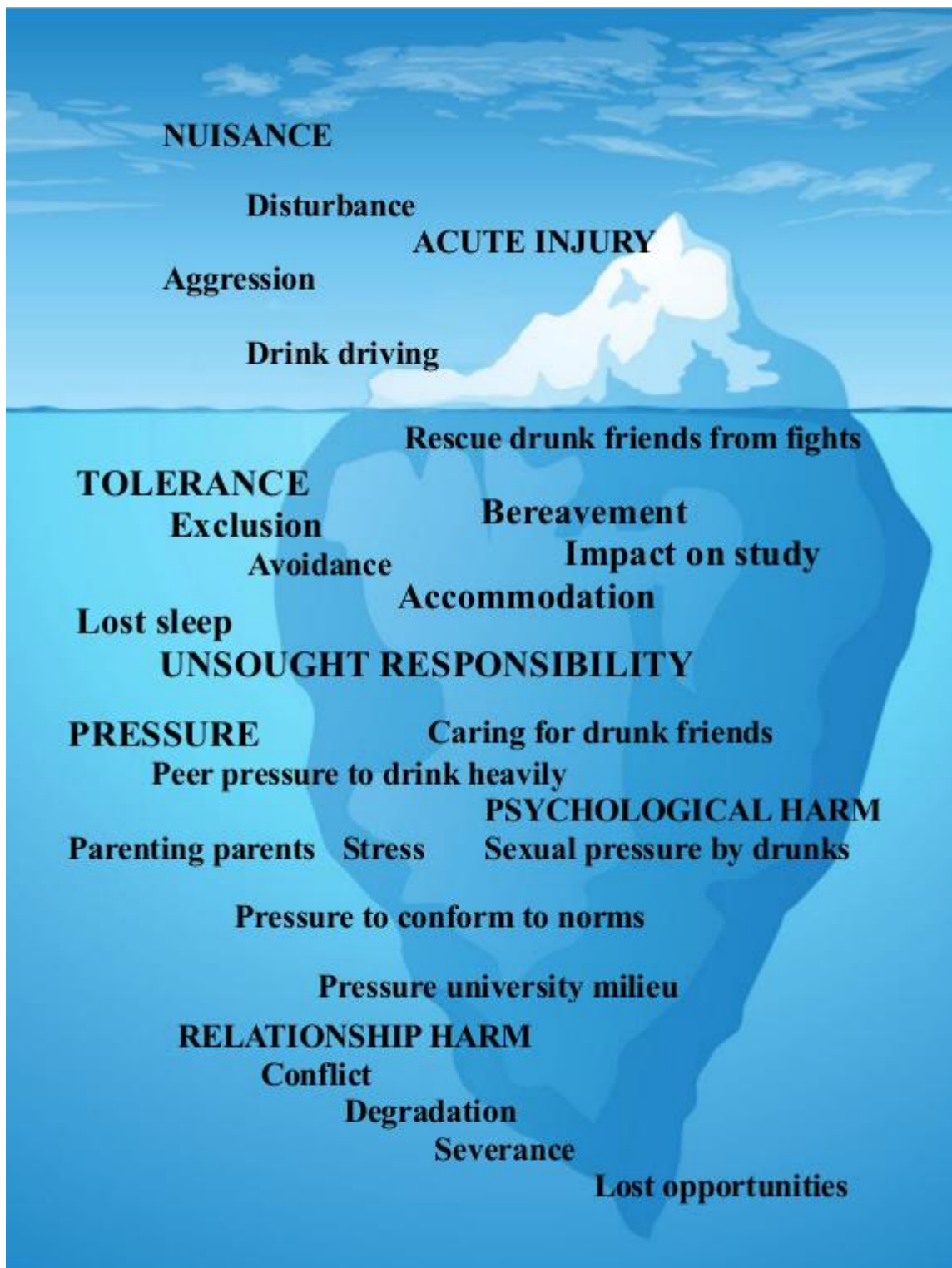


Figure 11.1 The iceberg metaphor for the phenomenon of ARC harm

Themes for risk factors associated with physical settings were designated as either ‘home’ or ‘away from home’ settings. The home settings most important for ARC harm were *Hall of residence* and *Family home*. The important physical settings away from home were *Nightclub*, *Vicinity of a drunk driver* and *University*. Three themes emerged for risk factors associated with psychological contexts: *Individuation*, *University milieu* and *Perceptions of alcohol*. The theme of *Individuation* represented the participants’ psychological turmoil as they negotiated this transitional period in their lives. The theme *University milieu* represented the participants’ reported expectations of university life, and the inducements to drink, permissive atmosphere and absence of censure or alternatives that met them on arrival. The theme *Perceptions of alcohol* captured participants’ views of alcohol that were implicated in their experiences of ARC harm.

Descriptive statistics from the coding frequencies in Phase II indicated the relative importance of the various risk factors within the themes for physical settings and psychological contexts. These suggested that the physical settings posing the greatest risk of ARC harm for participants were *Nightclub* and *Vicinity of a drunk-driver* and that the psychological context that posed the greatest risk was *Individuation*. (See Appendices 8.1 and 8.2).

Qualitative findings suggested that physical settings like *Hall of residence* were permissive for ARC harms. Here, participants were afforded a setting with few restrictions on drunken behaviours to prevent or mitigate ARC harms. Also, physical settings, like *Nightclub*, were reinforcing or legitimating for ARC harms, as they offered inducements to drink to excess and indulge in drunken behaviours that would be unacceptable elsewhere. Consequently, the participants’ everyday home and social settings were predominantly at least permissive and often reinforcing or legitimating for ARC harms. So, whether or not the participants were

drinkers or heavy drinkers, they shared these same physical settings and psychological contexts where the risks of ARC harm were high and hard to avoid.

Most participants' portrayals of ARC harm were in their current home and social settings. Nevertheless, there were also significant findings on participants' historical experiences of ARC harm from parents or other older family members. These suggested that the family home remained a significant ARC harm setting for some participants, even when they no-longer lived there. These findings indicate that ARC harms experienced in childhood or adolescent settings had longevity for the participants concerned and that the security of their family homes had been compromised by ARC harm.

11.8 The influence of normative behaviours on exposure to ARC harm

The themes of *Individuation*, *University milieu* and *Perceptions of alcohol* suggested that participants were at high risk of ARC harms as they negotiated the period between the settings and contexts of school and family home to university. Alcohol and ARC harm featured prominently in their lives as they made that transition. These themes indicated the strong influence of social referencing on the participants (Sherif, 1966; Asch, 1952). On entering the university milieu, making new friends and gaining social acceptance were portrayed by participants as unconditional priorities, with the liberal use of alcohol playing a key role. To be part of young-adult society and be accepted as normal was to socialise with heavy drinkers and to be exposed to the pervasive ARC harms that that entailed.

Significantly, although the participants described engaging in alcohol-centred activities to relax and have fun, this was also described as mandatory for making friends and gaining social acceptance. This indicates that their vulnerability and susceptibility to the influence of others

increased the participants' risk of ARC harm substantially. These findings resonate with the Phase I statistical association between ARC harm and susceptibility to the influence of others.

A further finding on conformity was the ARC harm pressure on young men to take part in competitive heavy-drinking rituals, with potentially grave outcomes. Arguably, those who participated knew the risks entailed. However, as described by the male study participants, to choose to do otherwise would be social suicide. This finding further emphasises the strength of the compulsion to conform, regardless of the ARC harm consequences.

All the participants, including the non-drinkers and more moderate drinkers, conformed by socialising with heavy drinkers to make friends and participate in the social opportunities that this offered. Although the non-drinkers and moderate drinkers regularly found themselves taking on unsought and unwelcome ARC harm responsibilities as minders, carers and fight referees for their drunken peers, this seems to have been preferable to the prospect of loneliness and exclusion from the group. The study participants chose to conform, but their perception was that they did not have a genuine choice, since that choice entailed choosing between having friends, status and a social life, or having none of these. This finding resonates with the Phase I finding that ARC harm was not significantly associated with whether the participants drank alcohol, or with the quantity of alcohol they consumed.

11.9 Coping with ARC harm

Chapter 9 draws together the findings on how the participants coped with the impact of ARC harms, prompted by the modelling work of Orford and his collaborators (e.g. Orford et al. 2010). These showed that participants were ambivalent about ARC harm and expressed conflicting views that might be expected to cause cognitive dissonance (Festinger, 1957). Participants

reported substantial dislike of the ARC harms they experienced and repeatedly described the perpetrators acting irresponsibly and abdicating responsibility for their own behaviour. Yet, significantly, the participants simultaneously accommodated those same unwelcome behaviours from drinkers with few indications that they held the perpetrators of ARC harms responsible for their actions. As victims of ARC harm, the participants tolerated otherwise intolerable behaviours, took over responsibility for the perpetrators and excused their actions. The overall outcome of these coping behaviours was that the participants effectively absorbed their peers' ARC harms as the price of entry to young-adult society. Given the extent of the ARC harms reported, these findings are remarkable. They indicate the very high value placed on that society by these young adults, and their fears of any alternative.

Coping with peer perpetrators

The finding that the participants routinely excused peer perpetrators of ARC harm is notable, not least as participants described drinking alcohol as conferring adult status, yet they portrayed drunkenness in their peers as an automatic excuse for irresponsible, childish, behaviours. Descriptions of an ARC harm were repeatedly followed by an acquittal, stating that the perpetrator would not have committed the harmful act had they not been drunk. Also, although alcohol was blamed, the excuses were not attributed to the relative degrees of cognitive impairment caused by alcohol. Rather, the excuses drew on a perception that the drunk person and the sober person were separate individuals, with the drunk person dictating the actions and the sober person having no responsibility for them.

This finding echoes the experiments of Milgram (1974) whose experimental subjects believed they were acting as agents for another person, and were thus not responsible for their actions. As the young adult participants consistently distinguished the drunk perpetrator of an ARC harm

from that same person when sober, the state of drunkenness authorised drunks to act irresponsibly with impunity. Including themselves in the excuse may partly account for the absence of dissonance in the participants' facility to condemn and excuse ARC harms simultaneously.

Coping with parent perpetrators

Parents' ARC harms were also excused, but with some evident discomfort. This suggests that participants were less able to reconcile and dismiss these harms. Participants' descriptions of ARC harms from childhood and adolescence indicated that these entailed coping with responsibilities inappropriate to their age. Some participants' accounts indicated that they had coped with ARC harms of significantly deficient, or, on occasion, directly harmful, parenting and psychological harm. These qualitative findings complement the Phase I statistical findings that suggested that parents who drank every day were a risk factor for ARC harm.

The findings on parental ARC harms resonate with findings from other research on the consequences of parental alcohol consumption (e.g. Klingemann and Gmel, 2001; Velleman and Orford, 1990; Ramstedt et al., 2015). However, those studies concern the families of heavy drinkers and alcoholics. The study findings are novel as the level of parental drinking portrayed was lower. It might be classed as regular, frequent, social drinking, but not as heavy drinking or alcoholism. Nevertheless, the participants' experiences of ARC harm from parents and older family members clearly echoed the harms found in those previous studies. Where, formerly, such harms have been attributed to parents who were heavy drinkers or alcoholics, the study findings suggest that ARC harm is not confined to such a small minority. Rather, they indicate that parents who are regular, frequent social drinkers are also implicated. This is important as the number of parents likely to be such frequent social drinkers is much greater and many more children and young people may be harmed than previous studies suggest.

11.10 Themes for why ARC harm remains unseen

Chapter 10 brings together the themes advanced in earlier chapters into ten themes to explain how and why ARC harm resists being seen within the totality of alcohol-related harm. These themes are wide-ranging and draw on the current, scant Government attention to the phenomenon of ARC harm, as discussed in the analytical review, and on the study findings that show the embeddedness of ARC harm in the environments and the behavioural norms of the young adult participants' lives. (See Appendix 10.1, *Ten themes for how and why ARC harms remain unseen*).

In the UK, a comparable collective blindness to the harms from other peoples' smoking persisted for many years until the concept of 'passive smoking' seized the public imagination. Subsequently, public awareness of those harms has prompted progressively hard-hitting interventions on smoking, and not just for passive smoking (e.g. DH, 2015). In the same way, increased awareness of ARC harm could transform public opinion and prompt more effective interventions for alcohol-related harm.

However, the proportion of the population who enjoy drinking alcohol, and who thus have a vested interest, is far greater than the proportion who enjoy smoking tobacco. Consequently, the paradigm shift in public opinion for ARC harm to achieve a similar effect would need to be that much greater. As Sen asserts:

“What we can see is not independent of where we stand in relation to what we are trying to see. And this in turn can influence our belief, understanding and decisions”

(Sen, 2009, p. 155-6).

CONCLUDING OBSERVATIONS

11.11 Limitations of the study

The pragmatic mixed methods employed in the study were designed to be complementary, with the objective of triangulating the findings and affording them greater authority. The largely quantitative findings of Phase I were complemented by the largely qualitative findings of Phase II. Each approach offered a perspective on the ARC harm experiences of young adult students. However, the strengths inherent in quantitative approaches, such as precision, and in qualitative approaches, such as depth, also come with the attendant weaknesses of each (Neale, 2009). Those relevant to the study are outlined below.

Sample biases:

In Phase I, the survey sample was self-selected from the student populations of the participating colleges and the university. In Phase II, the interview sample was self-selected from the purposive sample of the Phase I participants invited for interview. For both phases of the study, participants' reasons for taking part are occult and largely unknowable. In addition, the samples for both phases of the study were biased for gender, as more than two thirds of the participants in each were female. The Phase II sample was also biased for age, as the interviewees were exclusively aged 18 or over.

Researcher bias:

The researcher's own overarching philosophy, public health background, experience and ideas on alcohol-related harm influenced the research design, methodological processes and analyses in both phases of the study: "...previous knowledge brings with it assumptions about what you might find" (Bazeley and Jackson, 2013, p. 25).

