It's My Life: Staying in Control

Developing a school-based intervention to facilitate adolescent behaviour change with respect to alcohol consumption

Joanna Bragg

It's My Life: Staying in Control

Developing a school-based intervention to facilitate adolescent behaviour change with respect to alcohol consumption

Joanna Bragg

The University of Salford

School of Health and Society

Submitted in Partial Fulfilment of the Requirements of the

Degree of Doctor of Philosophy

Abstract

Trends in adolescent alcohol consumption are declining, however remain a cause for concern. Research evidences a relationship between alcohol-related mortality and socioeconomic deprivation, more disadvantaged social groups tending to experience disproportionately higher levels of alcohol attributable harm. Amongst adolescents, there is an association between school disengagement and likelihood to engage with risky behaviours followed by poor academic outcomes. The social determinants for health and education overlap considerably, therefore the premise underpinning this study proposes that trying to improve low wellbeing as a trait of low socioeconomic status and predictor of problematic drinking, might not only influence healthier attitudes and behaviours regarding alcohol consumption, but also improve self-esteem and wellbeing, and encourage school engagement leading to positive educational outcomes.

A universal whole-class intervention was developed to target 11-12 year olds, designed to embed into the English secondary personal, social, health and economic education (PSHE) curriculum. The six-week programme of activities took a pupil focused learning approach, drawing upon motivational interviewing and role play amongst other successful components evidenced by the research literature and behavioural theory to encourage intrinsic motivation towards healthier behaviour. Two feasibility studies were conducted in four different school contexts, specifically targeting areas of significant socioeconomic deprivation in the north west of England. Implementation of the intervention and evaluation measures were assessed using a mixed methods research design. Analysis of pre- and post-intervention survey data (matched sample of 89 pupils) and interview transcripts (6 teachers and 20 pupils) revealed broadly successful outcomes. The intervention was considered engaging and enjoyable and was valued by the teachers. One school subsequently chose to deliver the programme for the whole of their new year 7 intake and another school has incorporated elements of the intervention into their PSHE curriculum.

These positive outcomes provide the justification to conduct further research to evaluate the effectiveness of participating in the intervention classes when compared to a control group.

Acknowledgements

To my supervisory team; Professor Penny A Cook, Dr Margaret Coffey and Dr Linda Dubrow-Marshall for their expertise, patience and support.

To Dr Cathy Atkinson, University of Manchester, for her advice and expertise on Motivational Interviewing.

To the staff and students in all the schools for taking part in this study and particular thanks to School A who provided additional time, commitment and support in helping to develop and implement the intervention.

To my family and friends for believing I could actually do this!

Table of Contents

Index of Figures

Index of Tables

Definitions

Adolescence

Adolescence coincides with the onset of puberty, which occurs at different ages depending on various cultural and demographic factors, therefore there is no universally agreed definition of the term which is used inconsistently by authors in reference to young people of different ages. This thesis uses the World Health Organisation definition of adolescence as the significant period of physical and psychological development (approximately spanning the age range 10-19+years) that marks the transition from childhood to adulthood (WHO, 2015).

Three broad stages of adolescence characterised by key emotional, cognitive and social developments are also referred to in this work: *early adolescence* (approximately 10-15 years); *middle adolescence* (approximately 14-17 years); and *late adolescence* (approximately 16-19 years and beyond) (Curtis, 2015; Ingersoll, 1992; Stang & Story, 2005; UNICEF, 2011; WHO, 2015).

Wellbeing

The term 'wellbeing' is a broad concept that encompasses several areas of life which can make it hard to define. The Children's Society describe it as *"an umbrella term that can be measured via 'baskets' of indicators that together build up a picture of the quality of people's lives"* (The Childrens Society, 2018). Their Good Childhood Index based on children's definition of what they need to have a good life includes:

- Your relationships with your family
- The home that you live in
- How much choice you have in life
- Your relationships with your friends
- The things that you have
- Your health
- Your appearance
- What may happen to you later in your life
- The school that you go to
- The way you use your time

This definition is relevant to children and encompasses many of the components addressed in this research, therefore is assumed throughout this thesis.

Abbreviations

ACE	Adverse Childhood Experiences
AYPH	Association of Young Peoples' Health
BCT	Behaviour Change Technique
BCW	Behaviour Change Wheel
BEI	British Educational Index
CMO	Chief Medical Officer
COM-B	Capability, Opportunity, Motivation – Behaviour system
DARE	Drug Abuse Resistance Education
DCLG	Department of Communities and Local Government
DEVS	Drug Education in Victorian Schools
DH	Department of Health
ERIC	Education Resources Information Centre
EU	European Union
EU-DAP	European Drug Addiction Prevention
GBD	Global Burden of Disease
HBSC	Health Behaviour in School-Aged Children Study
HSCIC	Health & Social Care Information Centre
IMB	Information Motivation Behavioural skills model
IPSY	Information + Psychosocial Competence = Protection Life Skills Programme
KiR	Keepin' it Real
LAPE	Local Alcohol Profiles for England
LST	Life Skills Training
MI	Motivational Interviewing
MRC	Medical Research Council
NICE	National Institute for Health and Care Excellence
NHS	National Health Service
OECD	Organisation for Economic Co-operation and Development
ONS	Office for National Statistics
PHE	Public Health England
PSHE	Personal, Social and Health Education
RAHRA	Joint Action on Reducing Alcohol Related Harms
RSE	Relationships and Sex Education
SCT	Social Cognitive Theory
SDT	Social Determination Theory
SEM	Social Ecological Model
SHAHRP	School Health and Alcohol Harm Reduction Project
SIT	Social Identity Theory
SLT	Social Learning Theory
TBP	Theory of Planned Behaviour
TDF	Theoretical Domains Framework
TRA	Theory of Reasoned Action
WHO	World Health Organisation
UN	United Nations
UNICEF	United Nations International Children's Emergency Fund

Chapter 1 Introduction

The aim of this chapter is to provide the background rationale for the three-year study (comprising two phases of data collection), to describe the methods used in the research, to report the outcomes from the feasibility testing and to indicate future development of the research.

This study was conceived in an attempt to address the precursors of problematic alcohol consumption, particularly given the relationship that English adolescents have with alcohol and the associated implications for their safety, mental health and the impact on society (Sassi, 2015; Welch, 2013). Fifteen percent of 11 year olds will already consume alcohol according national statistics (NHS Digital, 2018c) - the age at which most young people in England make the transition from primary to secondary school - but according to the national trajectory of teenage alcohol consumption this figure increases steadily to 73% by age 15 (NHS Digital, 2018c). At a local level, this research was conducted in the Greater Manchester area where the rate of alcohol-specific mortality is 50% higher than the English average and alcohol-related crime, health, worklessness and social care is estimated to cost £1.3bn per annum (Hughes & Wilkins, 2019). In 2018, the percentage of 11-15 year olds in the North West region who reported having ever drunk alcohol was below the English average (NHS Digital, 2018a), however, alcohol-related hospital admissions amongst 15-24 year olds saw a 48% increase over the six years 2011-2017 (Hughes & Wilkins, 2019).

Alcohol can affect young people: *biologically* – their brain development, hormones and general physiology; *psychologically* – their mental health and wellbeing; and *socially* – their place in society, peer and family influences; making them vulnerable to negative consequences from engaging in risky behaviours such as involvement in violence or other types of misadventure, as well as long-term health implications. This study strives to develop and evaluate an intervention designed to influence the behaviour of young people to reduce future alcohol consumption and the associated negative consequences.

This study also responds to the increasingly evident health inequalities in English society. The local context for this research, being situated in some of the most

socially deprived neighbourhoods in the UK offers a useful insight for this study. The work of Marmot, Dyson and others (Dyson, Hertzman, Roberts, Tunstill, & Vaghri, 2009; Marmot, 2015; Marmot, Allen, Goldblatt, Boyce, McNeish, Grady et al., 2010; Marmot, 2013) in defining the social determinants of health, makes the link between health and education, indicating that social determinants such as poor parenting, lack of positive role models and low wellbeing are also largely the same predictors of educational outcomes. Sir Al Aynsley-Green, the first Children's Commissioner for England (2005-2010) called for the country to "confront the bunker between health and education" at the Association for Young People's Health (AYPH) Conference entitled A New Look at Young People's Health held in Manchester in February 2016. His point was that rather than working independently across different disciplines to tackle issues that are affected by the same social determinants, a paradigm shift was required to work across disciplines, with a focus on "needs, nurture and communities". Targeting the social determinants in early childhood with preventative work would impact across all disciplines.