Limitations of the survey format:

The convenience sample and the single geographical location limit the extent to which the survey findings may be generalised. The survey findings are subject to self-report bias, mitigated by participant anonymity. The survey method of data collection also constrained the depth of the qualitative data analysis achievable in Phase I.

Limitations of the interview format:

The interview data collected comprised the self-edited, subjective accounts of the participants, subjectively interpreted and analysed by the researcher. The conventions of a constructivist inquiry were followed, so the findings represent the researcher's interpretation of the information that participants elected to report. A consequence of the constructivist approach is that the interview findings do not purport to be facts about the participants' experiences of ARC harm. The findings are a construct of the interview process and the interaction between the participants and the researcher.

Severity of ARC harms:

In the absence of a recognised measure for the severity of ARC harm, interpreting the degree of harm relies on the young adults' descriptions of ARC harms.

Causality of ARC harms:

Although the inferential statistical analyses in Phase I suggest ARC harm predictors for the study sample, causality for ARC harm cannot be inferred from these findings. This should be the object of future studies.

11.12 Generalizability of the study findings

As the study was conducted in one geographical location in Southern England, the findings are exclusive to the university and college participants studied. Nevertheless, the study insights reflect the way the young adult participants themselves perceived ARC harms and they may have wider relevance to similar young adults. There may be implications for other sixth-form and university students around the country, and possibly in other countries. Regarding the potential wider generality of the risk factors for ARC harm identified for the study sample of young adults, some may merit more extensive promulgation. Some risk factor settings, such as halls of residence are exclusive to students, but others, like nightclubs and family homes with frequent parental drinking, are probably shared with other young adult population groups. Similarly, risk factors for psychological contexts that link ARC harms to the university milieu are exclusive to university students, whereas others, such as needing to socialise and to conform to group identity, probably have wide currency among all other young adult populations.

11.13 ARC harm as a public health target

Given the study findings on the covert and unseen nature of ARC harm, raising the profile of ARC harm is a priority. At present, there is no preventive guidance to alert people to ARC harm or to help protect against it. Also, public health messaging on alcohol targets health harms that tend not to manifest until middle-age. This bypasses young adults as it does not chime with their lives. It also implies that young adults experience no alcohol-related harms, despite evidence to the contrary. The study findings indicate that ARC harms represent a significant risk to young adults' health and wellbeing. ARC harm is thus a public health target that is directly relevant to young adults' lives and it presents an opportunity to develop preventive messages that are meaningful to young-adult populations.

The study gives ARC harm an accessible name, describes its key components and identifies risk factors for young adults. The findings might be used in preventive public health education initiatives to raise the profile of ARC harm for young adults, and, potentially, for the wider public. Chapter 10, posits some suggestions for how ARC harm interventions might help to refocus young adults' attention and ensure that the harms caused by drinkers are no longer ignored. Deployed to school or college leavers, or first-year university students, prevention initiatives could alert them to ARC harm risks and advise on mitigating tactics. As a minimum, young adults have a right to be informed about ARC harm and the risks it entails. In coming to know and understand the prevalence and covert nature of the phenomenon of ARC harm, these young adults would be empowered to reduce its impact on themselves and their peers:

“People can choose what to do about the information they receive, but they are at least entitled to know as much as possible of matters that affect their health choices.” (Rose, 1992, p. 149).

11.14 Recommendations for future research

The harm that drinkers do to the people around them is a rapidly developing area of research internationally. For example, Ramstedt et al. (2015) have recently compared some of these harms across six in Northern European countries and an international research project based in Australia (Callinan et al., 2016) has begun developing a database to describe the prevalence, patterns and predictors for these harms across seven collaborating countries. International research is also continuing into the burden on family members affected by alcohol addiction (e.g. Rane et al., 2017). Yet, in UK policy circles this issue remains on the periphery.

The prevalence of ARC harm and the risk factors identified in this study indicate the need for further studies of young adult students and other young adult populations. The study has

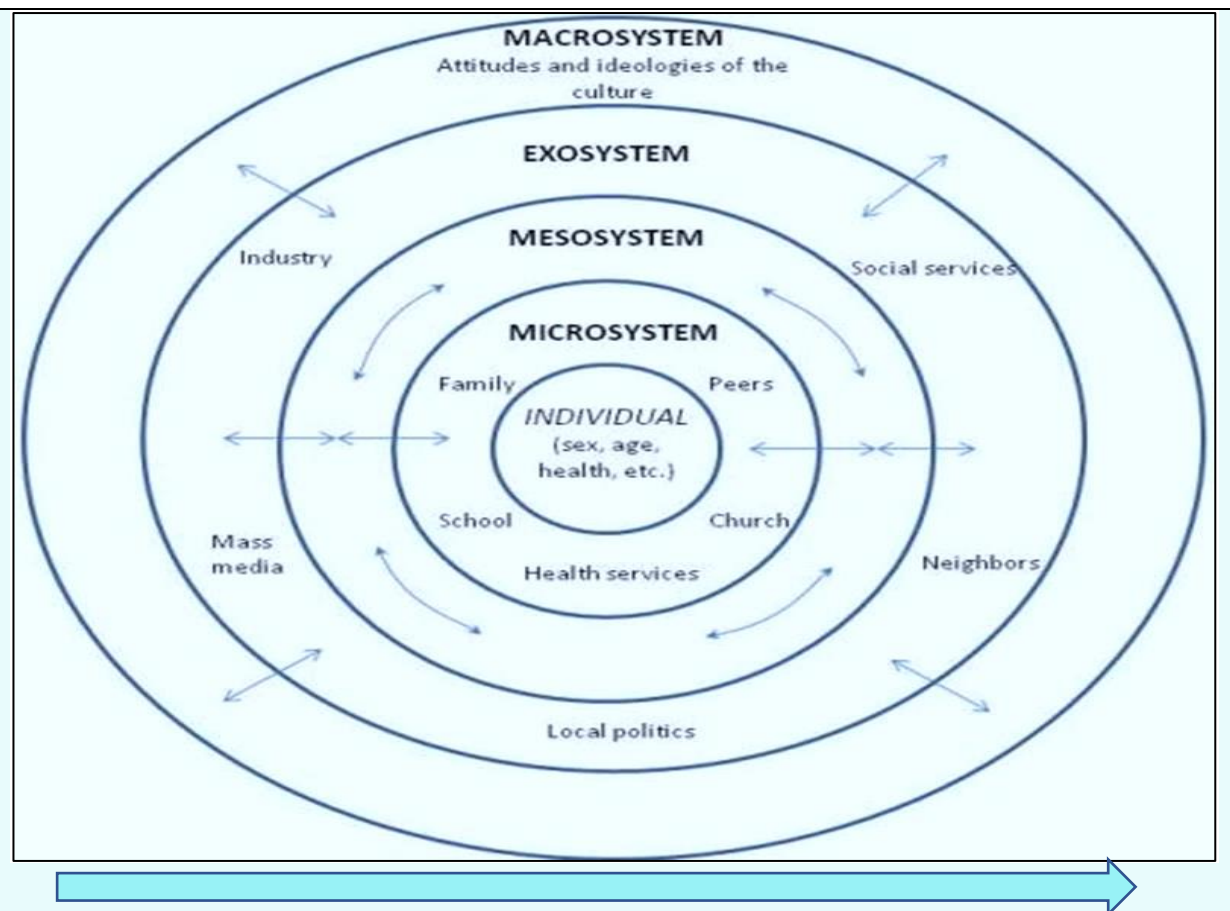
addressed some gaps in the knowledge of ARC harm, but there are many opportunities for further work to augment this under-researched field. Appendix 11.1, *Prototype questionnaire to test young adults for ARC harm*, shows how key types of ARC harm identified for the study participants might translate into a set of fifteen binary survey questions. This might be used to validate the study findings on the prevalence of ARC harm in other young adult student populations. However, as the questions capture all the types of ARC harm volunteered by the participants, they may prompt responses that support a higher level of ARC harm prevalence.

Given the paucity of research in this field in the UK, future studies in other regions with a variety of population groups are indicated to increase knowledge of ARC harms. For example, ARC harm questions might be devised for inclusion in routine national Opinions and Lifestyle Surveys (e.g. ONS, 2016d). Further studies like those cited in Chapter 10 (Christmas and Seymour, 2014; University of Exeter, 2015; 2016) are also indicated, as is a comparative review of the disparity in public health interventions in the UK for passive smoking and those for ARC harm. Such studies would encourage independent thought and challenge current perceptions that perpetuate and encourage ARC harm.

This study has told the story of ARC harm for a population group of young adult students and advanced evidence that broadens the current conception of the totality of alcohol-related harm. The findings have the potential to raise awareness of ARC harm. However, much more work is needed in the field to generate and promulgate robust evidence on ARC harm to inform and prompt initiatives to address it in the UK. Until there is recognition and understanding of ARC harm by the public and the Government, ARC harm and the issues it presents for public health will remain the unseen dimension of alcohol-related harm.

APPENDICES

APPENDIX 2.1 Ecological Systems Theory (Urie Bronfenbrenner)



CHRONOSYSTEM: passage of time over individual's life course and surrounding environment.

Ecological Systems Theory: Bronfenbrenner's definitions for the ecological elements of his system

A **Microsystem** is the complex of relations between the developing individual and the environment in an immediate setting containing that person (e.g., home, school, workplace, etc.). A setting is defined as a place with particular physical features in which the participants engage in particular activities in particular roles (e.g., daughter parent, teacher, employee, etc.) for particular periods of time.

A **Mesosystem** comprises the interrelations among major settings containing the developing person at a particular point in his or her life. [...] In sum, stated succinctly, a mesosystem is a system of microsystems.

An **Exosystem**, is an extension of the mesosystem embracing other specific social structures, both formal and informal, that do not themselves contain the developing person but impinge upon or encompass the immediate settings in which that person is found, and thereby influence, delimit, or even determine what goes on there.

A **Macrosystem** refers to the overarching institutional patterns of the culture or subculture, such as the economic, social educational, legal, and political systems, of which micro-, meso-, and exosystems are the concrete manifestations. Macrosystems are conceived and examined not only in structural terms but as carriers of information and ideology that, both explicitly and implicitly, endow meaning and motivation to particular agencies, social networks, roles, activities, and their interrelations. What place or priority children and those responsible for their care have in such macrosystems is of special importance in determining how a child and his or her caretakers are treated and interact with each other in different types of settings. (Bronfenbrenner, 1977. pp. 514- 515).

A **Chronosystem** encompasses change or consistency over time not only in the characteristics of the person but also of the environment in which that person lives (e.g., changes over the life course in family structure, socioeconomic status, employment, place of residence, or the degree of hecticness and ability in everyday life). (Bronfenbrenner, 1994, p. 1646).

APPENDIX 3.1 Phase I: Cross-Sectional Survey Questions

ALCOHOL

Q: Do you drink alcohol at all currently? (Regularly or occasionally) YES/NO*

Q: Do your close friends drink alcohol at all?

Q: Do your close friends drink alcohol every day?

Q: Do your close family members drink alcohol at all?

Q: Do your close family members drink alcohol every day?

Q: How would you describe your own alcohol consumption on average?

(Choose the option that that most nearly matches what you do)

☐ I drink pretty much every day and I like to have several at a sitting and to get drunk.

☐ I don't drink every day, but at the weekend I like to have several at a sitting and to get drunk.

☐ I try to keep within the guidelines, but I don't always succeed and I sometimes get drunk.

☐ I drink very moderately and I don't get drunk, but I don't think in terms of the guidelines.

☐ I only ever have one or two alcoholic drinks and usually just at family parties or on special occasions.

☐ I don't drink alcohol at all or only very occasionally.

Q: How many millilitres of pure alcohol do you think there are there in one UK unit, 10, 20, 30, 40, 50?

Q: On average in the last week, how many units of alcohol did you drink per day?

Q: The UK Chief Medical Officers set out recommended maximum limits for adults. What are these limits? (Tick any/all that you think apply)

☐ Men should not regularly drink more than 2 to 3 units of alcohol per day. Women should not regularly drink more than 1 to 2 units of alcohol per day

☐ Men should not regularly drink more than 3 to 4 units of alcohol per day. Women should not regularly drink more than 2 to 3 units of alcohol per day

☐ Men should not regularly drink more than 4 to 5 units of alcohol per day. Women should not regularly drink more than 3 to 4 units of alcohol per day

☐ A weekly limit of 12 units for women and a weekly limit of 18 units for men.

☐ A weekly limit of 14 units for women and a weekly limit of 21 units for men.

☐ A weekly limit of 24 units for women and a weekly limit of 32 units for men.

Q: How would you describe the Chief Medical Officers' advice on limits for alcohol?

(Choose the option that that most nearly matches your views)

☐ A really useful set limit that everyone should always try to keep within

☐ Sensible advice that people should aim for most of the time

☐ Useful as a guide but not that important

☐ Not important, if it wasn't safe it wouldn't be licensed for sale

☐ An unwarranted intrusion on people's freedom to choose.

Q: Have you ever heard of alcohol-related harms caused by other people's drinking?

Q: Which of the following equate to one UK unit of alcohol? (Tick any/all you think apply)

☐ One small glass of wine (120 mls)

☐ Half a pint of strong lager

☐ One double measure of spirits

☐ One medium glass of wine (180 mls)

☐ One single measure of spirits

☐ One pint of ordinary bitter

☐ One pint of strong lager

☐ Half a pint of ordinary bitter

☐ One large glass of wine (240 mls)

Q: Do you think that other peoples' drinking has ever put your health or safety at risk?

Q: Why do you say that? (Free text box).

Q: Do you think that parents' drinking ever puts their children at risk?

Q: Do you think that children are more or less likely to drink if their parents drink?

Q: Do you think it is OK for a woman to drink when she is pregnant?

Q: Why do you say that? (Free text box).

Q: Whether you drink or not: Does alcohol play a role in your life? (e.g. with family, socialising, friendships, dating?). Q: Why do you say that? (Free text box)

Q: Do you think that the drinking habits of anyone else ever affect your own decision to have a drink or not to drink? (e.g. friends, brothers/sisters, other family members.). Q: Why do you say that? (Free text box)

Q: Have the drinking habits of anyone else ever affected you in any other way? (e.g. got you into an argument or affected your studies). Why do you say that? (Free text box).

APPENDIX 3.1 Cross-Sectional Survey Questions (continued)

Q: Whether you drink or not: Have your own drinking habits ever affected anyone else? (e.g. have you overslept and missed an appointment or been taken to A&E when a night out on the town went too far? Or, alternatively, have you persuaded someone to have a soft drink instead of alcohol?).

Q: Why do you say that? (Free text box).

If there are any comments you would like to make on any of the questions about drinking or if there are any issues about alcohol you would like to raise, please use this box. (Free text box).

DIET

Q: Do you eat fruit and vegetables at all currently? (Regularly or occasionally)

Q: In the last week, how many portions of fruit and veg did you eat per day? A portion is around 80gms, for example, an apple, orange or banana, or three heaped tablespoons of veg- e.g. peas or beans, or a 150ml glass of fruit juice, or 30gms of dried fruit like dates. (NB. Potatoes do not count at all in any form)

Q: Do your close friends eat fruit and vegetables at all?

Q: Do your close friends eat fruit and vegetables every day?

Q: Do your close family members eat fruit and vegetables at all?

Q: Do your close family members eat fruit and vegetables every day?

Q: How would you describe the advice of the UK's Chief Medical Officers to eat five portions of fruit or vegetables per day? (Choose the option that that most nearly matches your views).

☐ A really useful set standard that everyone should always try to follow

☐ Sensible advice that people should aim for most of the time

☐ Useful as a guide but not that important

☐ Not important, all modern food products are tested and wholesome

☐ An unwarranted intrusion on people's freedom to choose.

Q: How would you describe the average amount of fruit and vegetables in your own diet?

Q: Please look at the chart below which explains the basis of describing people as "overweight" and as "obese" (BMI chart) What proportion of the adult population in England do you think was obese in 2012? (5%, 10%, 15%, 20%, 25%, 30%)

Q: What proportion of the population in England do you think was overweight or obese in 2012? (i.e. The total proportion of both the overweight people and the obese people in the country added together). (10%, 20%, 30%, 40%, 50%, 60%)

Q: Do you think that the dietary habits of anyone else affect your own? (e.g. friends/family)

Q: Why do you say that? (Free text box)

Q: Does anything else affect your diet? (Advertising/supermarkets/health food shops etc.)

Q: Why do you say that? (Free text box)

If there are any comments you would like to make on any of the questions about diet or if there are any issues about diet you would like to raise, please use this box. (Free text box).

SMOKING

Q: Do you smoke tobacco at all currently? (Regularly or occasionally)

Q: If you smoke: How many cigarettes do you usually smoke in a week?

Q: If you smoke: At what age did you start smoking? (Under 11, 12-15, 16-18, 19-21, 22-24)

Q: If you smoke: Have you smoked a cigarette in the last week?

Q: If you smoke: On average, in the last week, how many cigarettes per day did you smoke?

Q: Whether you smoke or not: Do your close friends smoke at all?

Q: Whether you smoke or not: Do your close family members smoke at all?

Q: What percentage of adults do you think smoke in England? (5%, 10%, 15%, 20%, 25%, 30%)

Q: Whether you smoke or not: Before you were 16, had you ever tried smoking at least once?

Q: Whether you smoke or not: Before you were 16, did you smoke at least one cigarette a week?

Q: Have you ever heard of smoking-related harms from other peoples' second hand smoke?

Q: Do you think that other peoples' second-hand smoke has ever put your health at risk?

Q: Do you think that parents' second-hand smoke puts their children at risk?

Q: Do you think that children are more or less likely to smoke if their parents smoke?

Q: Do you think it is OK for a woman to smoke when she is pregnant? Q: Why do you say that?

Q: Do you think that the smoking habits of anyone else affect your own decision to smoke or not to smoke? (e.g. friends/family) Q: Why do you say that? (Free text box)

Q: Does anything else affect your decision to smoke or not to smoke? (Advertising / warnings on packets etc.). Q: Why do you say that? (Free text box)

If there are any comments you would like to make on any of the questions or if there are any issues about smoking that you would like to raise, please use this box. (Free text box).

APPENDIX 3.1 Cross-Sectional Survey Questions (continued)

EXERCISE

- Q: Do you exercise at all currently? (Regularly or occasionally)
- Q: In an average week, on how many days do you do at least 30 minutes of moderate intensity exercise? e.g. brisk walking, cycling, jogging, football, swimming, dancing. (0 days, 1, 2, 3, 4, 5, 6+ days)
- Q: Do your close friends exercise at all?
- Q: Do your close family members exercise at all?
- Q: Do your close friends do moderate exercise (for at least 30 minutes 5 times per week)?
- Q: Do your close family members do moderate exercise (for at least 30 minutes 5 times per week)?
- Q: The Chief Medical Officers' advice on exercise. How many minutes of at least moderate intensity physical activity a week do the UK CMOs recommend adults should achieve? (50, 75, 100, 125, 150, 175)
- Q: How would you describe the Chief Medical Officers advice on exercise? (Choose the option that that most nearly matches your views)
- ☐ Really useful advice that everyone should always try to keep within
 - ☐ Sensible advice that people should aim for most of the time
 - ☐ Useful as a guide but not that important unless you are a sportsman or woman
 - ☐ Not important, modern life does not require much exercise
 - ☐ An unwarranted intrusion on people's freedom to choose.
- Q: How many hours of at least moderate intensity exercise did you do in total last week? (None, Half an hour, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more hours)
- Q: How would you describe your own moderate exercise activity on average?
- ☐ I exercise at least moderately for half an hour at least 5 days a week and I engage in vigorous sports
 - ☐ I try to achieve at least half an hour of moderate exercise 5 days a week, but I don't always succeed
 - ☐ I do some of moderate exercise most days, but I don't think in terms of achieving a set amount.
 - ☐ I do some moderate exercise occasionally, but usually just to be sociable or at special events.
 - ☐ I don't do moderate intensity exercise at all, or only very occasionally
- Q: Does exercise play a role in your life? (e.g. active family holidays, sports with friends, dancing, cycling to studies, dog walking, exercise classes, Zumba, yoga, ballet, martial arts etc.)
- Q: Do you think that the exercise habits of anyone else affect your own? (e.g. friends / family) Why do you say that? (Free text box).
- Q: Does anything else affect the amount of exercise you do? (Advertising / sports on TV / the Olympics etc.) Why do you say that? (Free text box).
- If there are any comments you would like to make on any of the questions or if there are any issues about smoking that you would like to raise, please use this box. (Free text box).

ABOUT YOU

Please provide the following details:

- Q: Are you male or female?
- Q: Age (in years)
- Q: Height: Please select units (metres or feet and inches) then find your height in that unit.
- Q: Weight: Please select units (kilos, pounds or stones and pounds) then enter your weight in that unit.
- Q: Waist size: Please select units (inches or centimetres) then enter your waist size in that unit.
- Q: Your type of accommodation during your course of study
(Hall of residence, Other rented, With parents/family, Own home/mortgaged).
- Q: Stage of study (School/Sixth-form College, Undergraduate year 1, year 2, year 3, postgraduate)
- Q: What country were you living in before you began your current course of study?
(Please choose from the drop-down box).
- Q: Please enter your email address (optional).
- Q: And finally: How would you describe your own overall level of health and wellbeing currently?
(Excellent, Very good, Good, Fair, Poor).

If there are any comments you would like to make about this survey or if there are any issues about health and wellbeing that you would like to raise, please use the box below. (Free text box).

Notes on survey completion: *All survey questions required binary yes/no answers unless otherwise stated. All survey questions were presented in order in an on-line format using QUALTRICS software.

APPENDIX 3.2 Phase I Participant Information Sheet

Student Health and Wellbeing Survey: Participant Information Sheet.

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

Purpose of study

This is a Public Health study, which will examine the lifestyle, attitudes and experiences of young adult students around smoking, drinking, diet and exercise. It considers what young adults know about current lifestyle advice for healthy living in these four areas and will ask what their own views and experiences are. This study is taking place in winter/spring 2013/14 and takes the form of a one-off survey which young adult students aged between 16 and 24 are invited to complete.

Why have I been invited to participate?

You have been invited to participate as you are a school or university student and you are aged between 16 and 24. More than 500 other young adults are also being invited to participate.

Do I have to take part? No. Taking part in this research is entirely voluntary. It is up to you to decide whether or not to take part. If you do decide to take part, you will confirm that you agree to take part through the act of completing the survey. (Please note that, as a student, whether or not you choose to take part in the study will have no impact on your marks, assessments or future studies).

What are the possible benefits of taking part?

Taking part offers the chance to win a £50 Amazon voucher. There is one £50 voucher to be won in every 100 of the first 500 survey questionnaires completed. Each of these winners will be randomly selected by the electronic software from the first 500 participants who complete the survey. In addition, your answers will contribute to a better understanding of the young adults' perspective on four key areas of Public Health and of young adults' experiences in these areas. Survey participants who complete the questionnaire will also be offered access to an anonymised summary of the survey findings, once the initial analysis of the survey is complete.

What should I do if I want to take part?

If you want to take part in the survey, it starts on the next page. By completing the survey questionnaire, you are confirming that you: have read and understood the information sheet for the study and have had the opportunity to ask questions; understand that your participation is voluntary and that you are free to withdraw, without giving a reason. (To withdraw, you would need to notify the researcher prior to any analysis of the returns). You are confirming that you agree: to take part in the above study; that data gathered in this study may be stored (after being anonymised) in a specialist data centre and may be used for future research; to the use of anonymised quotes in publications.

Will what I say in this study be kept confidential?

All of the information you provide in the survey responses will be de-identified and kept strictly confidential by the researcher (subject to legal limitations) and will not be shared with any other person or with any institution. Confidentiality, privacy and anonymity will be ensured in the collection, storage and any publication of research material. Relevant computer files will be protected by a unique password and any hard copies of data codes or identifying information will be kept in a separate, locked filing cabinet. (Please note: Anonymised data generated by the study must be retained in accordance with the University's policy on Academic Integrity. This means that data generated in the course of this research must be kept securely in paper or electronic form for a period of ten years after the completion of the research).

APPENDIX 3.2 Phase I Participant Information Sheet (continued).

Who has reviewed the study?

This research has been approved by the University Research Ethics Committee (UREC) of Oxford Brookes University. (UREC Ref No: 130743). If you have any concerns about the way in which the study has been conducted, you should contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk.

What will happen to me if I take part?

You will be asked to complete a survey which asks health and wellbeing questions about smoking, diet, drinking and exercise and seeks your views on issues in these areas. It takes the form of an electronic questionnaire and will take 20 to 30 minutes to complete. (At a later date, up to 1 in 10 survey participants will be invited to take part in a follow up interview, with another £50 voucher to win, but taking part in that will be entirely voluntary).

What will happen to the results of the research study?

In addition to contributing to a better understanding of young adults' perspective on issues and experiences around smoking, drinking, diet and exercise, the results of this health and wellbeing survey will provide the context for more in-depth research into young adults' experiences around drinking and the effect that those who drink too much have on those around them. This is an under-researched area of Public Health and the study will aim to deliver new insights drawn from the views and experiences of young adults themselves. The findings will be submitted as a PhD thesis, with a view to publication.

Who is organising and funding the research?

Briony Enser, Department of Psychology, Social Work and Public Health,
Faculty of Health & Life Sciences Oxford Brookes University

Director of Studies: Prof David Foxcroft

Professor of Community Psychology and Public Health Department of Psychology, Social Work and Public Health, Faculty of Health and Life Sciences, Oxford Brookes University

Further information

After completing the survey, if you wish to find out more about the survey topics, or to seek advice on any issues raised, you will find some suggestions at the end of the survey questionnaire to assist you with this. If you would like more information before completing the survey, contact: Briony Enser, at 12097441@brookes.ac.uk

Thank you for taking the time to read this information sheet.

Date: 5 November 2013.

Notes on the Phase I Participant Information sheet and consent procedure

The above text appeared on the on the Qualtrics website and preceded the electronic survey at https://brookeshls.col.qualtrics.com/SE/?SID=SV_37pqVmB2zzAaxGB).

Participants consented by the act of participating in the on-line survey.