Public Health England (PHE, 2016) recommend strategies aimed at reducing alcohol consumption in order to make financial savings for the National Health Service (NHS) targeting those who already have alcohol-related problems. However, in the longer-term greater savings could potentially be made both through earlier preventative work and by working in collaboration with other sectors. In recognition that "young people's mental and physical health are intertwined and at the heart of health and wellbeing" (p6) PHE outline their 'six principles to shape our thinking about young people's health' which include reducing health inequalities and integrating services "that meet needs holistically and that are centred on young people" (p6) (PHE, 2015).

The National Institute for Health and Care Excellence (NICE) released new guidelines in August 2019 on alcohol interventions in secondary and further education (NICE guideline NG135) (NICE, 2019). Revisions were made in response to government policy recommendations which identified under 18s as a priority for government action and pronounced alcohol education in schools as crucial (Department of Health, 2008; HM Government, 2012). The guidance is designed to inform local authorities responsible for education and public health; teachers, school

governors and others (including school nurses and healthy school leads); health and social care practitioners working with children and young people; providers of alcohol education; and members of the public. The guidelines recommend that alcohol education should be planned and delivered as part of a whole-school approach to relationships education, relationships and sex education (RSE) and health education or personal, social, health and economic education (PSHE). Those planning and delivering these subjects should have the necessary materials, planning time and training to support, promote and provide alcohol education. The recommendations suggest that alcohol education should: be delivered as a spiral curriculum; be age appropriate; take account of each pupil's learning needs and abilities; and be tailored to the group's knowledge and perceptions of alcohol and alcohol use. The guidelines also specify that alcohol education should be delivered using a positive approach to help pupils to make informed, safe, healthy choices; involve pupils in discussions; avoid unintended consequences; avoid scare tactics; and avoid only giving out information (for example by lectures or leaflets).

Therefore, in-line with current policy recommendations, this research study sought to work on the social determinants (poor parenting, low wellbeing, lack of positive mentors) relevant to both health and educational contexts simultaneously with a programme of early intervention. The programme would address some of the social deficits that impact on health and educational outcomes, for example, working with pupils to improve their self-esteem and psychological wellbeing, to inspire aspirations, to establish healthy social norms (regarding alcohol consumption) and to develop strategies to negotiate social situations and avoid engaging in risky behaviours.

The intention was to develop a school-based programme of activities that would influence the behaviour of young adolescents as they entered the secondary phase of education (aged 11-12 years). The programme would attempt to reduce or prevent anticipated alcohol consumption as the young people progress into adolescence. Most of the young people targeted in this research would not yet engage with alcohol, but national data predicts an increased likelihood to drink alcohol as they progress through their teenage years. The intervention was therefore designed to be preventative, aiming to positively influence the future behaviour of the young people

involved. Those who took part in the intervention were expected to report healthier attitudes towards alcohol, which could potentially result in less future engagement with alcohol as time progressed, compared to the national trajectory.

The Hypothesis and Objectives for this research study are as follows.

1.1 Hypothesis and Objectives

The aim of this research was to develop a universal school-based intervention (this would involve all pupils in a class or cohort, rather than specific targeted pupils) designed to prevent, halt or reduce future alcohol consumption (behaviour) amongst adolescents. The intervention would target 11-12 year olds during their transition to secondary education (year 7). This thesis reports on the development of the intervention and the first stages of feasibility testing.

A positive outcome of this research would be the reported successful development and implementation of the intervention into the secondary school classroom setting. Using a stages of change model (Laing & Todd, 2015), indicators of behaviour change predicting the intended long-term impact (alcohol consumption rising more slowly (or even halting or decreasing) compared to national trends data) would be evidenced.

Two stages of feasibility testing were conducted, involving investigations in four different school contexts, to test the intervention, its implementation and evaluation in preparation for a future larger scale study. The objectives for the feasibility studies are detailed in the following sections (Section 1.1i and 1.1ii).

1.1i Objectives for feasibility study 1

1. To develop and adapt an evidence-based universal school-based intervention that:
    i. provides information and raises awareness about the risks associated with alcohol misuse (to inspire healthier attitudes towards drinking)
    ii. helps individuals to improve their self-esteem and psychological wellbeing to enable them to be confident in taking responsibility for their own behaviour

    iii.   encourages individuals to have the motivation and self-confidence to consider and moderate their future alcohol consumption (whether or not they are already drinking)

    iv.   provides strategies to help individuals carry out their intentions regarding their future alcohol consumption

2. To assess the feasibility of delivering the intervention in a mainstream (state-funded) secondary school setting as part of the compulsory school curriculum according to the following process evaluation criteria (Humphrey, Lendrum, Ashworth, Frearson, Buck, & Kerr, 2016): fidelity, dosage, quality, responsiveness, evaluation, adaptation and impact.

1.1ii Objectives for feasibility study 2

Following developments and adaptations to the intervention and evaluation measures resulting from feasibility study 1.

1. To assess whether the revised intervention could be implemented in different school settings with varying contextual factors, such as the delivery model, staff support and class size.

2. To identify any key 'active' components evident within the intervention.

3. To explore how the intervention might be improved for future application to increase its impact and relevance for schools.

1.2 Overview of the thesis

In order to clarify the stages that form this study, a flow chart illustrating the structure of the thesis is shown in Figure 1.1. This diagram is situated at the start of each chapter as a navigation device, the relevant position in the thesis is highlighted in bold.

The Introduction (Chapter 1.0) sets the scene for the research and describes the areas of concern, explaining the issues that need to be addressed. The research hypothesis and objectives are outlined in Section 1.1.

The Literature Review (Chapter 2.0) then explores the implications of the issues that are detailed in Chapter 1.0, providing the background information that informs the direction taken in this research.

Chapter 3.0 and Chapter 4.0 then describe the methodology used in the feasibility studies, explaining how the research was conducted; firstly the development of the intervention (Chapter 3.0) followed by its evaluation (Chapter 4.0).

The testing and development work was conducted as a series of feasibility studies, the outcomes from these studies are described in Chapter 5.0, Chapter 6.0 and Chapter 7.0.

Discussion of the study results and conclusions are presented in Chapter 8.0. The implications of the research, some of the limitations encountered in conducting this research and recommendations are also discussed. It is planned that the research should continue, building on the foundations outlined in this thesis and preparations are underway, in the form of a funding application that is being prepared for a larger feasibility study.

Figure 1.1 Structure of Thesis

Chapter 1
Introduction
Background information: describing the problem

Chapter 2
Literature Review
Exploring the issues,
- Approaches to addressing the problem
- Theoretical Framework

Chapter 3
Methodology: developing the intervention
- Intervention mechanisms
- Intervention structure

1.2 Hypothesis and Objectives
hypothesis & objectives

3.3 Intervention Structure
- Components
- Structure

Chapter 4
Methodology: testing the intervention
- Study design
- Evaluation measures

4.2 Feasibility Study 1
- Process evaluation
- Spring 2016

Chapter 5
Implementation

4.3 Feasibility Study 2
- Case studies
- Spring 2017

Chapter 6
Results: Quantitative Data

Chapter 8
Discussion & Conclusions
- Implications
- Reflections
- Future directions

Chapter 7
Results: Qualitative Data

Chapter 2 Literature Review

The background context to the research including the trends in adult and adolescent alcohol consumption, the consequences of alcohol misuse and the relationship between alcohol and socioeconomic status are explained in greater detail in the first sections of this chapter (Section 2.1, Section 2.2, Section 2.3). The results of a literature review of school-based alcohol interventions are then presented in Section 2.4. The purpose of this review was to assess the effectiveness of previous studies, to itemise the key active components evidenced from these studies, to identify elements that might be improved and to hypothesise what might be missing. The key components were then combined using the theoretical framework (detailed in Section 2.5) to create a new and potentially more successful intervention which forms the basis of this research.

For each section of this chapter, literature searches were conducted using the following databases: PubMed, PsycINFO, Web of Science, British Educational Index (BEI), Education Resources Information Centre (ERIC) and the Cochrane Database of Systematic Reviews. Hand searches were conducted in study reference lists and citation indexes. Websites and the grey literature were also searched using conventional electronic search engines, such as Google and Google scholar. This approach was used for the broad literature scoping required to inform the background context for the research. A more targeted systematic search was then conducted to explore the literature relating to school-based alcohol interventions. This process is explained in greater detail in Section 2.4ii.

2.1 Background – Adult alcohol consumption
2.1i Global trends in adult alcohol consumption

Increasing trends in alcohol consumption over recent decades and the consequential significant health implications are of worldwide concern (Global Burden of Disease GBD 2016 Alcohol Collaborators, 2018; Rehm, Mathers, Popova, Thavorncharoensap, Teerawattananon, & Patra, 2009; WHO, 2014). Alcohol was ranked as the seventh leading risk factor for premature death and disability worldwide in 2016, by the GBD 2016 Alcohol Collaborators, with 2.8 million deaths attributed to alcohol use (2.2% of females, 6.8% of males). Amongst 15-49 year olds,

alcohol was the leading global risk factor with 3.8% of female deaths and 12.2% of male deaths attributable to alcohol (GBD 2016 Alcohol Collaborators, 2018). The European Commission pronounce alcohol-related harm as a major public health concern accountable for 7% of all ill health and early deaths in the European Union (EU) and cite alcohol as the 3rd risk factor for disease and death in the EU (Joint Action on Reducing Alcohol Related Harms (RAHRA) 2015). Recognition of alcohol as a serious health burden has prompted organisations including the United Nations (UN), WHO, EU and the UK Government to respond by implementing strategies to target harmful alcohol consumption (EU, 2006; HM Government, 2012; UN, 2015; WHO, 2010).

The highest levels of alcohol consumption worldwide were reported across areas of Europe and Russia in 2016 (*Figure 2.1*) (WHO, 2018). WHO projections for 2015 anticipated a more widespread distribution of the highest alcohol consumption levels worldwide (WHO, 2015) and suggested that the USA, Brazil and Australia were likely to record higher levels of consumption. However, Figure 2.2 shows that alcohol consumption remained stable in Brazil and Australia over the five years 2010-2016 (WHO, 2014, 2018) whilst the USA recorded an increase. During this five-year period, alcohol consumption decreased across some areas of Europe and Russia but recorded an increase in more developing countries such as China, India and parts of Africa.

Figure 2.1 Global Alcohol Consumption Among Adults (15+ years population)
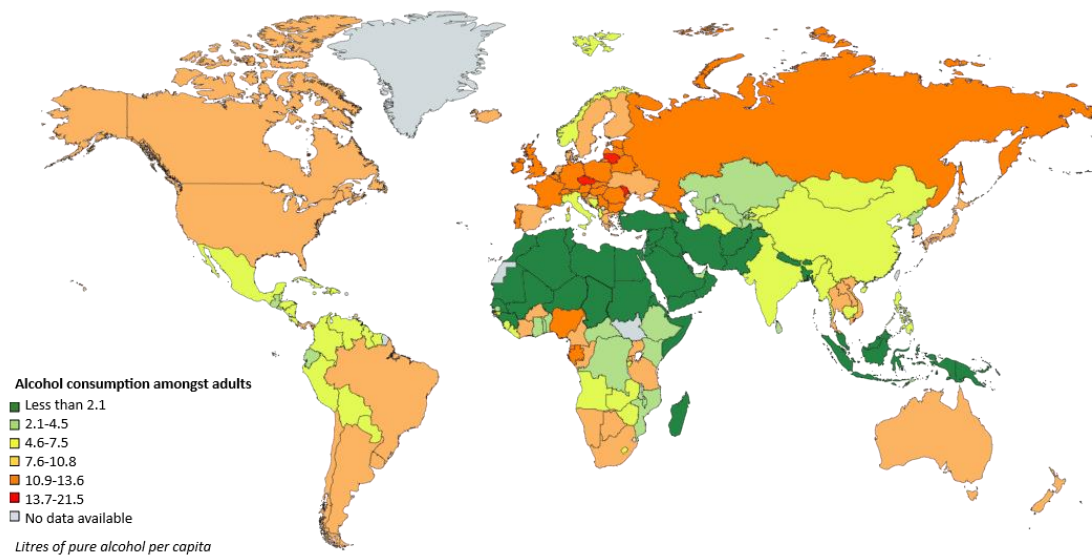
Source: Data from the World Health Organisation (WHO, 2018).

Figure 2.2 Global trends in alcohol consumption 2010-2016
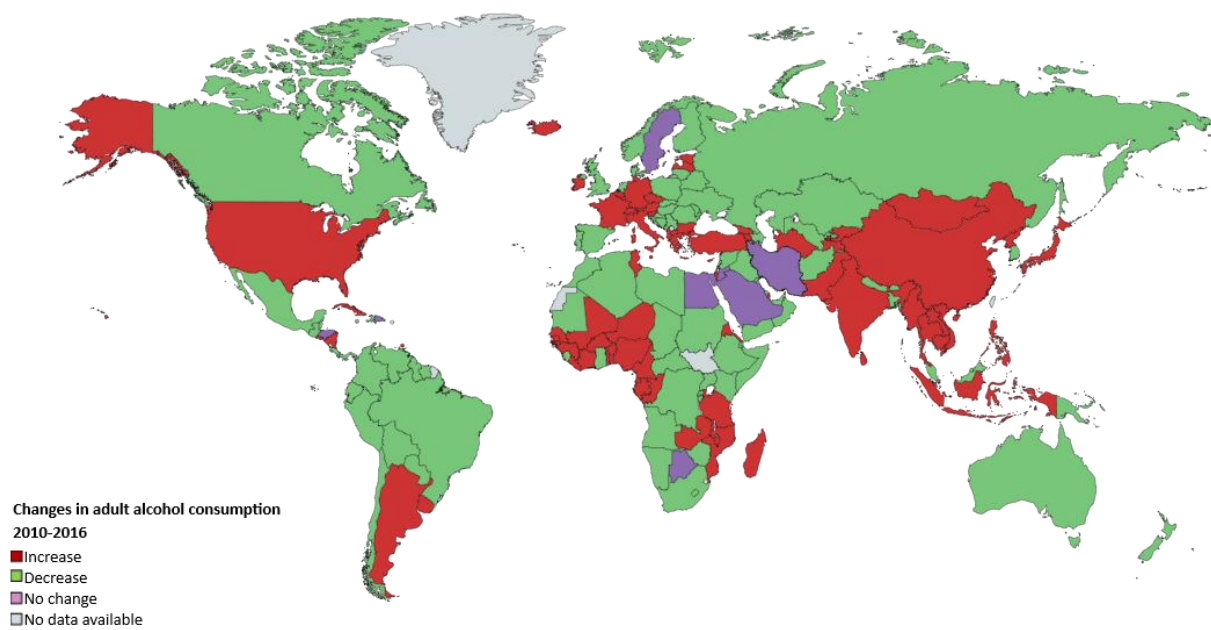
Source: Data from the World Health Organisation (WHO, 2014, 2018)

2.1ii UK trends in adult alcohol consumption

The WHO data ranks the UK as the 23rd highest consumer of alcohol in the world in 2016 with an average of 11.4 litres of pure alcohol per capita (WHO, 2018) (*Figure 2.3*). As shown in Figure 2.1, the highest consumers of alcohol tend to be in more developed countries. The Organisation for Economic Co-operation and Development (OECD) ranks the UK 17th highest consumer out of the 44 developed country members (OECD, 2017) (*Figure 2.4*).

Figure 2.3 Global alcohol prevalence for adults, 2016
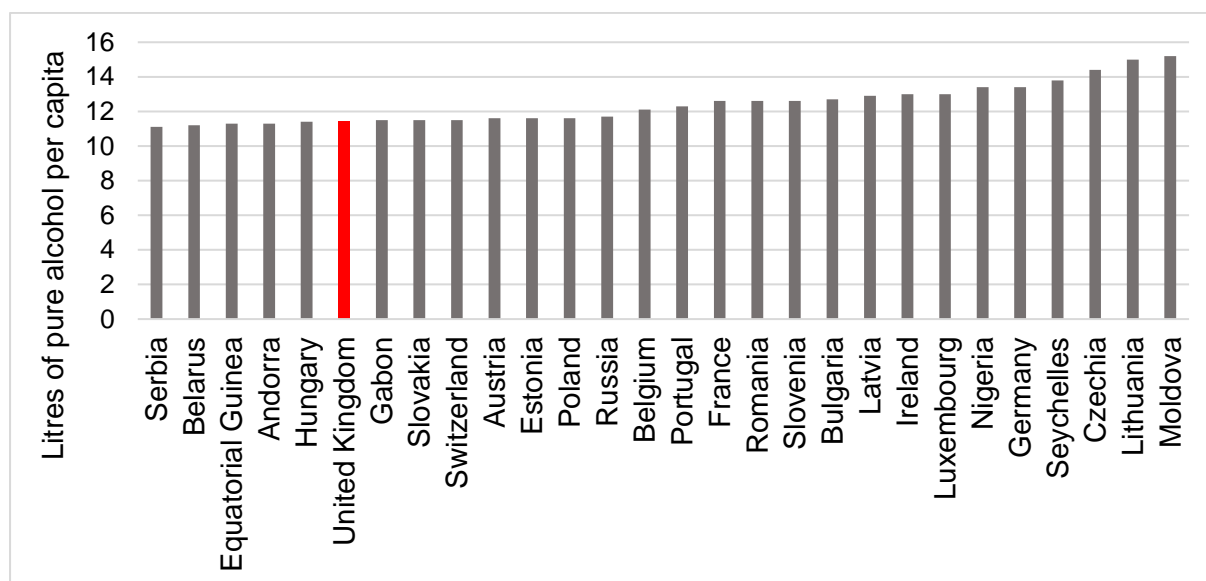
Source: Data from the World Health Organisation (WHO, 2018).