APPENDIX 3.3 Phase II: Semi-Structured Interview Schedule

Part 1: Practicalities, Introduction, Settling down of participant Part 2: Young Adult Experience Interview Part 3: Interview Wind-Up and Sample Researcher Prompts
Part 1: Practicalities, Introduction, Settling down participant Each participant to be sent the Participant Information Sheet and personal feedback from the Phase I Health and Well-Being Survey (HWBS) prior to the interview. Researcher introduces self and purpose of interview, reassures participant of confidentiality and invites each to talk openly and freely about their drinking stories and experiences. Participant and researcher sign consent form and date, time and place of interview is recorded. Sample ice breakers <i>Q Do you have any questions before we start?</i> <i>Q Did you find your personal print out from the survey interesting? Anything you wanted to ask about it?</i> <i>Q Was the health and wellbeing survey relevant to your studies at all?</i> <i>Q What are you studying? What do you enjoy most about your course?</i>
Transition Researcher signals change of pace/emphasis. Participant is given a paper copy of the print-out of relevant questions and answers from their own relevant survey responses relating to alcohol. <i>Q Now I am going to begin by asking a few follow up questions from the survey and the answers you gave then. Is that OK? (Recording to start when participant assents).</i>
Part 2: Young Adult Experience Interview The semi-structured interview schedule uses questions on alcohol from the Phase I survey to introduce each interview topic. These questions are reproduced below, preceded by “HWBS”. Each serves as the structured lead-in to an open-ended interview question that follows. Sample formulaic interview questions appear in italics, preceded by “Q” and the question number. The researcher uses such questions to invite participants to expand on their survey answers. If a participant’s survey response indicated no experience, knowledge or viewpoint on a topic, the researcher to probe this. (E.g. Have you thought of anything since then?). HWBS Have you ever heard of alcohol-related harms caused by other people’s drinking? Yes/No <i>Q1. You said that you had/had never heard of Alcohol-Related Collateral Harms before.</i> <i>Can you tell me what you think these are, how you became aware of them and if you think they’re important?</i> HWBS Do you think that other peoples’ drinking has ever put your health or safety at risk? Yes/No <i>Q2. You said yes/no. Can you tell me more about why you say that?</i> HWBS Do you think that parents’ drinking ever puts their children at risk? Yes/No <i>Q3. You said yes/no. Can you tell me more about why you say that?</i> HWBS Do you think that children are more or less likely to drink if their parents drink? Yes/No <i>Q4. You said more likely/less likely. Can you tell me more about why you say that?</i> HWBS Do you think it is OK for a woman to drink when she is pregnant? Yes/No and free text box) <i>Q5. You said yes/no and [...]. Can you tell me more about that?</i> HWBS Does alcohol play a role in your life? (E.g. with family, friendships, dating?) Yes/No and free text box) <i>Q6. You said yes/no and [...]. Can you tell me more about that?</i> HWBS Do you think that the drinking habits of anyone else affect your own decision to drink or not to drink? (E.g. friends/brothers/sisters, other family members). Yes/No and free text box) <i>Q7. You said yes/no and [...]. Can you tell me more about that?</i> HWBS Have the drinking habits of anyone else ever affected you in any other way? (E.g. got you into an argument or an accident or affected your studies). Yes/No and free text box) <i>Q7. You said yes/no and [...]. Can you tell me more about that?</i>

APPENDIX 3.3 Phase II: Semi-Structured Interview Schedule (continued)

HWBS Have your own drinking habits ever affected anyone else? (E.g. have you overslept and missed an appointment/ been taken to A&E when a night out on the town went too far? Or have you persuaded someone to have a soft drink instead of alcohol?) (Yes/No and free text box)

Q8. You said yes/no and [...]. Can you tell me more about that?

HWBS If there are any comments you would like to make on any of the questions about drinking or if there are any issues about alcohol you would like to raise, please use this box. (Free text box)

Q9. You said [...]. Can you tell me more about that?

Pause. Participant offered opportunity to revisit earlier answers or raise issues that concern them

HWBS Prompted list of alcohol-related collateral harms

Researcher shows participant list of types of alcohol-related collateral harms drawn from the survey free text box responses. Each is checked off in turn as experienced, or not by, the participant.

Q10. You have been telling me about your own experiences of harms caused by other peoples' drinking.

I have a list here of some examples of these harms given by the other students who completed the survey.

I will ask you whether you have experienced each of these in turn. Also, is there anything here on this list that makes you think of something else you have encountered yourself that you hadn't thought to mention before?

Part 3: Interview Wind-Up

Researcher indicates that end is near. Researcher revisits incomplete or inconclusive issues (if any).

Q11. Can we just go back to what you were saying about X?

Participant is given carte blanche to input anything not covered

Q12. Was there anything else at all you wanted to talk about today?

Researcher assures participant of the value of their contribution. Participant is reminded of further information and support available, should they need it and given a list of sources. Researcher thanks participant. Interview ends. Recording halted. Off-the-record chat, and reassurances as required. After participant leaves, the researcher records impressions immediately on post-interview comment sheet.

Sample Researcher Prompts (Prompts to pursue emergent issues with the participant during the interview)

Sample standard prompts

Can you tell me more about X?

What happened next?

Did anything else happen later on?

Neutral acknowledgement/encouragement

This is a valuable addition to what I know.

Neutral acknowledgement of participant discomfort

I know that talking about something like this is not easy.

Neutral encouragement

Your personal experiences are important to my understanding of X.

Sample Alcohol-Related Collateral Harm (ARC harm) prompts

(Specific prompts, for example to clarify events that illustrate ARC harm points made, or to establish the seriousness of any ARC harms described and the impact on the people around the drinker).

Q Exactly what did the drinker do?

Q What was the immediate effect on you/your friends/ your family?

Q How did you/your friends/your family respond afterwards?

Q What do you think about it?

Q Does it still affect you now? And if so how?

Note for use of interview schedule: All the Phase I Health and Well-Being Survey prompts to be used in every case. Each participant's own responses from Phase I to be read back to them verbatim in every case. Participant otherwise to dictate direction of travel and pace of the interview to promote an informal mood.

APPENDIX 3.4 Phase II: Participant Information Sheet



Participant Information Sheet: Young Adult Experience Interview

You are invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it involves. Please take time to read the following information carefully.

Purpose of the study

This is a Public Health study, which examines the lifestyle, attitudes and experiences of young adult students in the context of how people who drink alcohol affect others around them. This study is taking place in 2014/15 and it takes the form of an interview in which young adults' own views and experiences around alcohol-related harms to other people are considered.

Why have I been invited to participate?

You have been invited to participate as you completed the Student Health and Wellbeing Survey as a sixth form or university student when you were aged between 16 and 24 and your responses to the Survey indicate that you have further useful experiences, views and information to contribute. Up to 50 other young adults who successfully completed the Survey are also being asked to participate.

Do I have to take part?

No. Taking part in this research is entirely voluntary. *It is up to you to decide whether or not to take part. If you do decide to take part, you will confirm this by signing a consent form before completing the interview and you remain free to withdraw at any time without giving a reason.* (Students, please note that whether or not you choose to take part will have no impact on your marks or assessments).

What are the possible benefits of taking part?

Your interview answers will contribute to a better understanding of young adults' own experiences and views on Public Health issues around drinking alcohol. Every interview participant will receive **£10** and you will also be entered in a raffle for a **£50** Amazon voucher and a "Five-a-Day" cookbook.

What will happen to me if I take part?

You will take part in an informal interview in which the researcher will invite you to talk about your own experiences of how people who drink alcohol affect others around them. The interview will be arranged at a time and place to suit you (e.g. near where you are studying on the Brookes' campus, or at or near your school or college). The interview will take between 45 minutes to an hour and it will be audio recorded and transcribed.

If you decide to take part in these interviews

Before starting the interview, you will be asked to sign a consent form confirming that you have read and understood the information sheet for the study and have had the opportunity to ask questions, and that you agree to take part in the study.

What should I do if I want to take part or want more information?

Contact: Briony Enser at: 12097441@brookes.ac.uk.

APPENDIX 3.4 Phase II: Participant Information Sheet (continued)

Will what I say in this study be kept confidential?

All the information you provide in the interview will be anonymised and all the information about participants will be kept strictly confidential (subject to legal limitations). Confidentiality and privacy will be ensured in the collection and storage of research material and anonymity will be ensured in the reporting of the findings. Relevant computer files will be protected by a unique password and any hard copies of data codes or identifying information will be kept in a separate, locked filing cabinet.

Legal limitations to confidentiality:

Academic Integrity: Anonymised data generated by the study must be retained in accordance with the University's policy on Academic Integrity. This means that data generated in the course of this research must be kept securely in paper or electronic form for a period of 10 years after the completion of the research.

Child protection: Child protection mechanisms must be observed for interview participants aged less than 18. This means that if the researcher has concerns about the safety of a 16 or 17 year old interviewee, these would be discussed with them and with their school or college member of staff who has responsibility for Safeguarding Children.

What will happen to the results of the research study?

The interviews will contribute to a better understanding of young adults' perspective on issues and experiences around drinking alcohol and the effect that those who drink too much have on those around them. Currently, this is an under-researched area and this study will aim to deliver new insights drawn from the experiences and views of young adults themselves. The findings will be submitted as a PhD thesis with a view to publication. Participants who complete the interview will be offered access to an anonymised summary of the research findings once the analysis is complete.

Who is organising and funding the research?

Briony Enser is conducting this study as a researcher in the Department of Psychology, Social work and Public Health, Faculty of Life Sciences at Oxford Brookes University.

Director of studies: Prof David Foxcroft, Professor of Community Psychology and Public Health at Oxford Brookes University.

Who has reviewed the study?

This research has been reviewed and approved by the University Research Ethics Committee of Oxford Brookes University (UREC No.140793).

If you have any concerns about the way in which the study has been conducted, contact the Chair of UREC on ethics@brookes.ac.uk.

Thank you for taking time to read the information sheet.

Briony Enser, Oxford Brookes University.

APPENDIX 3.5 Phase II: Participant Consent Form



CONSENT FORM

Young Adult Experience Interview

Alcohol-related collateral harm in the family and social circle

Name, position and contact address of Researcher:

Briony Enser, Doctoral Researcher
Department of Psychology, Social Work and Public Health
Faculty of Health and Life Sciences
MRG 27A, 12097441@brookes.ac.uk

Please initial box

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.

☐

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.

☐

I agree to take part in the above study.

☐

I agree to the interview being audio recorded.

☐

I agree that my data gathered in this study may be stored (after it has been anonymised) in a specialist data centre and may be used for future research.

☐

Please tick box

Yes No

I agree to the use of anonymised quotes in publications

☐☐

Name of Participant

Date

Signature

Name of Researcher

Date

Signature

APPENDIX 3.6 Phase I: Ethical approval



Professor David Foxcroft
Director of Studies
Department of Psychology, Social Work and Public Health
Faculty of Health and Life Sciences
Marston Road Campus

13 September 2013

Dear Professor Foxcroft

UREC Registration No: 130743

Alcohol-related collateral harm in the family and social circle: a mixed methods exploration of the impact of others' alcohol consumption from the perspective of young adults – Phase 1

Thank you for the email of 19 August 2013 outlining the response to the points raised in my previous letter about the PhD study of your research student Briony Enser, and attaching the revised documents. I am pleased to inform you that, on this basis, I have given Chair's Approval for the study to begin. I would also like to confirm approval for the minor protocol change; to include a flyer about the study in welcome packs for new students.

The UREC approval period for this study is two years from the date of this letter, so 13 September 2015. If you need the approval to be extended please do contact me nearer the time of expiry.

In order to monitor studies approved by the University Research Ethics Committee, we will ask you to provide a (very brief) report on the conduct and conclusions of the study in a year's time. If the study is completed in less than a year, could you please contact me and I will send you the appropriate guidelines for the report.

Yours sincerely

Hazel Abbott
Chair of the University Research Ethics Committee

cc Briony Enser, Research Student
Jill Organ, Graduate Office
Louise Wood, UREC Administrator

UNIVERSITY RESEARCH ETHICS
COMMITTEE, FACULTY OF HEALTH AND
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APPENDIX 3.7 Phase II: Ethical approval



Professor David Foxcroft
Director of Studies
Department of Psychology, Social Work and Public Health
Faculty of Health and Life Sciences
Oxford Brookes University
Marston Road Site

19 March 2014

Dear Professor Foxcroft

UREC Registration No: 140793

Study Title: Alcohol-related collateral harm in the family and social circle: a mixed methods exploration of the impact of others' alcohol consumption from the perspective of young adults

Phase 2: Young Adult Experience Interviews

Thank you for the email of 24 February 2014 outlining the response to the points raised in my previous letter about the PhD study of your research student Briony Enser, and attaching the revised documents. I am pleased to inform you that, on this basis, I have given Chair's Approval for the second phase of the study to begin.

The UREC approval period for this study is two years from the date of this letter, so 19 March 2016. If you need the approval to be extended please do contact me nearer the time of expiry.

In order to monitor studies approved by the University Research Ethics Committee, we will ask you to provide a (very brief) report on the conduct and conclusions of the study in a year's time. If the study is completed in less than a year, could you please contact me and I will send you the appropriate guidelines for the report.

Yours sincerely

Hazel Abbott
Chair of the University Research Ethics Committee

cc Dr Jane Appleton, Supervisor
Briony Enser, Research Student
Jill Organ, Research Degrees Team
Louise Wood, UREC Administrator

UNIVERSITY RESEARCH ETHICS
COMMITTEE, FACULTY OF HEALTH AND
LIFE SCIENCES

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APPENDIX 4.1 Phase I: Demographic profiles of participant sample

Gender, Age, Stage of study, Self-assessed health

Gender	Frequency	Percentage
Male	134	30%
Female	316	70%
Total	450	100%

Age	Male Frequency and percentage		Female Frequency and percentage		Total Frequency and percentage	
16	18	13%	13	4%	31	7%
17	19	14%	18	6%	37	8%
18	20	15%	72	23%	92	20%
19	35	26%	90	28%	125	28%
20	16	12%	47	15%	63	14%
21	8	6%	20	6%	28	6%
22	9	7%	17	5%	26	6%
23	4	3%	18	6%	22	5%
24	5	4%	21	7%	26	6%
	134	100%	316	100%	450	100%

Stage of study	Male Frequency and percentage		Female Frequency and percentage		Total Frequency and percentage	
Sixth Form / College	72	54%	60	19%	132	29%
University 1st year	38	28%	158	50%	196	44%
University 2nd year	10	7%	50	16%	60	13%
University 3rd year	6	4%	26	8%	32	7%
Postgraduate	8	6%	22	7%	30	7%
	134	100%	316	100%	450	100%

Self-assessed health	Male Frequency and percentage		Female Frequency and percentage		Total Frequency and percentage	
Excellent	20	15%	5	2%	25	6%
Very Good	38	29%	80	25%	118	26%
Good	46	35%	142	45%	188	42%
Fair	27	20%	77	25%	104	23%
Poor	2	2%	10	3%	12	3%
	133	100%	314	100%	447*	100%
(*Three non-responses)						

APPENDIX 4.2 Phase I: Participants' alcohol profile

Do you drink alcohol at all currently? (Regularly or occasionally)							
		Male	%	Female	%	Total	%
	Yes	98	73%	286	91%	384	85%
	No	36	27%	30	9%	66	15%
	Total	134	100%	316	100%	450	100%
Do your close friends drink alcohol at all?							
		Male	%	Female	%	Total	%
	Yes	122	91%	303	96%	425	94%
	No	12	9%	13	4%	25	6%
	Total	134	100%	316	100%	450	100%
Do your close family members drink alcohol at all?							
		Male	%	Female	%	Total	%
	Yes	112	84%	288	91%	400	89%
	No	22	16%	28	9%	50	11%
	Total	134	100%	316	100%	450	100%
Do your close family members drink alcohol every day? *							
		Male	%	Female	%	Total	%
	Yes	25	22%	75	26%	100	25%
	No	87	78%	213	74%	300	75%
	Total	112	100%	288	100%	400	100%
(*Of those who drink)							
How would you describe your own alcohol consumption on average? (Choose the option that that most nearly matches what you do).							
		Male	%	Female	%	Total	%
	I drink pretty much every day and I like to have several at a sitting and to get drunk.	6	4%	12	4%	18	4%
	I try to keep within the guidelines, but I don't always succeed and I sometimes get drunk.	50	37%	160	51%	210	47%
	I drink very moderately and don't get drunk, but I don't think in terms of the guidelines.	23	17%	63	20%	86	19%
	I only ever have one or two alcoholic drinks and usually just at family parties or special occasions.	21	16%	50	16%	71	16%
	I don't drink alcohol at all or only very occasionally.	34	25%	31	10%	65	14%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.2 Phase I: Participants' alcohol profile (continued)

How many millilitres of pure alcohol do you think there are there in one UK unit?							
		Male	%	Female	%	Total	%
.	10 mls	49	37%	94	30%	143	32%
	20 mls	47	35%	121	38%	168	37%
	30 mls	28	21%	70	22%	98	22%
	40 mls	5	4%	19	6%	24	5%
	50 mls	5	4%	12	4%	17	4%
	Total	134	100%	316	100%	450	100%
On average in the last week, how many units of alcohol did you drink per day?							
		Male	%	Female	%	Total	%
	None	77	57%	155	49%	232	52%
	One	17	13%	47	15%	64	14%
	Two	15	11%	49	16%	64	14%
	Three	14	10%	32	10%	46	10%
	Four	4	3%	15	5%	19	4%
	Five	2	1%	7	2%	9	2%
	Six	0	0%	4	1%	4	1%
	Seven or more	5	4%	7	2%	12	3%
	Total	134	100%	316	100%	450	100%
The UK Chief Medical Officers set out recommended maximum limits for adults. What are these limits? (Tick any/all that you think apply).							
		Male	%	Female	%	Total	%
	Men should not regularly drink more than 2 to 3 units of alcohol per day. Women should not regularly drink more than 1 to 2 units of alcohol per day	53	40%	133	42%	186	41%
.	Men should not regularly drink more than 3 to 4 units of alcohol per day. Women should not regularly drink more than 2 to 3 units of alcohol per day	66	49%	148	47%	214	48%
	Men should not regularly drink more than 4 to 5 units of alcohol per day. Women should not regularly drink more than 3 to 4 units of alcohol per day	14	10%	20	6%	34	8%
	A weekly limit of 12 units for women and a weekly limit of 18 units for men.	32	24%	101	32%	133	30%
.	A weekly limit of 14 units for women and a weekly limit of 21 units for men.	32	24%	58	18%	90	20%
	A weekly limit of 24 units for women and a weekly limit of 32 units for men.	3	2%	3	1%	6	1%
	Total responses	200		463		663	
	Total participants	134		316		450	

APPENDIX 4.2 Phase I: Participants' alcohol profile (continued)

How would you describe the Chief Medical Officers' advice on limits for alcohol? (Choose the option that that most nearly matches your views).							
		Male	%	Female	%	Total	%
	A really useful set limit that everyone should always try to keep within	29	22%	72	23%	101	22%
	Sensible advice that people should aim for most of the time	74	55%	193	61%	267	59%
	Useful as a guide but not that important	23	17%	46	15%	69	15%
	Not important, if it wasn't safe it wouldn't be licensed for sale	3	2%	3	1%	6	1%
	An unwarranted intrusion on people's freedom to choose.	5	4%	2	1%	7	2%
	Total	134	100%	316	100%	450	100%
Which of the following equate to one UK unit of alcohol? (Tick any/all you think apply)							
		Male	%	Female	%	Total	%
.	One small glass of wine (120 mls)	79	59%	205	65%	284	63%
	Half a pint of strong lager	42	31%	119	38%	161	36%
	One double measure of spirits	9	7%	19	6%	28	6%
	One medium glass of wine (180 mls)	21	16%	61	19%	82	18%
.	One single measure of spirits	47	35%	162	51%	209	46%
	One pint of ordinary bitter	27	20%	75	24%	102	23%
	One pint of strong larger	19	14%	25	8%	44	10%
.	Half a pint of ordinary bitter	53	40%	112	35%	165	37%
	One large glass of wine (240 mls)	9	7%	10	3%	19	4%
	Percentages are expressed in terms of participants						
Have you ever heard of alcohol-related harms caused by other people's drinking?							
		Male	%	Female	%	Total	%
	Yes	114	85%	257	82%	371	83%
	No	20	15%	58	18%	78	17%
	Total	134	100%	315	100%	449	100%
Do you think that other peoples' drinking has ever put your health or safety at risk?							
		Male	%	Female	%	Total	%
	Yes	56	42%	156	49%	212	47%
	No	78	58%	160	51%	238	53%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.2 Phase I: Participants' alcohol profile (continued)

Have the drinking habits of anyone else ever affected you in any other way? (e.g. got you into an argument or affected your studies).							
	Male	%	Female	%	Total		
Yes	51	38%	160	51%	211	47%	
No	83	62%	156	49%	239	53%	
Total	134	100%	316	100%	450	100%	
Do you think that the drinking habits of anyone else ever affect your own decision to have a drink or not to drink? (e.g. friends, brothers/sisters, other family members).							
	Male	%	Female	%	Total		
Yes	66	49%	203	64%	269	60%	
No	68	51%	113	36%	181	40%	
Total	134	100%	316	100%	450	100%	
Do you think that parents' drinking ever puts their children at risk?							
	Male	%	Female	%	Total		
Yes	110	82%	285	90%	395	88%	
No	24	18%	31	10%	55	12%	
Total	134	100%	316	100%	450	100%	
Do you think that children are more or less likely to drink if their parents drink?							
	Male	%	Female	%	Total		
Less likely	22	16%	36	11%	58	13%	
More likely	112	84%	280	89%	392	87%	
Total	134	100%	316	100%	450	100%	
Do you think it is OK for a woman to drink when she is pregnant?							
	Male	%	Female	%	Total		
Yes	14	10%	25	8%	39	9%	
No	120	90%	291	92%	411	91%	
Total	134	100%	316	100%	450	100%	
Whether you drink or not: Does alcohol play a role in your life? (e.g. with family, socialising, friendships, dating).							
	Male	%	Female	%	Total		
Yes	91	68%	263	83%	354	79%	
No	43	32%	53	17%	96	21%	
Total	134	100%	316	100%	450	100%	
Whether you drink or not: Have your own drinking habits ever affected anyone else? (e.g. have you overslept and missed an appointment or been taken to A & E when a night out on the town went too far? Or, alternatively, have you persuaded someone to have a soft drink instead of alcohol?).							
	Male	%	Female	%	Total		
Yes	50	37%	176	56%	226	50%	
No	84	63%	140	44%	224	50%	
Total	134	100%	316	100%	450	100%	

APPENDIX 4.3 Phase I: Participants' smoking profile

Do you smoke tobacco at all currently? (Regularly or occasionally)							
		Male	%	Female	%	Total	%
	Yes	26	19%	83	26%	109	24%
	No	108	81%	233	74%	341	76%
	Total	134	100%	316	100%	450	100%
If you smoke: How many cigarettes do you usually smoke in a week?							
		Male	%	Female	%	Total	%
	Up to 3 per week	2	11%	27	36%	29	31%
	Up to 7 per week (1 a day)	3	16%	34	46%	37	40%
	Up to 20 (One pack per week)	8	42%	55	74%	63	68%
	Up to 40 (Two packs per week)	15	79%	68	92%	83	89%
	Up to 60 (Three packs per week)	16	84%	72	97%	88	95%
	Up to 100	19	100%	74	100%	93	100%
	Total	19	100%	74	100%	93	100%
If you smoke: At what age did you start smoking?							
		Male	%	Female	%	Total	%
	Age 12 -15	10	40%	26	32%	36	34%
	Age 16 -18	11	44%	46	57%	57	54%
	Age 19 -21	3	12%	9	11%	12	11%
	Age 22 - 24	1	4%	0	0%	1	1%
	Total	25	100%	81	100%	106	100%
If you smoke: Do you smoke every day?							
		Male	%	Female	%	Total	%
	Yes	18	72%	29	35%	47	44%
	No	7	28%	53	65%	60	56%
	Total	25	100%	82	100%	107	100%
If you smoke: Have you smoked a cigarette in the last week?							
		Male	%	Female	%	Total	%
	Yes	20	80%	66	81%	86	81%
	No	5	20%	15	19%	20	19%
	Total	25	100%	81	100%	106	100%
If you smoke: On average, in the last week, how many cigarettes per day did you smoke?							
		Male	%	Female	%	Total	%
	0 -3	10	40%	53	68%	63	61%
	4 - 6	6	24%	12	15%	18	17%
	7 - 9	6	24%	6	8%	12	12%
	10 - 19	3	12%	6	8%	9	9%
	20 or more	0	0%	1	1%	1	1%
	Total	25	100%	78	100%	103	100%

APPENDIX 4.3 Phase I: Participants' smoking profile (continued)

Whether you smoke or not: Do your close friends smoke at all?							
		Male	%	Female	%	Total	%
	Yes	86	64%	195	62%	281	62%
	No	48	36%	121	38%	169	38%
	Total	134	100%	316	100%	450	100%
Whether you smoke or not: Do your close family members smoke at all?							
		Male	%	Female	%	Total	%
	Yes	35	26%	96	30%	131	29%
	No	99	74%	220	70%	319	71%
	Total	134	100%	316	100%	450	100%
What percentage of adults do you think smoke in England?							
		Male	%	Female	%	Total	%
	5%	3	2%	2	1%	5	1%
	10%	13	10%	12	4%	25	6%
	15%	13	10%	41	13%	54	12%
	20%	34	25%	75	24%	109	24%
	25%	26	19%	81	26%	107	24%
	30%	45	34%	105	33%	150	33%
	Total	134	100%	316	100%	450	100%
Whether you smoke or not: Before you were 16, had you ever tried smoking at least once?							
		Male	%	Female	%	Total	%
	Yes	49	37%	152	48%	201	45%
	No	85	63%	164	52%	249	55%
	Total	134	100%	316	100%	450	100%
Whether you smoke or not: Before you were 16, did you regularly smoke at least one cigarette a week?							
		Male	%	Female	%	Total	%
	Yes	14	10%	42	13%	56	12%
	No	120	90%	274	87%	394	88%
	Total	134	100%	316	100%	450	100%
Have you ever heard of smoking-related harms from other peoples' second-hand smoke?							
		Male	%	Female	%	Total	%
	Yes	117	87%	292	92%	409	91%
	No	17	13%	24	8%	41	9%
	Total	134	100%	316	100%	450	100%
Other people: Do you think that other peoples' second-hand smoke has ever put your health at risk?							
		Male	%	Female	%	Total	%
	Yes	78	58%	193	61%	271	60%
	No	56	42%	123	39%	179	40%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.3 Phase I: Participants' smoking profile (continued)

Do you think that parents’ second-hand smoke puts their children at risk?							
		Male	%	Female	%	Total	%
	Yes	120	90%	306	97%	426	95%
	No	14	10%	10	3%	24	5%
	Total	134	100%	316	100%	450	100%
Do you think that children are more or less likely to smoke if their parents smoke?							
		Male	%	Female	%	Total	%
	Less likely	31	23%	25	8%	56	12%
	More likely	103	77%	291	92%	394	88%
	Total	134	100%	316	100%	450	100%
Do you think it is OK for a woman to smoke when she is pregnant?							
		Male	%	Female	%	Total	%
	Yes	0	0%	4	1%	4	1%
	No	134	100%	312	99%	446	99%
	Total	134	100%	316	100%	450	100%
Do you think that the smoking habits of anyone else affect your own decision to smoke or not to smoke? (e.g. close friends or members of your family)?							
		Male	%	Female	%	Total	%
	Yes	65	49%	190	60%	255	57%
	No	69	51%	126	40%	195	43%
	Total	134	100%	316	100%	450	100%
Does anything else affect your decision to smoke or not to smoke? (e.g. Advertising or health warnings on packets).							
		Male	%	Female	%	Total	%
	Yes	46	34%	150	47%	196	44%
	No	88	66%	166	53%	254	56%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.4 Phase I: Participants' diet profile

Do you eat fruit and vegetables at all currently? (Regularly or occasionally)							
		Male	%	Female	%	Total	%
	Yes	127	95%	309	98%	436	97%
	No	7	5%	7	2%	14	3%
	Total	134	100%	316	100%	450	100%
Do you eat some fruit and vegetables every day?							
		Male	%	Female	%	Total	%
	Yes	103	77%	279	88%	382	85%
	No	31	23%	37	12%	68	15%
	Total	134	100%	316	100%	450	100%
In the last week, how many portions of fruit and vegetables did you eat per day? (A portion is around 80g, such as an apple, orange or banana, or three heaped tablespoons of veg - e.g. peas or beans, or a 150ml glass of fruit juice, or 30gms of dried fruit like dates. NB. Potatoes do not count.							
		Male	%	Female	%	Total	%
	None	3	2%	2	1%	5	1%
	One	11	8%	28	9%	39	9%
	Two	31	23%	64	20%	95	21%
	Three	27	20%	92	29%	119	26%
	Four	25	19%	44	14%	69	15%
	Five	11	8%	30	9%	41	9%
	Six	8	6%	24	8%	32	7%
	Seven or more	18	13%	32	10%	50	11%
	Total	134	100%	316	100%	450	100%
Do your close friends eat fruit and vegetables at all?							
		Male	%	Female	%	Total	%
	Yes	124	93%	303	96%	427	95%
	No	10	7%	13	4%	23	5%
	Total	134	100%	316	100%	450	100%
Do your close friends eat fruit and vegetables every day?							
		Male	%	Female	%	Total	%
	Yes	76	57%	218	69%	294	65%
	No	58	43%	98	31%	156	35%
	Total	134	100%	316	100%	450	100%
Do your close family members eat fruit and vegetables at all?							
		Male	%	Female	%	Total	%
	Yes	131	98%	313	99%	444	99%
	No	3	2%	3	1%	6	1%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.4 Phase I: Participants' diet profile (continued)