Figure 2.4 Global alcohol prevalence for adults, 2015 (or nearest year)
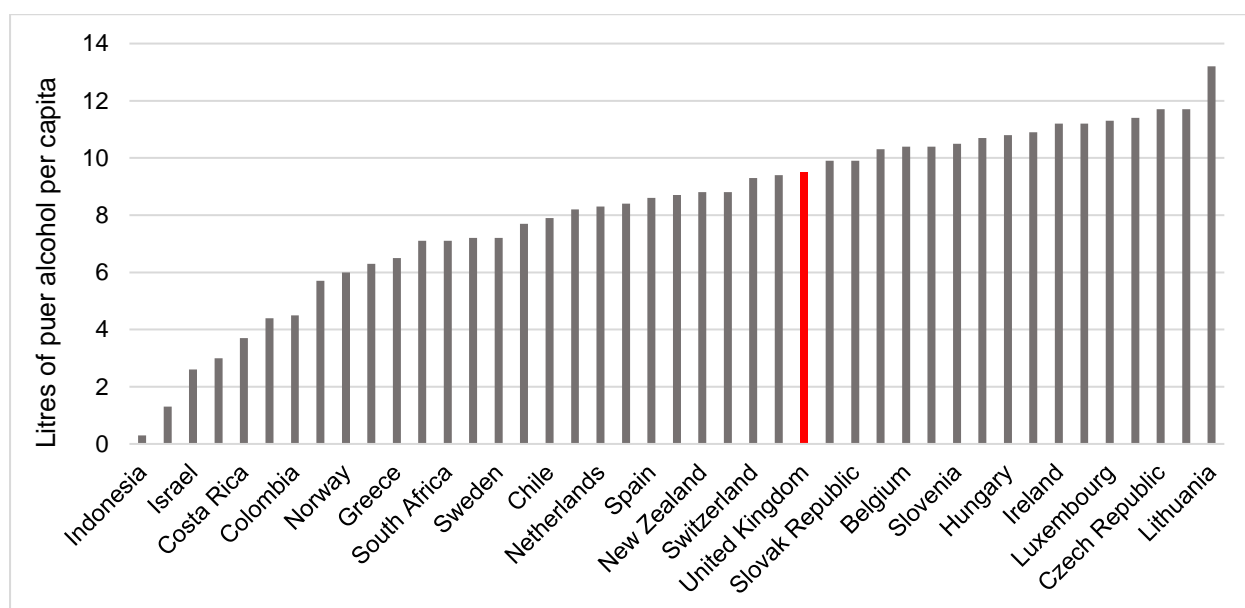
Source: OECD Health Statistics, 2017.

The WHO report consistent high levels of drinking in England (WHO, 2015), however, adult alcohol consumption steadily decreased over ten years (2007-2017) from 65% to 58% of the population who reported being drinkers. Heavy drinking also decreased in England (from 20% reported in 2007 to 15% in 2017) (GBD 2016 Alcohol Collaborators, 2018). Despite such reductions, alcohol misuse remains the biggest risk factor for death, ill-health and disability among 15-49 year olds in the UK, and the fifth biggest risk factor across all ages (LAPE, 2018). Increased adverse consequences of alcohol consumption were recorded in England between 2007 and 2017 with alcohol-related hospital admissions rising by 29% (Local Alcohol Profiles for England (LAPE, 2016, 2018)).

At a regional level, data from the Opinions and Lifestyle Survey, (ONS, 2017a) shows that the highest numbers of drinkers in England are in the South West (61.4%), South East (61.1%) and Yorkshire & the Humber (60.7%) (*Figure 2.5*).

Figure 2.5 Proportion of adults who drank alcohol in the previous week by region in the UK (2017)
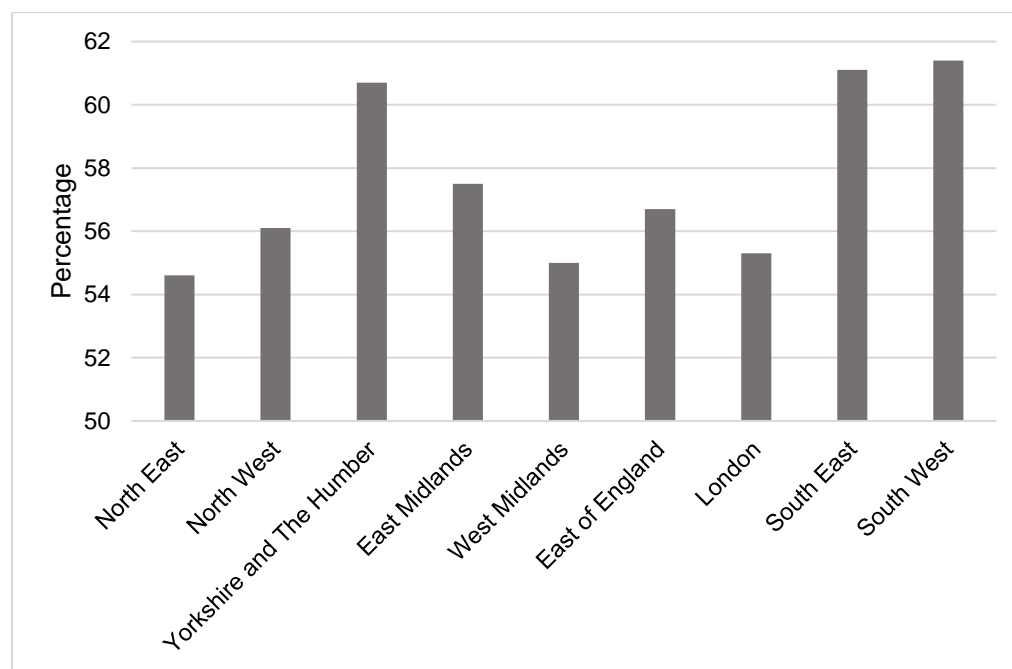
Source: Data from Opinions and Lifestyle Survey, Office for National Statistics (2017).

LAPE data shows, however, that alcohol-related hospital admissions are highest in the North East (2,690 per 100,000 population) and North West (2,590 per 100,000 population) of England (LAPE, 2018) (*Figure 2.6*). Within the North West - and of particular local interest within the scope of this study - Manchester has the third

highest alcohol-related hospital admissions amongst the local authorities in this region (*Figure 2.7*). Manchester also features in the top 20 local authorities with the highest proportion of neighbourhoods in the most deprived ten per cent of neighbourhoods nationally (Department of Communities and Local Government DCLG, 2015).

Figure 2.6 Alcohol-related hospital admissions in England by region (broad measure: based on primary and secondary diagnoses)
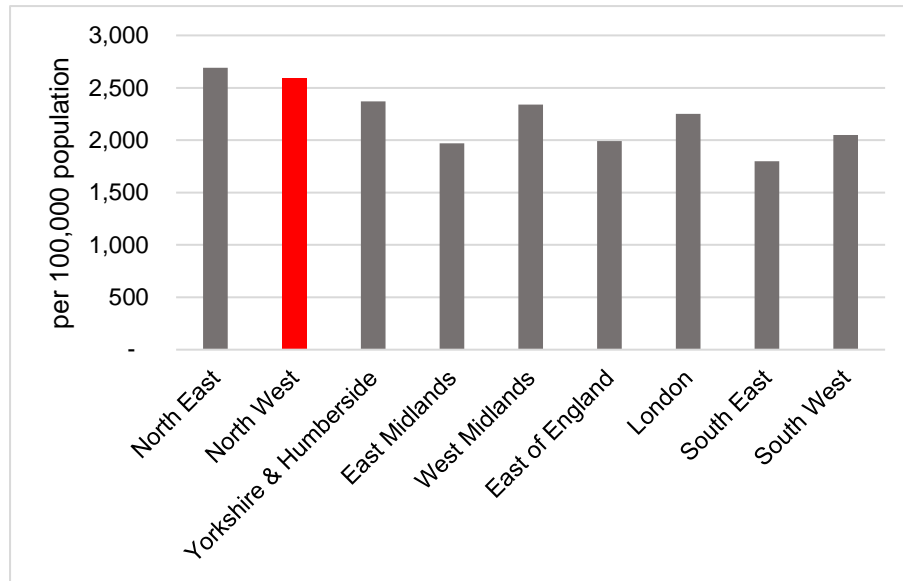
Source: Data from Local Alcohol Profiles for England (LAPE, 2018).