Do your close family members eat fruit and vegetables every day?							
		Male	%	Female	%	Total	%
	Yes	114	85%	279	88%	393	87%
	No	20	15%	37	12%	57	13%
	Total	134	100%	316	100%	450	100%
How would you describe the advice of the UK’s Chief Medical Officers to eat five portions of fruit or vegetables every day? (Choose the option that most nearly matches your views).							
		Male	%	Female	%	Total	%
	A really useful set standard that everyone should always try to follow	23	17%	65	21%	88	20%
	Sensible advice that people should aim for most of the time	77	57%	214	68%	291	65%
	Useful as a guide but not that important	30	22%	34	11%	64	14%
	Not important, all modern food products are tested and wholesome	0	0%	0	0%	0	0%
	An unwarranted intrusion on people’s freedom to choose	4	3%	3	1%	7	2%
	Total	134	100%	316	100%	450	100%
How would you describe the average amount of fruit and vegetables in your own diet?							
		Male	%	Female	%	Total	%
	I eat at least five portions of fruit and vegetables a day pretty much every day	13	10%	36	11%	49	11%
	I try to eat five portions of fruit and vegetables a day, but I don’t always succeed	28	21%	77	24%	105	23%
	I eat a good balanced diet, with fruit and vegetables, but I don’t think of five a day	67	50%	165	52%	232	52%
	I eat some fruit and vegetables, but not many, usually only in convenience foods	19	14%	35	11%	54	12%
	I eat fruit and vegetables only very occasionally or not at all	7	5%	3	1%	10	2%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.4 Phase I: Participants' diet profile (continued)

Please look at the BMI chart provided which explains the basis of describing people as "overweight" and as "obese". (People with a Body Mass Index (BMI) of 25-29 are overweight. People with a Body Mass Index (BMI) of 30 or above are obese).							
What proportion of the adult population in England do you think was obese in 2012?							
		Male	%	Female	%	Total	%
	5%	1	1%	1	0%	2	0%
	10%	7	5%	23	7%	30	7%
	15%	25	19%	57	18%	82	18%
	20%	32	24%	70	22%	102	23%
	25%	28	21%	83	26%	111	25%
	30%	41	31%	82	26%	123	27%
	Total	134	100%	316	100%	450	100%
What proportion of the population in England do you think was overweight or obese in 2012? (I.e. The total proportion of <u>both</u> the overweight people <u>and</u> the obese people in the country added together).							
		Male	%	Female	%	Total	%
	10%	1	1%	1	0%	2	0%
	20%	12	9%	17	5%	29	6%
	30%	32	24%	69	22%	101	22%
	40%	41	31%	91	29%	132	29%
	50%	31	23%	80	25%	111	25%
	60%	17	13%	58	18%	75	17%
	Total	134	100%	316	100%	450	100%
Other people: Do you think that the dietary habits of anyone else affect your own? (E.g. your friends or members of your family).							
		Male	%	Female	%	Total	%
	Yes	73	54%	247	78%	320	71%
	No	61	46%	69	22%	130	29%
	Total	134	100%	316	100%	450	100%
Does anything else affect your diet? (Advertising/supermarkets/health food shops etc.)							
		Male	%	Female	%	Total	%
	Yes	77	57%	243	77%	320	71%
	No	57	43%	73	23%	130	29%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.5 Phase I: Participants' exercise profile

Do you exercise at all currently? (Regularly or occasionally)							
		Male	%	Female	%	Total	%
	Yes	110	82%	252	80%	362	80%
	No	24	18%	64	20%	88	20%
	Total	134	100%	316	100%	450	100%
Do you exercise every day?							
		Male	%	Female	%	Total	%
	Yes	56	42%	70	22%	126	28%
	No	78	58%	246	78%	324	72%
	Total	134	100%	316	100%	450	100%
In an average week, on how many days do you do at least 30 minutes of moderate intensity exercise?							
		Male	%	Female	%	Total	%
	0 days	25	19%	67	21%	92	20%
	One day	8	6%	31	10%	39	9%
	Two days	12	9%	52	16%	64	14%
	Three days	15	11%	60	19%	75	17%
	Four days	17	13%	40	13%	57	13%
	Five days	17	13%	34	11%	51	11%
	Six or more days	40	30%	32	10%	72	16%
	Total	134	100%	316	100%	450	100%
Do your close friends exercise at all?							
		Male	%	Female	%	Total	%
	Yes	105	78%	241	76%	346	77%
	No	29	22%	75	24%	104	23%
	Total	134	100%	316	100%	450	100%
Do your close family members exercise at all?							
		Male	%	Female	%	Total	%
	Yes	87	65%	237	75%	324	72%
	No	47	35%	79	25%	126	28%
	Total	134	100%	316	100%	450	100%
Do your close friends do moderate exercise (for at least 30 minutes 5 times per week)?							
		Male	%	Female	%	Total	%
	Yes	64	48%	144	46%	208	46%
	No	70	52%	172	54%	242	54%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.5 Phase I: Participants' exercise profile (continued)

Do your close family members do moderate exercise (for at least 30 minutes 5 times per week)?							
		Male	%	Female	%	Total	%
	Yes	59	44%	149	47%	208	46%
	No	75	56%	167	53%	242	54%
	Total	134	100%	316	100%	450	100%
The Chief Medical Officers' advice on exercise? How many minutes of at least moderate intensity physical activity a week do the UK CMOs' recommend adults should achieve?							
		Male	%	Female	%	Total	%
	50 minutes	12	9%	19	6%	31	7%
	75 minutes	13	10%	20	6%	33	7%
	100 minutes	24	18%	49	16%	73	16%
	125 minutes	20	15%	56	18%	76	17%
.	150 minutes	39	29%	110	35%	149	33%
.	175 minutes	5	4%	21	7%	26	6%
.	200 minutes	21	16%	41	13%	62	14%
	Total	134	100%	316	100%	450	100%
How would you describe the Chief Medical Officers advice on exercise? (Choose the option that that most nearly matches your views)							
		Male	%	Female	%	Total	%
	Really useful advice that everyone should always try to keep within	39	29%	83	26%	122	27%
	Sensible advice that people should aim for most of the time	72	54%	194	61%	266	59%
	Useful as a guide but not that important unless you are a sportsman or woman	15	11%	31	10%	46	10%
	Not important, modern life does not require much exercise	3	2%	4	1%	7	2%
	An unwarranted intrusion on people's freedom to choose.	5	4%	4	1%	9	2%
	Total	134	100%	316	100%	450	100%
How many hours of at least moderate intensity exercise did you do in total last week?							
		Male	%	Female	%	Total	%
	None	11	8%	29	9%	40	9%
	Half an hour	18	13%	31	10%	49	11%
	1 hour	14	10%	62	20%	76	17%
	2 hours	14	10%	61	19%	75	17%
.	3 hours	20	15%	52	16%	72	16%
.	4 hours	17	13%	32	10%	49	11%
.	5 or more hours	40	30%	49	16%	89	20%
	Total	134	100%	316	100%	450	100%

APPENDIX 4.5 Phase I: Participants' exercise profile (continued)

How would you describe your own moderate exercise activity on average?							
		Male	%	Female	%	Total	%
	I exercise at least moderately for half an hour at least 5 days a week and I engage in vigorous sports	45	34%	41	13%	86	19%
	I try to achieve at least half an hour of moderate exercise 5 days a week, but I don't always succeed	20	15%	76	24%	96	21%
	I do some of moderate exercise most days, but I don't think in terms of achieving a set amount.	39	29%	103		142	32%
	I do some moderate exercise occasionally, but usually just to be sociable or at special events.	14	10%	52	16%	66	15%
	I don't do moderate intensity exercise at all, or only very occasionally	16	12%	44	14%	60	13%
	Total	134	100%	316	100%	450	100%
Does exercise play a role in your life? (e.g. active family holidays, sports with friends, dancing, cycling to studies, dog walking, exercise classes, Zumba, yoga, ballet, martial arts etc.).							
		Male	%	Female	%	Total	%
	Yes	99	74%	217	69%	316	70%
	No	35	26%	99	31%	134	30%
	Total	134	100%	316	100%	450	100%
Do you think that the exercise habits of anyone else affect your own? (e.g. friends / family)							
		Male	%	Female	%	Total	%
	Yes	74	55%	210	66%	284	63%
	No	60	45%	106	34%	166	37%
	Total	134	100%	316	100%	450	100%
Does anything else affect the amount of exercise you do? (Advertising/sports on TV/ Olympics).							
		Male	%	Female	%	Total	%
	Yes	71	53%	144	46%	215	48%
	No	63	47%	172	54%	235	52%
	Total	134	100%	316	100%	450	100%

APPENDIX 5.1 Phase I: Variables cross-tabulated showing potential collinearities
(χ^2 and p values marked by the shaded squares suggest collinearity for these variables)

Variables cross-tabulated showing potential collinearities		Experience of ARC harm	Gender	Aged under 19 years? (16 to 18)	Student at college or university?	Living in the parental home?	Do you drink alcohol at all currently? (Regularly or occasionally)	Self-reported units of alcohol consumed in the last week within UK CMO's guidelines	Do your close family members drink alcohol at all?	Close family members drink alcohol every day	Do the drinking habits of friends or family members affect your decision to have a drink or not to drink?
Experience of ARC harm	χ^2	450.0	10.0	21.1	11.1	8.4	6.6	0.7	2.4	14.3	20.9
	p	0.000	0.002	0.000	0.001	0.004	0.010	0.408	0.118	0.000	0.000
Gender	χ^2	10.0	450.0	4.1	54.8	33.1	22.7	3.2	5.4	1.4	8.8
	p	0.002	0.000	0.044	0.000	0.000	0.000	0.075	0.020	0.236	0.003
Aged under 19 years? (16 to 18)	χ^2	21.1	4.1	450.0	131.8	65.9	1.6	1.2	0.1	0.0	8.7
	p	0.000	0.044	0.000	0.000	0.000	0.207	0.265	0.807	0.916	0.003
Student at college or university?	χ^2	11.1	54.8	131.8	450.0	267.7	23.7	3.0	3.1	0.0	25.5
	p	0.001	0.000	0.000	0.000	0.000	0.000	0.085	0.079	0.934	0.000
Living in the parental home?	χ^2	8.4	33.1	65.9	267.7	450.0	22.9	4.8	2.1	0.4	20.6
	p	0.004	0.000	0.000	0.000	0.000	0.000	0.028	0.151	0.535	0.000
Do you drink alcohol at all currently? (Regularly or occasionally)	χ^2	6.6	22.7	1.6	23.7	22.9	450.0	7.5	56.1	0.7	15.4
	p	0.010	0.000	0.207	0.000	0.000	0.000	0.006	0.000	0.393	0.000
Self-reported units of alcohol consumed in the last week within UK CMO's guidelines?	χ^2	0.7	3.2	1.2	3.0	4.8	7.5	450.0	0.6	10.4	3.0
	p	0.408	0.075	0.265	0.085	0.028	0.006	0.000	0.446	0.001	0.086
Do your close family members drink alcohol at all?	χ^2	2.4	5.4	0.1	3.1	2.1	56.1	0.6	450.0	16.1	4.4
	p	0.118	0.020	0.807	0.079	0.151	0.000	0.446	0.000	0.000	0.035
Close family members drink alcohol every day?	χ^2	14.3	1.4	0.0	0.0	0.4	0.7	10.4	16.1	450.0	5.6
	p	0.000	0.236	0.916	0.934	0.535	0.393	0.001	0.000	0.000	0.018
Do the drinking habits of friends or family affect your decision to have a drink or not to drink?	χ^2	20.9	8.8	8.7	25.5	20.6	15.4	3.0	4.4	5.6	450.0
	p	0.000	0.003	0.003	0.000	0.000	0.000	0.086	0.035	0.018	0.000

APPENDIX 5.2 Phase I: Successive multivariate logistic regression analyses

Logistic regression analysis of the original nine hypothesised factors

Variable					Experience of ARC harm (N= 450).		
						95% C.I.	
	B	S.E.	Wald	Sig	OR	Lower	Upper
A. Gender (Female: Male)	.483	.244	3.927	.048	1.621	1.005	2.615
B. Aged under 19 years of age? (No: Yes)	.960	.259	13.756	.000	2.612	1.572	4.337
C. At college or university? (Univ.: Coll.)	-.304	.407	.556	.456	.738	.332	1.640
D. Living in the parental home? (No: Yes)	.135	.338	.159	.690	1.144	.590	2.221
E. Drink alcohol currently? (Yes: No)	.393	.321	1.501	.221	1.482	.790	2.780
F. Drink within UK guidelines? (No: Yes)	.179	.397	.203	.652	1.196	.549	2.606
G. Close family drink? (Yes: No)	-.006	.354	.001	.987	.994	.497	1.988
H. Close family drink every day? (Yes: No)	.973	.292	11.074	.001	2.646	1.492	4.693
I. Friends/family affect drinking? (Yes: No)	.706	.217	13.756	.000	2.026	1.324	3.101
Constant	- 1.303	.558	5.457	.019	.272		

Logistic regression analysis of the seven factors suggested by univariate analysis

Variable					Experience of ARC harm (N= 450).		
						95% C.I.	
	B	S.E.	Wald	Sig	OR	Lower	Upper
A. Gender (Female: Male)	.479	.243	3.877	.049	1.615	1.002	2.603
B. Aged under 19 years of age? (No: Yes)	.958	.258	13.733	.000	2.606	1.570	4.325
C. At college or university? (Univ.: Coll.)	-.299	.407	.540	.462	.742	.334	1.646
D. Living in the parental home? (No: Yes)	.126	.337	.139	.710	1.134	.585	2.197
E. Drink alcohol currently? (Yes: No)	.378	.299	1.600	.206	1.459	.813	2.621
H. Close family drink every day? (Yes: No)	.956	.285	11.479	.001	2.601	1.487	4.549
I. Friends/family affect drinking? (Yes: No)	.702	.217	10.479	.001	2.017	1.319	3.085
Constant	- 1.119	.319	12.274	.000	.327		

Logistic regression analysis of the four main drivers of ARC harm

Variable					Experience of ARC harm (N= 450).		
						95% C.I.	
	B	S.E.	Wald	Sig	OR	Lower	Upper
A. Gender (Female: Male)	.481	.225	4.551	.033	1.618	1.040	2.516
B. Aged under 19 years of age? (No: Yes)	.860	.215	15.949	.000	2.362	1.549	3.602
H. Close family drink every day? (Yes: No)	.964	.284	11.502	.001	2.622	1.502	4.577
I. Friends/family affect drinking? (Yes: No)	.718	.212	11.504	.001	2.051	1.354	3.107
Constant	-.883	.245	13.019	.000	.414		

APPENDIX 6.1 Phase II: Semantic themes characterising ARC harm

(Coding using Nvivo (2012) for the number and percentage of participants who reported each ARC harm identified and number of references participants made to each).

CODED CATEGORIES & TYPES OF ARC HARM (as Parent and Child codes)	Number of interviewees reporting	Percent of interviewees reporting	Number of references overall
01 NUISANCE: VISIBLE IMMEDIATE IMPACT Nuisance-frustration-/exasperation due to drunken brouhaha (Low level)	23	92%	78
Exclusion (from all-drinker friendship groups)	11	44%	18
Lost opportunity (to take part in all-drinker social activities)	6	24%	9
Lost sleep (due to noisy drunken friends/neighbours)	18	72%	35
Lost study (due to noisy drunken friends/neighbours)	11	44%	16
02 TOLERANCE/ACCOMMODATION	18	72%	62
Avoidance (staying away from people who are drunk and/or from places where people get drunk (city centre/pubs/clubs)	18	72%	49
Deception (e.g. pretence that a soft drink is alcohol)	9	36%	13
03 PRESSURE	24	96%	212
Pressure peer group (to drink and to drink more)	23	92%	59
Pressure sexual (to accept high, aberrant levels of intimacy)	18	72%	29
Pressure to accept unacceptable behaviour (excuse drunks)	17	68%	57
Pressure to conform to social norms for young adults	19	76%	28
Pressure university norm for students to drink	11	44%	19
Wider social pressure on young adults to drink	10	40%	20
04 UNSOUGHT RESPONSIBILITY	25	100%	231
Acute care friends- intra generation-siblings	21	84%	75
Acute care older generation-parents etc.	7	28%	9
Acute care partner	2	8%	2
Acute care strangers	8	32%	18
Drawn into argument	9	36%	9
Drawn into fight	1	4%	1
Emperor's new clothes -seeing beyond the crowd	3	12%	4
Long term care older generation	2	8%	8
Long term care partner	0	0%	0
Long-term care friend/intra generation relative-sibling/cousin	6	24%	7
Parenting roles	18	72%	32
Persuading to moderate drinking/have soft drink	19	76%	25
Rescue friend from argument	17	68%	24
Rescue friend from fight	11	44%	15

APPENDIX 6.1 Phase II: Semantic themes characterising ARC harm (continued)

CODED CATEGORIES & TYPES OF ARC HARM (As Parent and Child codes)	Number of interviewees reporting	Percent of interviewees reporting	Number of references Overall
05 PSYCHOLOGICAL HARM (STRESS AND DISTRESS, LONG TERM)	25	100%	258
Apparent resilience	11	44%	29
Bereavement	9	36%	18
Distress caused by drunk driver injury - chronic	8	32%	12
Embarrassment	12	48%	19
Guilt	11	44%	17
Harassment	8	32%	12
Helplessness	10	40%	19
Stress-distress-pain family member's drinking behaviour	16	64%	52
Stress-distress-pain friend's drinking behaviour	17	68%	54
Stress-distress-pain partner's drinking behaviour	6	24%	11
Undisclosed ARC harm experience	12	48%	15
06 PHYSICAL HARM: INJURY/ASSAULT (ACUTE HARM /ACUTE RISK OF HARM)	20	80%	140
A and E / Drinker requiring immediate medical treatment	10	40%	18
'Accidental' injury by a drinker	10	40%	17
Acute fear / threat of violence	11	44%	18
Acute drunk driver risk	16	64%	29
Fight injury	6	24%	10
Shock	4	16%	5
Unsolicited aggression from a drinker	12	48%	28
Unsolicited injury by a drinker	6	24%	7
Unsolicited intimacy from a drinker	6	24%	8
07 RELATIONSHIP HARM	20	80%	92
Conflict	16	64%	30
Conflict (friend)	10	40%	10
Conflict (family)	8	32%	10
Conflict (partner)	6	24%	10
Degradation	20	80%	52
Degradation relationship (family)	11	44%	30
Degradation relationship (friend)	10	40%	13
Degradation relationship (partner)	7	28%	8
Severance	7	28%	10
Severance (family)	3	12%	5
Severance (friend)	2	8%	2
Severance (partner)	3	12%	3

APPENDIX 7.1

Phase II: Environmental risk factors for ARC harm - Concrete physical settings

(Coding for the *Concrete physical settings* for ARC harm identified in Phase II. Number and percentage of participants who reported each setting and number of references to each).

Themes: Environmental Risk Factors - Concrete Physical Settings		Number of interviewees reporting this ARC harm setting/context	% of interviewees reporting ARC harm in this setting/context	Number of references overall
Coded concrete physical settings		25	100%	140
Home	(Microsystem)	19	76%	51
	Family home	14	56%	32
	Hall of residence	10	40%	13
	Shared student house	5	20%	6
Away	(Macrosystem)	25	100%	128
	Nightclub	23	92%	40
	Vicinity of a drunk driver	18	72%	39
	University	16	64%	36
	Public place	9	36%	11
	Working in a bar	2	8%	2

APPENDIX 7.2

Phase II: Environmental risk factors for ARC harm - Abstract psychological contexts

(Coding for the *Abstract psychological contexts* for ARC harm identified in Phase II. Number and percentage of participants who reported each context and number of references to each).

Themes: Environmental Risk Factors Abstract Psychological Contexts	Total number of interviewees who reported the factor	% of interviewees reporting the ARC harm factor	Total number of references to the factor overall
Coded abstract psychological contexts	24	96%	198
Theme: Individuation	21	84%	91
Group identity, acquiring and conforming to a new group	13	52%	18
Lacking confidence	10	40%	15
Need to socialise	10	40%	12
Away from home first time, unfamiliar surroundings	9	36%	12
Coming of age at eighteen	8	32%	15
Need for new friends	7	28%	11
Fear of being left out	6	24%	8
Theme: University Milieu	20	80%	51
Expectations of drinking at university	13	52%	19
Permissive university environment	11	44%	14
Freshers' week inducements to drink	7	28%	11
Absence of censure at university	3	12%	3
Absence of alternatives at university.	2	8%	4
Theme: Perceptions of Alcohol	15	60%	27
Alcohol as a game or joke	12	48%	18
Alcohol as 'cool'	5	20%	5
Meaning in alcohol	3	12%	4

APPENDIX 8.1 Themes for environmental risk factors - Concrete physical settings (ARC harm themes and illustrative participant quotes from Phase II)

Themes: Concrete physical settings	Examples of the influence of physical settings on ARC harm experiences (Selected illustrative quotes)
Home (microsystem): Family home The home where participants grew up with parents and/or other close relatives. Where the majority of the participants lived before going to university and where a few still lived while at university.	<i>I would worry about my dad and I would be worried to leave him... I worry about him all the time... because you know I've found him face-flat on the floor with like blood ...and that, you know, that does stick in your mind, you know. ...Instead of thinking about what I should be thinking about I'd be worried in case, you know, he's lying... (Yvonne, aged 19)</i> <i>So, when he had a problem, he started to drink... Like, I don't know how to explain, I was quite small and my mother was protecting me... from him. But I know that I was really scared of him. (Georgia, aged 19).</i> <i>Because mum was drinking you know, I was able to kind of steal her drink as it were like you know when I was younger and I kind of thought it was OK and acceptable. (Annie, aged 21).</i> <i>My dad does upset me because I think he... there are better things he could be doing rather than getting drunk. Yeah... That upsets me. (Nathan, aged 19).</i>
Home (microsystem): Hall of residence The home where most participants lived, or had lived previously, whilst at university. Divided residential blocks in 'flats'.	<i>If you're in halls, you never got a good night's sleep.... You could just hear everyone come back and then knocking on windows and shouting and screaming... You kind of got used to it after a while, because there's like six of you in a flat, so it's likely that one of you or two of you's going out, like almost every night. (Melinda, aged 19).</i> <i>They'd sort of leave the cooker on and be really sort of careless and I would be like 'oh, gosh if anything happened' (Stella, aged 19).</i> <i>Glad I moved out after a year. Couldn't wait to move out of there. (Rosa, aged 20).</i>
Home (microsystem): Shared student house The home where some participants lived while at university, often after living in halls of residence. Shared flats or houses, often with friends.	<i>I have the worst case living in my house at the moment. She goes out Mondays and Wednesdays usually and she knocks up at the house around four-o'clock in the morning, very loud. (Lara, aged 22).</i> <i>He decided to light a cigarette off the toaster... This is after a night out so he'd come back at like three, and this toaster... it did catch fire. So, it was like my worst fear had been... it had come true. (Stella, aged 19).</i> <i>We've just got a new housemate who we don't really know that well... He's come home four nights in a row now completely off his face drunk. I locked my door for the first time today and I don't know why. (Helen, aged 19).</i>
Away (macrosystem): Nightclub Late night venues in town, licensed for alcohol, music and dancing. Open until 3am at weekends and, at discounted rates for students, on Mondays and Wednesdays.	<i>At the club that we used to go to... there used to be a paramedic nearby anyway and police presence all the time because it was that sort of place. (Frank, aged 23).</i> <i>I used to work in a nightclub and there'd always be fights after. The police would always be called. (Betsy, aged 23).</i> <i>So, if you're with boys quite a lot, they just start on each other... probably every time I go out, they always get involved in fights... especially nightclubs, you know...it never really ends up being a massive thing unless they meet outside the club again and then it's like a big thing. (Melinda, aged 19)</i> <i>It seems to me a sort of accepted thing now in night clubs to be sort of groped and touched... I just sort of find it really sort of sickening. (Betsy, aged 23).</i> <i>I was wearing a white top once when I was in a club and a man threw a drink over me just to see my top, my bra through it. (Tess, aged 19).</i>

APPENDIX 8.1 Themes for environmental risk factors - Concrete physical settings
(ARC harm themes and illustrative participant quotes from Phase II) (continued)

Themes: Concrete physical settings	Examples of the influence of physical settings on ARC harm experiences (Selected illustrative quotes)
Away (macrosystem): Vicinity of a drunk driver Travelling in a car with a driver who is drunk, or knocked down in the street by a drunk driver. (Definition of ‘drunk driver’ at: The drink drive limit https://www.gov.uk/drink-drive-limit Home Office (2016).	<i>We’d missed the last bus. But he had his car in [town name] anyway, he planned to drive home: my plan was to get the bus because I was, obviously, I was terrified of getting in the car with him, but I had no choice. (Frank, aged 23).</i> <i>I’ve been in a car with someone who’s been drunk before. But they didn’t actually crash... they weren’t involved in an accident, but they were very close to. That was a reality check really. Wow, that was like I had a bit of a reassessment of my life, really was like that, that could have been the end. A very close call. (Edward, aged 22).</i> <i>... teeth knocked out, broken jaw, cracked ribs. Luckily, he landed on his face, not the back of his skull because he flew quite a way across the road... That was a big shock for everyone. It would have been even more easy for it to be someone who was drunk ‘cause you’re already vulnerable.” (Annie, aged 21).</i>
Away (macrosystem): University A setting, distanced from school and family constraints. Here, the young adult participants were presented with a new and liberal regime. Here there were many inducements to drink alcohol often and excessively with negligible consequences, and negative consequences for not conforming to expected drinking norms.	<i>When I first got here...we were told by the Uni that we only needed 40% and a pass for everything in the first year.... quite a lot of my friends thought ‘Yay! We can all go out all the time and it doesn’t matter because all we need to do is pass’. (Helen, aged 19).</i> <i>There are no events for you to meet people because you’re just not a drinker and that kind of puts everybody into this one box of ‘you-have-to-drink-or-you-don’t-fit-in’ and that’s, that’s really unfair, especially for people coming to university with a lot of insecurities. (Isabelle, aged 24).</i> <i>People are very pressured into drinking at university... there’s free drinks every night, all nights... It is seen as... obviously, you’ve got to do work, but that’s the other part of it, you know, this big drinking fest that everybody’s just mad for. But actually everybody’s not mad for. (Whitney, aged 20).</i> <i>I suppose, with student life, you never really know what to do and you want to be accepted, so you kind of go along with it. (Isabelle, aged 24).</i>
Away (macrosystem): Public place City streets frequented by all participants returning from nights out often on foot. Here, participants encountered other drinkers and drunken behaviour.	<i>We were headed back, waited for the bus, and one of them decided to punch my mate in the back of the head... my mate here had been drinking, so he had to punch him back and I had to break them apart, and then someone whacked me around the back of the head for no reason at all. (Edward, aged 22).</i> <i>At the end of the night... one of my friend’s boyfriends and one of my boyfriend’s friends got into a fight... that shocked me into just like I just became sober after that because I was so frightened. I saw both of the boys’ faces were covered in blood, and one of them was on the floor and it was just horrific. (Yvonne, aged 19).</i>
Away (macrosystem): Working in a bar Local bars where a few study participants worked, and met ARC harms whilst serving drinks and negotiating drunks.	<i>I used to work in a bar and I’ve experienced fights there as well. There was a riot one night where pretty much half of the bar got destroyed... Like throwing chairs and tables... We all kind of went and hid in the kitchen... None of us were hurt severely, I’m not sure if any of the customers were. (Betsy, aged 23).</i>