Figure 2.7 Alcohol-related hospital admissions in the North West region by local authority (broad measure: based on primary and secondary diagnoses)
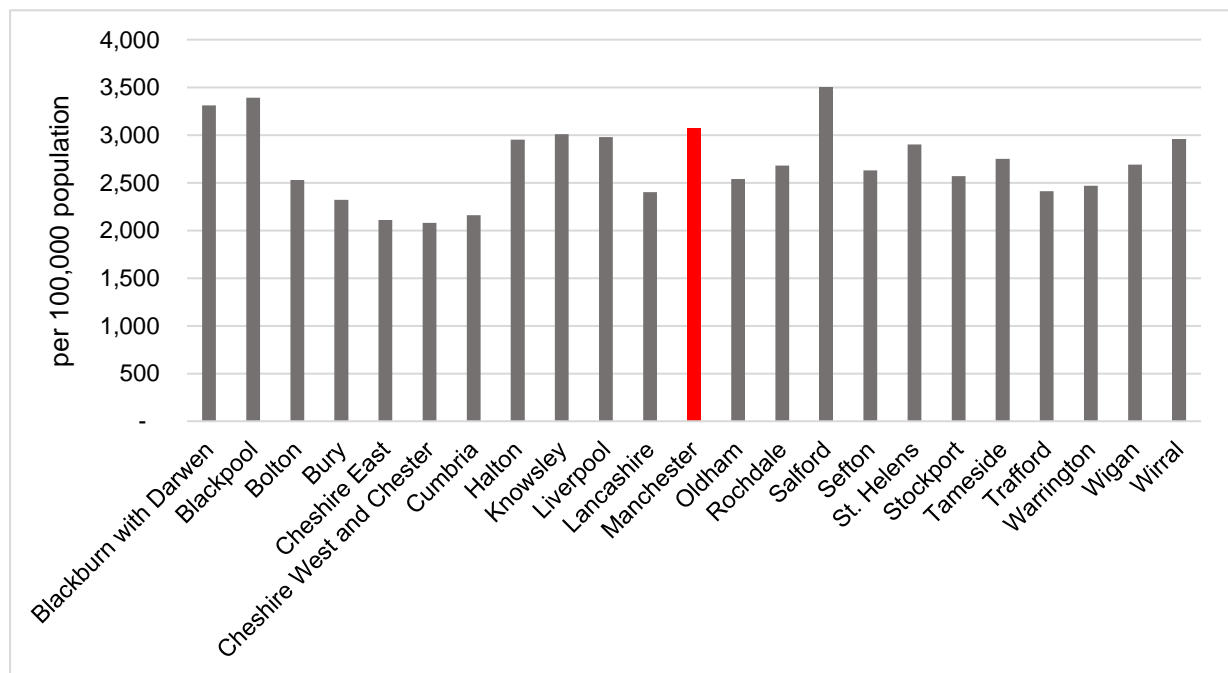
Source: Data from Local Alcohol Profiles for England (LAPE, 2018).

2.2 Background – Adolescent alcohol consumption

2.2i Global trends in adolescent alcohol consumption

Decreasing trends in alcohol consumption were also reflected amongst the younger population (15 years old and younger) worldwide. The Health Behaviour in School-Aged Children Study (HBSC) reported a 28% reduction in the proportion of 8 to 15 year olds who have ever had a 'proper' alcoholic drink (between 1999 and 2017). The largest decrease was amongst the 13-15 year olds (39% reduction 1999-2017). However, they caution that this is a likely underestimation due to the nature of data collection being a self-completed household survey.

Increasing trends in age of alcohol initiation and in experience of drunkenness before the age of 16 were reported across 20 'developed' OECD countries between 2001 and 2010, followed by a decrease to 2014 (**Figure 2.8** and **Figure 2.9**).

Figure 2.8 Changes in age of first drink 2001-2014, average across 20 OECD countries
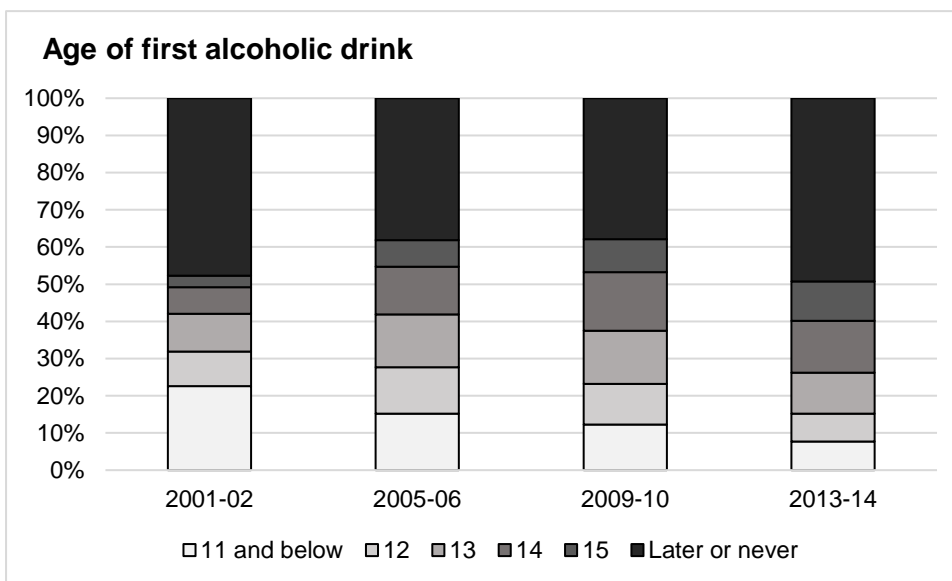
Source: Data from Health Behaviours in School-aged Children survey 2001-02, 2005-06, 2009-10 and 2013-14 (http://hbsc-nesstar.nsd.no/webview/).

Figure 2.9 Age of first drunkenness 2001-2014, average across 20 OECD countries
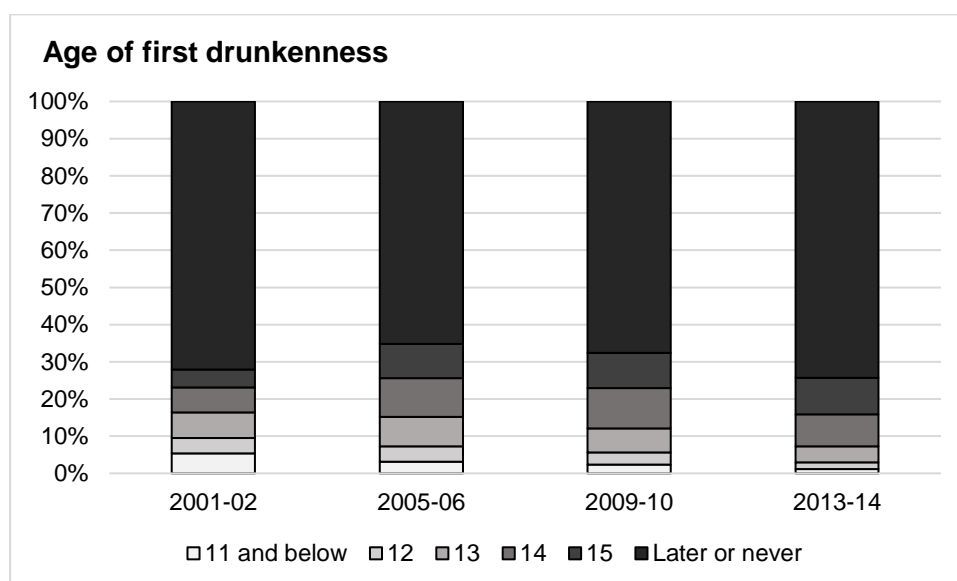
Age of first drunkenness

Source: Data from Health Behaviours in School-aged Children survey 2001-02, 2005-06, 2009-10 and 2013-14 (http://hbsc-nesstar.nsd.no/webview/).

2.2ii UK trends in adolescent alcohol consumption

Adolescent alcohol consumption in developed nations has declined in recent years, particularly amongst 15 year olds in the UK, as shown in Figure 2.10. (HBSC, 2014). Of the 36 countries surveyed, 15 year olds in England (ranked 30th) and Wales (ranked 25th) who drink weekly consume lower levels (below the HBSC average) of alcohol compared to other countries (Scotland ranked 19th, above the HBSC average for girls and below the average for boys). However, in terms of alcohol initiation, an above average proportion of English 15 year olds reported having their first drink at 13 or younger.

Figure 2.10 Trends in weekly drinking 2002-2014 by subregion and gender

Legend:

GIRLS / BOYS

- Central–western Europe
- Central–eastern Europe
- Southern/ Mediterranean
- Ireland/ Great Britain
- Nordic
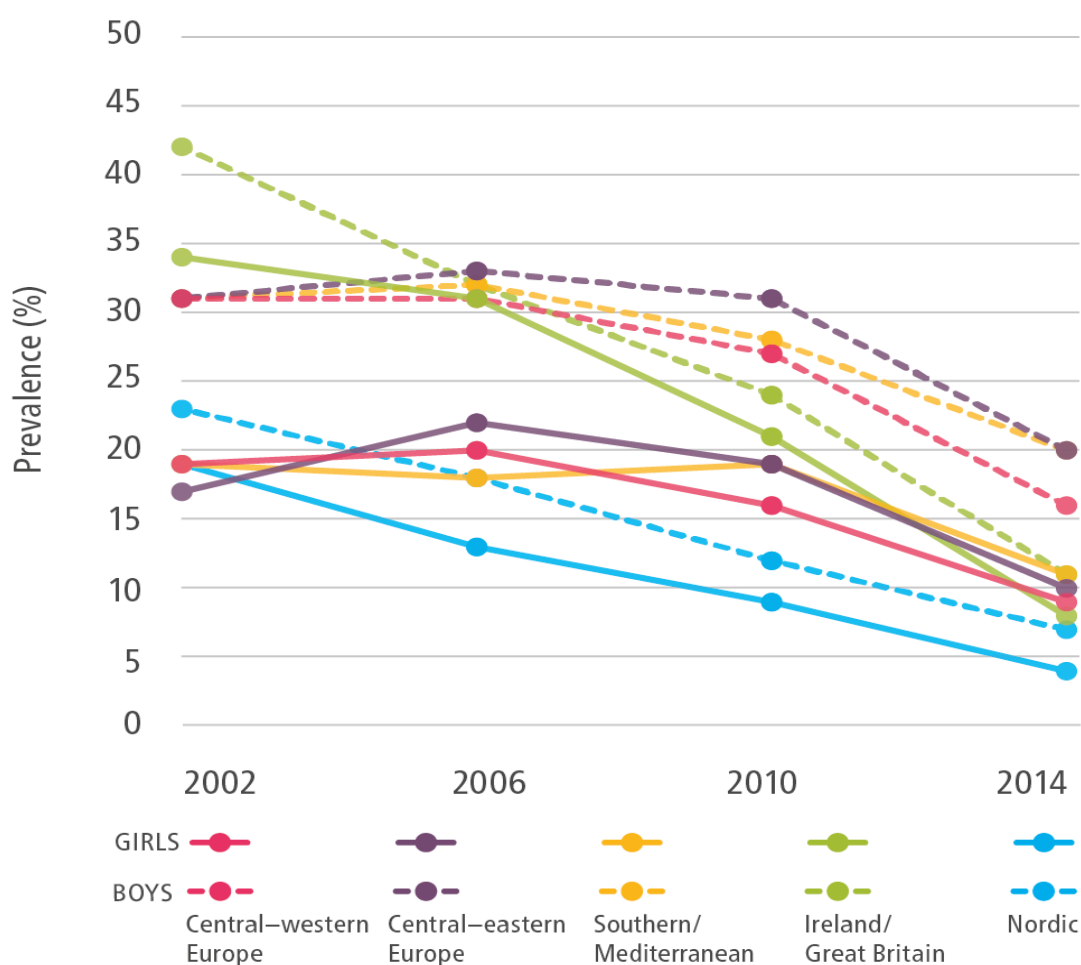
Source: Health Behaviour in School-aged Children Study (HBSC) (2014).

Despite the substantial decrease in adolescent alcohol consumption in the UK (*Figure 2.10*), there remains evidence of high consumption patterns in a proportion of young people (Henderson, Nass, Payne, Phelps, & Ryley, 2012; HSCIC, 2016). In 2014, 8% of 11-15 year olds had drunk alcohol in the last week compared to a quarter (25%) in 2003 and there was a reported change in attitude with 24% of those surveyed thinking it was acceptable for someone their age to drink once a week (2014) compared to 46% in 2003. However, the 8% who had drunk alcohol in the last week in 2014 consumed a mean of 9.8 units and the majority had drunk above the recommended guidelines for adults (according to the former guidelines which were subsequently revised in 2016 (*Figure 2.11*)), with girls (76%) consuming higher levels than boys (59%).

Figure 2.11 Recommended drinking guidelines (adults)

UK Chief Medical Officers'
Low Risk Drinking Guidelines

Drinkaware explains

=

Unit guidelines are now the **SAME** for **men** & **women**.
BOTH are advised **not to regularly drink**
more than **14 units** a **week**

This is what 14 units looks like:

6 pints of 4% beer

6 glasses of
13% wine

175ml glasses

25ml glasses

14 glasses of
40% whisky

BUT don't 'save up' your 14 units, it's best to **spread evenly**
across the **week.**

If you want to cut down the amount you're drinking, a good
way is to have several **drink-free days** each week.

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |

Note: 175ml 13% ABV wine and 4% ABV beer

If you're **pregnant** you **shouldn't**
drink alcohol **at all**

Keep the short-term health risks low by:
- **limiting** the total amount of **alcohol** in **one session**
- **drinking** more **slowly**, alternating with **food** and/or **water**

The **guidelines** have been set at a level to keep
the **risks of cancer** or other diseases **low**.

drinkaware

Half of young people (49%) who had drunk alcohol in the last four weeks reported that they had been drunk at least once during that time and three out of five (63%) had deliberately tried to get drunk (NHS Digital, 2017, 2018c). A precise definition of binge drinking cannot be specified because tolerance to alcohol varies from person to person. The pace of drinking in a session along with other factors such as body mass and amount of food consumed can alter the effects of alcohol. The NHS suggest that binge drinking is *"drinking lots of alcohol in a short space of time or drinking to get drunk"* - defined as drinking more than 8 units of alcohol in a single session for men and 6 units in a single session for women (www.nhs.uk). The WHO specify binge drinking as consuming more than six units of alcohol in a single session. The NHS *Drink-by-drink guide* describes the effects of alcohol on the adult mind and body (***Figure 2.12***) which are more pronounced for young people due to their inexperience and low tolerance to alcohol (Scottish Health Action on Alcohol Problems (SHAAP, 2013)).

Figure 2.12 NHS Drink-by-drink guide

Drink-by-drink guide

Below is a drink-by-drink guide, based on a standard (175ml) 13% volume glass of white wine and 4% strength pint of lager, showing how quickly alcohol can affect your mind and body.

One glass of white wine or a pint of lager (approximately two units):
- You're talkative and you feel relaxed.
- Your self-confidence increases.
- Driving ability is already impaired, which is why it is best to drink no alcohol if you're driving.

Two glasses of white wine or two pints of lager (approximately four units):
- Your blood flow increases.
- You feel less inhibited and your attention span is shorter.
- You start dehydrating, one of the causes of a hangover.

Three glasses of white wine or three pints of lager (approximately six units):
- Your reaction time is slower.
- Your liver has to work harder.
- Your sex drive may increase, while your judgement may decrease.

Four glasses of white wine or four pints of lager (approximately eight units):
- You're easily confused.
- You're noticeably emotional.
- Your sex drive could now decrease and you may become less capable.

www.nhs.uk

Figure 2.13 shows a steep increase in alcohol consumption as children progress into adolescence from age 11 to 15. In 2016, 44% of 11-15 year olds reported having consumed alcohol at least once (when asked whether they have *'ever had a proper alcoholic drink – a whole drink, not just a sip?)* The percentage of drinkers increases rapidly from 15% of 11 year olds to 73% of 15 year olds with a sharp increase occurring around year 9 (age 13-14 years) (NHS Digital, 2017, 2018c).

Figure 2.13 Percentage of 11-15 year olds who have consumed alcohol at least once (2016)

Source: *National Statistics, NHS Digital (2017)*

2.3 Risks and impacts of alcohol misuse

Alcohol use is a leading risk factor for global disease burden (GBD 2016 Alcohol Collaborators, 2018). There is worldwide concern over the associated impacts on long-term physical and mental health with alcohol impacting on over 200 diseases and types of injuries (Peacock, Leung, Larney, Colledge, Hickman, Rehm et al., 2018; PHE, 2016a; Sassi, 2015). There are also wider societal impacts as harmful drinking affects people who have not been consuming alcohol such as the victims of traffic accidents, violence and also children born with foetal alcohol spectrum disorders (Gell, Ally, Buykx, Hope, & Meier, 2015; ONS, 2018; PHE, 2016a).

The National Institute for Health and Care Excellence (NICE) reported that, in the UK, drinking adversely affected 1.3 million children and led to over 7,000 road accident injuries and 17 million lost working days. PHE estimate that in 2015

167,000 working years were lost due to alcohol in England (PHE, 2016b). NICE conjecture that adult alcohol misuse is likely to have contributed to one million assaults and was associated with 125,000 instances of domestic violence (NICE, 2010). Data from the Crime Survey for England and Wales (2016-2018) indicated that in 39% of all violent offences, victims believed the offender(s) to be under the influence of alcohol (equivalent to 561,000 offences) (ONS, 2018).