APPENDIX 8.2 Themes for environmental risk factors - Abstract psychological contexts (ARC harm themes and illustrative participant quotes from Phase II)

Themes: Abstract psychological contexts	Examples of the influence of psychological contexts on ARC harms (Selected illustrative quotes)
Individuation (Chronosystem) The psychological context comprising the phase in the young adult participants' lives when they were actively negotiating the transition into autonomous adulthood. Individuation became the parent code for Phase II data items assigned to the following child codes: - Group identity - Lacking confidence - Need to socialise. - Away from home first time - Coming of age at eighteen - Need for new friends - Fear of being left out.	<i>I was still quite young, that was first time away from home...and I went out loads, but at the same time, while I really liked that, it was really annoying that everyone was getting too drunk... (Rosa, aged 20).</i> <i>Under eighteen it's cinema, bowling and stuff like that, but no, none of that anymore. It's all alcohol. (Vivienne, aged 18).</i> <i>There was quite a pressure to drink...and, obviously, I'd never really had like this kind of initiation or like this kind of drinking habit or behaviour before, so I was like assuming it would be a normal night..., at the point I was like eighteen, I wasn't willing to argue. (Peter, aged 20).</i> <i>I thought well, you know, it's not very fair really. You know, I could easily have gone to that and could have had two drinks or three. I didn't have to have ten to be able to go to that event. (Carl, aged 21).</i> <i>I didn't really feel I had very many friends there and the ones that I had all they all wanted to do was go out and I didn't want to do that, and so I kind of felt a bit like a fish out of water. (Isabelle, aged 24).</i> <i>If I was meeting new people... I think it's a bit of Dutch courage to kind of have maybe a glass of wine or two. But then sometimes it turns out badly like when I met my friend's boyfriend for the first time, he threw up all over me because he got too drunk, because he was really nervous. (Kristie, aged 18).</i> <i>My housemates are like "oh, come on, you have to join" and I was like "I don't want a shot." Like "go on, go on, everyone else is doing it" and I'm like "no! I do not want a shot" And they're like "oh, for goodness sake, why won't you join in? (Olivia, aged 23).</i> <i>You know that's a friend edging you on, 'let's go here', 'let's have some alcohol'. Just to go to parties and things, but you kind of want to as well because you've not experienced that. Definitely at a younger age yeah because you've never tried these things. (Xavier, aged 19).</i> <i>When you turn eighteen and lots of people haven't got drunk before, it's like this huge thing and they go crazy because they've never been allowed to do it. I think it's that thing, it's like you're not allowed and now it's like you've got this freedom, that people take it, you know, to the extremes. (Whitney, aged 20).</i> <i>You also have that in clubs and things, you're not just with people your age, there are a lot of people who are a lot older... (Isabelle, aged 24).</i> <i>I carried my dad upstairs on my eighteenth.... I carried him up because he got quite drunk. I didn't on my eighteenth, which is kind of weird if you think about it. (Frank, aged 23).</i>
University milieu Permissive psychological context nested within the physical university setting, comprising expectations of drinking, alcohol-centred social interaction and the absence of alternatives, or of censure for harming others.	<i>When you're younger, when you first go to university and you're trying to make friends, and this seems to be the way that everybody's doing it, you do it... Some of the drinking habits I just couldn't deal with it... I very rarely left my room by the end of my first year. (Queenie, aged 24).</i> <i>I went from college straight to uni and We got involved with the party crowd and we'd go out drinking almost every night of the week... I kind of neglected my studies and so you know, didn't show up for lectures, didn't show for exams. I ended with dropping out. (Betsy, aged 23).</i>

APPENDIX 8.2 Themes for environmental risk factors - Abstract psychological contexts
(ARC harm themes and illustrative participant quotes from Phase II) (continued)

Themes: Abstract psychological contexts	Examples of the influence of psychological contexts on ARC harms (Selected illustrative quotes)
University milieu (Chronosystem and macrosystem) University milieu is the parent code for Phase II data items assigned to the following child codes: - Expectations of drinking - Permissive environment - Freshers week inducements - Absence of alternatives - Absence of censure	<i>That was really something everyone was looking forward to, but a bit nervous about... And everyone was like "it'll be fine" like "if you're drinking, you'll just talk to anyone" So, yeah, I think maybe just stories from other people sort of maybe influence your actual time at uni. (Isabelle, aged 24).</i> <i>Everything involved going out clubbing or going out drinking, and if you're not into that then you don't really integrate into student life because you don't find friends... (Isabelle, aged 24).</i> <i>Once you get all the... have all the work to do and all the essays and things, I think it definitely goes down and, even if your friends do it, you try and like try not to for the sake of your uni work and things. But it's definitely hard watching your friends go out, but then you not... (Kristie, aged 18).</i> <i>I find that sports societies and the other groups that I'm in are by nature quite alcohol orientated... there's quite a lot of alcohol and sports societies have a bit of a reputation... you would think the two wouldn't go together, but they do. (Betsy, aged 23).</i> <i>It's actually quite difficult to be the person who's not drinking and to still go out and feel like... I just don't want to be in that situation where everyone's really drunk and you're the one who's like.... sober and..... Yes, it does really affect your social life if you don't want to drink. Definitely. (Annie, aged 21).</i> <i>I don't know anyone at uni who actually doesn't drink. (Stella, aged 19).</i>
Perceptions of alcohol (Chronosystem) Psychological context comprising participants' attitudes to alcohol and the role alcohol plays in their social lives. Perceptions of alcohol is the parent code for Phase II data items assigned to the following child codes: - Alcohol as a joke or game - Alcohol as 'cool' - Meaning in alcohol	<i>It's normal for our age bracket, you know. Between eighteen and twenty-five you're expected to drink right. People expect you to. And if you don't you're kind of ... um.... (Annie, aged 21).</i> <i>I tried going out sober once, which was quite strange... (Peter, aged 20).</i> <i>People are going to look at you really differently if you order a lemonade, expecting you to either say you're driving a car or you're pregnant, so you have a good reason to not drink. (Rosa, aged 20).</i> <i>When people are drunk, they aren't really that aware whether a person means something very seriously or not because everything is sort of a joke. Everything can be turned into a joke, because everything's funny all of a sudden. (Peter, aged 20).</i> <i>It does relax me a lot and I feel, I feel like I can, you know... You do, you feel like you can to talk to people and stuff when you're drunk. (Yvonne, aged 19).</i> <i>Because when drunk or tipsy any conversation seems meaningful, no matter how pointless or absurd the conversation may be. (Peter, aged 20).</i> <i>I've had water before and drunk it out of a straw, so people don't think I'm stopping drinking, because I don't want them to think I'm a bit pathetic....so I just pretend it's alcohol. (Ursula, aged 19).</i> <i>I think for boys... I think they're just very competitive...it's like who can drink the most, who's going to drink the most, not throw up, who's going to drink the most and get with the girls, who's going to... It's all that, you know, who's the better person, you know, that sort of thing. (Whitney, aged 20).</i>

APPENDIX 10.1 Ten themes for how and why ARC harms remain unseen

Themes from the historical review of Government policy on alcohol harm prevention

1. ARC harm has no recognised name or agreed composition (Chapter 1)

- There is no publicly recognised name for ARC harm in the way there is for passive smoking.
- The research community has no universally agreed name for ARC harm. It is variously described as e.g. *externalities, harm to others, second-hand drinking, social consequences of alcohol*.
- Different manifestations of ARC harm are not recognised as the same phenomenon.

2. Alcohol policy focus on health harms to the individual drinker (Chapters 1 and 2)

- The policy focus for preventing alcohol-related harm is directed towards the alcohol-related health harms for the individual drinker.
- Despite the admonition to ‘Drink responsibly’, harms to people around the drinker that are perpetrated by the drinker are largely ignored.

3. Negligible and diminishing policy notice for alcohol’s harms to society (Chapters 1 and 2)

- Recent Government actions reveal increasing reluctance to intervene at the societal level. 2012 plans to increase alcohol prices were abandoned in 2013, existing measures to increase taxation on alcohol have been progressively repealed and duty on alcohol has been lowered.
- Any policy consideration of alcohol-related harm at the societal level on drinkers’ harms to other people tends to be depersonalised and expressed in financial terms only, e.g. as estimated costs to the NHS or to the economy.

4. The policy focus shapes the public view of alcohol-related harm (Chapters 1 and 2)

- Government messages on responsible drinking direct the public attention towards the potential health harms to the individual drinker (with media and alcohol industry support).
- This sets the agenda and directs attention away from the harms that drinkers cause to the people around them, since the focus of attention on any one area effectively directs attention away from other areas and from other issues.

Themes from analyses of study data on ARC harms from the Phase I survey and Phase II interviews

5. The majority of types of ARC harm in the study were covert (Chapters 5 and 6)

- Few of the types of ARC harm identified in the study were immediately visible or easily recognised. Those that were tended to be minor (e.g. single instances of late night noise and disturbance) or short-lived (e.g. instances of aggression or injury).
- The majority of ARC harms identified were unseen and chronic in nature (tolerance, pressure, psychological harm, unsought responsibility). See Figure 6.2, Iceberg of ARC harm.

APPENDIX 10.1 Ten themes for how and why ARC harms remain unseen (continued)

Themes from analyses of study data on ARC harms from the Phase I survey and Phase II interviews

6. ARC harm victims deliberately concealed some ARC harm experiences (Chapters 5 and 6)

- Some ARC harms experienced by the study participants were so sensitive in nature that they declined to disclose them.
- Such ARC harms were assumed to be consciously suppressed by embarrassment or shame.

7. ARC harms were embedded in the environments in which they occurred (Chapters 7 and 8)

- ARC harms described in the study were embedded in the physical settings and psychological contexts in which they occurred.
- The frequency and familiarity of ARC harms rendered them commonplace, and thus unremarked and hidden in plain sight.

8. ARC harm victims tolerated and accommodated ARC harms (Chapter 9)

- The established cultural norms of the young adult participants precipitated the toleration and accommodation of ARC harms and drinkers' harmful behaviours had become normalised.
- ARC harms were unremarked since victims coped with the ARC harms they experienced by tolerating and accommodating them, thus absorbing them and living their lives around them.

9. ARC harm victims excused ARC harm perpetrators (Chapter 9)

- Participants who were ARC harm victims repeatedly accepted alcohol and drunkenness as an excuse for drinkers' harmful behaviours. Peers who committed ARC harms were automatically excused.
- Perpetrators of ARC harms used alcohol and drunkenness to excuse their own irresponsible behaviours and the ARC harms they committed whilst drunk.
- The use of the 'drunk' excuse rendered ARC harms invisible, as ARC harms effectively ceased to exist for both victims and perpetrators.

10. ARC harm victims took over responsibility for ARC harm perpetrators (Chapter 9)

- Peer perpetrators of ARC harms were portrayed as incapable of being responsible for themselves.
- Perpetrators of ARC harms used alcohol and drunkenness to abdicate responsibility for themselves.
- ARC harm victims cared for perpetrators who were severely intoxicated, rescued them from fights and arguments, and did not hold them responsible for their harmful actions.
- ARC harms effectively disappeared since the victims absorbed them, the perpetrators abdicated responsibility for them and victims did not hold perpetrators responsible for them.

APPENDIX 10.2 Media example: *Drunk drivers who kill could face automatic jail terms*

Example of a well-recognised ARC harm; death from drunk driving. (Note the efficacy of public pressure on government to legislate for automatic jail terms for such deaths).

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Joe Murphy, London Evening Standard, 8 December 2016.

APPENDIX 10.3 Media example: *Mother is jailed over toddler's bath death*

Example of a less well-known ARC harm; death from alcohol-related irresponsible parenting. Not recognised as the same phenomenon as Appendix 10.2 drunk driving death.

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Annabal Bagdi, Oxford Times, Thursday 17 November 2016.

APPENDIX 11 Prototype questionnaire to test young adults for ARC harm

ARC HARM SURVEY Young adult students' experiences of Alcohol-Related Collateral harm		
	YES	NO
Have you been woken or kept awake at unsocial hours by other people's drinking habits?		
Have your studies or work been disrupted by other people's drinking habits?		
Have you been verbally abused or threatened aggressively by someone who had been drinking?		
Have you been assaulted or physically injured by someone who had been drinking?		
Have you travelled in a car with an 'over-the-limit' driver and worried about the outcome?		
Have you or your close friends or family members been involved in a drunk-driver accident?		
Have drinking friends or family members pressured you into an unwanted, dangerous or difficult situation?		
Have you experienced unwelcome sexual attention from someone who had been drinking?		
Have you cared for or cleaned up after drunk friends, partners or family members?		
Have you rescued drunk friends, partners or family members from fights or arguments?		
Has someone's behaviour when they were drinking frightened, distressed or upset you?		
Have you felt imposed on by having to take responsibility for others when they were drunk?		
Have you worried about a friend, partner or family member because of their drinking habits?		
Has a friend, partner or family member's drinking embarrassed you or made you feel ashamed?		
Has a friend, partner or family member's drinking damaged or ended your relationship with them?		
TOTALS		

APPENDIX 12: Previously published work

Enser, B. J., Appleton, J. V. and Foxcroft, D. R. (2017) 'Alcohol-related collateral harm, the unseen dimension? Survey of students aged 16-24 in Southern England', *Drugs: Education, Prevention and Policy*, **24**(1), pp. 40–48. doi: 10.1080/09687637.2016.1215409.

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