Financial consequences of harmful drinking impact on health care and crime costs and also lost productivity in the workplace (Sassi, 2015). Government estimates claim that alcohol generates external costs of £21 billion a year in England and Wales: £3.5 billion in NHS costs, £11 billion for alcohol-related crime and £7.3 billion in costs to the economy (PHE, 2016a).

In 2017, 7,697 people died from alcohol-specific causes in the UK, a rate of 12.2 per 100,000 population. This is the highest figure recorded since a peak of 12.7 per 100,000 population in 2008 (ONS, 2017b). Female deaths reached the highest level since the ONS records began in 2001 (8 deaths per 100,000 females in 2017). Male death rates have remained consistently higher than females (at least double) since 2001, (16.8 deaths per 100,000 males in 2017) (ONS, 2017b). Alcohol-related deaths amongst the more socially deprived have been consistently higher compared to the more affluent, for both genders (*Figure 2.14* and *Figure 2.15*). Accident and Emergency (A&E) attendance rates (2009-2014), likely due to alcohol poisoning, doubled from 72.7 per 100,000 population to 148.8 per 100,000 population (104.6% increase) and the highest rates were found in the 15–19 and 20–24 age groups (Currie, Davies, Blunt, Ariti, & Bardsley, 2015). The main causes of deaths amongst young people in the UK were not linked to disease; rather, 57% were attributed to external causes of morbidity and mortality and 22% of this age group died as a result of intentional self-harm/event of undetermined intent (ONS, 2013). In 2017, 34% of deaths in children and young people were from causes considered avoidable (ONS, 2019).

Figure 2.14 Alcohol-related deaths for females by deprivation quintile (England, 2017)
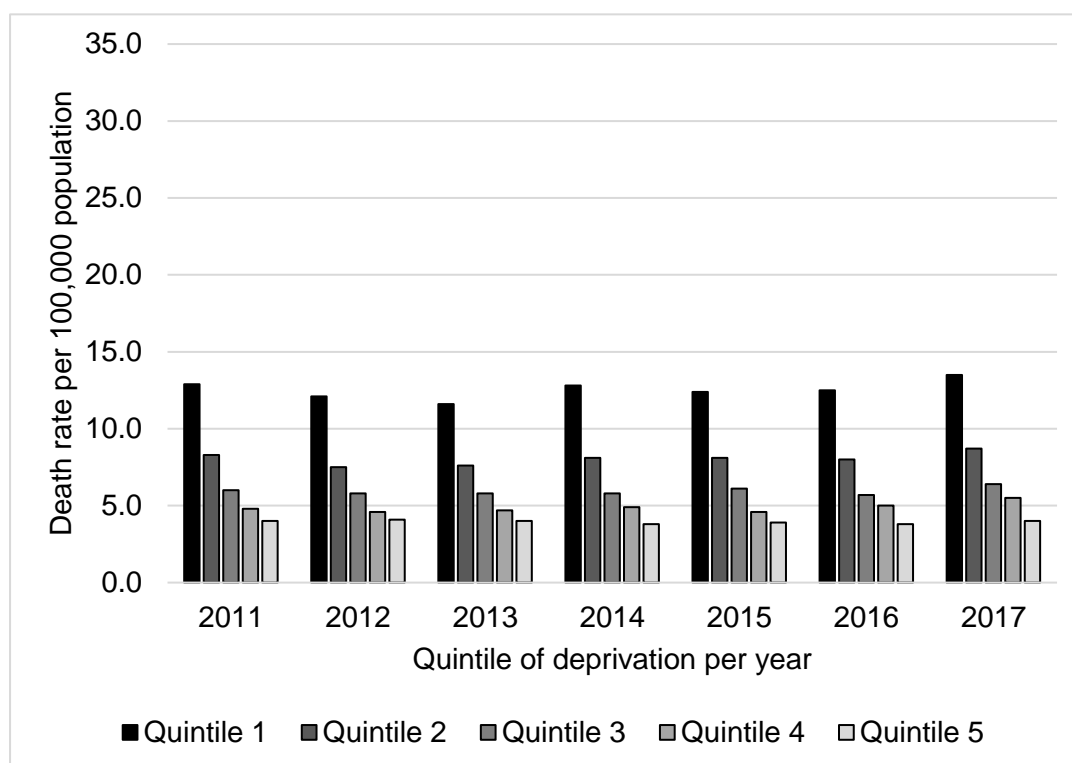
Figure 2.15 Alcohol-related deaths for males by deprivation quintile (England, 2017)
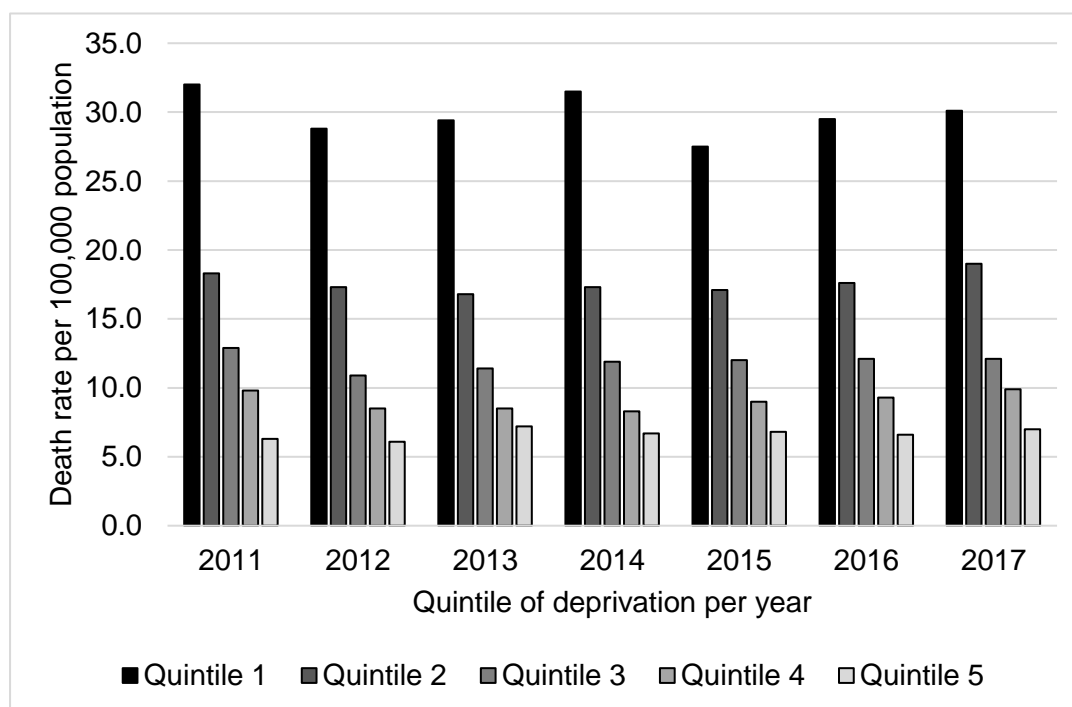
Source: Data from Office of National Statistics. Alcohol specific deaths in the UK: Registered in 2017. https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/datasets/ alcoholspecificdeathsintheunitedkingdomsupplementarydatatables

High levels of alcohol consumption in young people are also linked to likelihood of experiencing harms such as alcohol-related violence and regretted sex (Bellis, Morleo, Hughes, Downing, Wood, Smallthwaite et al., 2010; Miller, Naimi, Brewer, & Jones, 2007; Stolle, Sack, & Thomasius, 2009). In the UK, 40% of those binge drinking once a week reported being involved in violence and 15% reported having regretted sex when drunk (Bellis, Phillips-Howard, Hughes, Hughes, Cook, Morleo et al., 2009). Binge drinkers were found to have almost a five-fold increased risk of becoming pregnant or getting someone pregnant (Bellis, Morelo, Tocque, Dedman, Phillips-Howard, Perkins et al., 2009b). Increased aggression, impulsivity and poor decision making often associated with hazardous drinking is also understood to increase the risk of suicide (Schilling, Aseltine, Glanovsky, James, & Jacobs, 2009), suicide being the second leading cause of death amongst 15-29 year olds worldwide (WHO, 2014). Alcohol consumption is also associated with sexual assault. Research evidence from a US study found that binge drinking could help explain why some victims of sexual assault become suicidal when those who had not consumed alcohol do not (Behnken, Le, Temple, & Berenson, 2010).

2.3i Mental health implications of alcohol misuse

Public Health England (PHE, 2015) claim many alcohol-related deaths of young people (aged 10-24) are largely preventable (*Table 2.1*). This raises questions about the extent to which alcohol misuse is responsible and its relationship to mental health and psychological wellbeing.

Table 2.1 Reasons to target young people to reduce drinking, smoking and illegal drug use

1. mortality and morbidity for this age group (10-24) remain largely preventable and rates vary widely across the country
2. this is a life stage of significant neural, emotional and physical development and when change is possible
3. the 9.9 million young people in the UK have poorer health outcomes than those in many other developed nations
4. inequality has a significant negative effect on health in adolescence
5. keeping young people safe from harm is an important priority
6. the consequences of poor health in this age period last a lifetime

Source: Improving young people's health and wellbeing: A framework for public health. *Public Health England (PHE, 2015).*

There are various ways of conceptualising and measuring mental health and wellbeing. UNICEF measures wellbeing according to five dimensions of children's lives: material well-being; health and safety; education; behaviour and risks; and housing and environment. NHS Digital report the mental health in terms of whether or not the individual has a mental health disorder. The Children's Society's Good Childhood Index (Rees, Bradshaw, Goswami, & Keung, 2010) as a subjective measure of wellbeing (for children aged 8 and above) which is used to measure wellbeing overall and in relation to ten aspects of life. It includes a single-item measure of happiness with life as a whole, a five-item measure of overall life satisfaction, and questions about happiness which cover ten different aspects of life including happiness with school life and relationships with family and friends. Collectively, the data give an overall indication of the mental health and wellbeing of children and young people in the UK.

In 2007, children in the UK were identified as having one of the lowest wellbeing scores amongst wealthy nations ranking last out of the 21 nations surveyed (UNICEF, 2007; Viner, 2013). An overall general improvement in children's wellbeing in the UK was reported in 2013, compared with 2007, ranking 16th out of 29 nations (UNICEF, 2013). High rates of alcohol abuse amongst 11-15 year olds, at almost 20% (ranking 23rd out of the 29 nations) and teenage pregnancy (ranking in the top three countries with over 29 per 1,000) were influential contributors to the UK's poor overall ranking of child wellbeing. The Mental Health of Children and Young People survey (Sadler, Vizard, Ford, Marchesell, Pearce, Mandalia et al., 2018) reported that 11.2% of 5-15 year olds had a mental health disorder. This figure has increased by 1.5% since 1999. Older adolescents, aged 17-19, were three times more likely to have a disorder compared to pre-school children (aged 2-4 years). Data from The Good Childhood Report, 2018 shows an overall decreasing trend in UK children's happiness with life as a whole from 2012-2016 (The Children's Society, 2018).

Adolescence is a significant period of physical and psychological development (approximately spanning the age range 10-19+years (WHO, 2015)) that marks the transition from childhood to adulthood. Adolescence coincides with the onset of puberty, which occurs at different ages depending on various cultural and demographic factors (Curtis, 2015), for example girls generally experience puberty

12-18 months earlier than boys and can have their first period as early as 8 years old (UNICEF, 2011). The general term 'adolescence' is used inconsistently in reference to young people of different ages within the broader age range, so these will be specified as appropriate throughout this report. Adolescence is understood in terms of three stages which are characterised by key emotional, cognitive and social developments (Curtis, 2015; Ingersoll, 1992; Stang & Story, 2005; UNICEF, 2011; WHO, 2015) (*Table 2.2*). It is important to consider these characteristics in the planning of preventative alcohol intervention work.

Table 2.2 Psychosocial Processes and the Substages of Adolescent Development

	Emotional development	Cognitive development	Social development
Early adolescence (approximately 10-15 years)	Adjustment to a new body image, Adaptation to emerging sexuality	Concrete thinking; Early moral concepts	Strong peer effect
Middle adolescence (approximately 14-17 years)	Establishment of emotional separation from parents	Emergence of abstract thinking, expansion of verbal abilities and conventional morality; Adjustment to increased school demands	Increased health risk behaviour; Sexual interests in peers; Early vocational plans
Late adolescence (approximately 16-19 years)	Establishment of a personal sense of identity; Further separation from parents	Development of abstract complex thinking; Emergence of post-conventional morality	Increased impulse control; Emerging social autonomy; Establishment of vocational capability

Source: Compiled from (Curtis, 2015; Ingersoll, 1992; Stang & Story, 2005).

The substantial social, emotional and cognitive changes that occur during adolescence mean that there is a greater tendency to engage with risky behaviours, such as alcohol use during this time. It is also a time of heightened risk for developing depressive symptoms (Maughan, Collishaw, & Stringaris, 2013; Willoughby & Fortner, 2015). Research evidence suggests that early alcohol use is an important risk factor for suicide ideation and attempts (Maughan et al., 2013; Shaikh, Lloyd, Acquah, Celedonia, & M, 2016; Swahn & Bossarte, 2007; Swahn, Bossarte, Ashby, & Meyers, 2010).

As described in Section 2.2, trends in alcohol consumption amongst the younger population have been declining in recent years, however instances of binge drinking are still cause for concern. During adolescence the brain is still developing; studies reveal that changes in neural connectivity continue to develop throughout the teens and 20s, potentially influencing reasoning capacity, affective states and impulse control. The frontal lobes are the last areas to mature and development is not complete until a person is well into their 20s (Curtis, 2015; Steinberg, 2014). Heavy patterns of alcohol consumption during his period of adolescent brain development can have adverse health implications (Ewing, Sakhardande, & Blakemore, 2014; Squeglia, Brammer, Ray, & Lee, 2016; Squeglia, Jacobus, & Tapert, 2014) including an increased likelihood of alcohol-related disorders occurring in later life (Nixon & McClain, 2010; Welch, 2013; Welch, Carson, & Lawrie, 2013). This is partly due to adolescents being more susceptible to the effects of alcohol compared with adults (Nixon & McClain, 2010; Welch et al., 2013) - the adolescent brain being highly sensitive to alcohol's rewarding and memory impairing effects whilst being less sensitive to the motor impairing and sedative effects of alcohol. Neural pathways in the brain are reinforced during this time and thus the consequences of alcohol use are more likely to persist into adulthood (Bava & Tapert, 2010).

2.3ii Socioeconomic status and alcohol-related consequences

Population-wide rates of alcohol consumption in the UK are lower in poorer societies compared to wealthier ones. In 2016, higher earners in the UK were more likely to drink alcohol - 79% of those earning over £40,000 drank alcohol in the last week compared to 47% of those earning up to £9,999 (ONS, 2017a). However, more disadvantaged social groups tend to experience disproportionately higher levels of alcohol attributable harm (Bellis, Hughes, Nicholls, Sheron, Gilmore, & Jones, 2016; EU, 2006; Jones, Bates, McCoy, & Bellis, 2015; Jones & Sumnall, 2016; WHO, 2010). Local alcohol profiles for 2018 indicate that alcohol-related hospital admissions are associated with deprivation; the average number of admissions per 100,000 population in the most deprived decile of England was 58.7 compared with a national average of 46.2. In Manchester, the focus area for this research, the average number of hospital admissions per 100,000 population was 64.2 – above the average for the most deprived decile of the country (LAPE, 2018). The rate of hospital admissions in the most deprived local authorities was almost 70% higher

than in the least deprived 10% (LAPE, 2018). Other research has evidenced a clear association between alcohol-related mortality and socioeconomic deprivation, with progressively higher rates in more deprived areas (Erskine, Maheswaran, Pearson, & Gleeson, 2010; Katikireddi, Whitley, Lewsey, Gray, & Leyland, 2017). More affluent populations consume more alcohol than those in more disadvantaged circumstances, yet greater alcohol-related harm is experienced by the more deprived cohorts. This phenomenon is defined as the 'alcohol harm paradox' (Bellis et al., 2016). Research by Bellis et al (2016) revealed that individuals from deprived cohorts consuming higher levels of alcohol were more likely to engage in other health challenging behaviours, such as smoking, being overweight, having a poor diet and lack of exercise, resulting in escalated health risks compared to their more affluent counterparts (Bellis et al., 2016; Erskine et al., 2010; Jones et al., 2015; Katikireddi et al., 2017).

2.3iii Social determinants of health and education

As discussed in the previous sections, mental health, socioeconomic status and educational engagement are all associated with alcohol-related consequences that affect adolescents. These factors are also inter-related, for example research has identified an association between socioeconomic status and childhood wellbeing (Currie et al., 2015). It is evident that issues, or social determinants, characterizing social economic deprivation, such as low self-esteem and psychological wellbeing, lack of aspiration, lack of positive role models, poor parenting and school disengagement, are also known factors that correlate with harmful alcohol consumption (Erskine et al., 2010; Katikireddi et al., 2017). Therefore, targeting the social determinants that are common across multiple domains, particularly, education and health can yield multiple benefits (Dyson, Hertzman, Roberts, Tunstill, & Vaghri, 2009; Marmot, Allen, Goldblatt, Boyce, McNeish, Grady et al., 2010; Marmot, 2013; Viner, Ozer, Denny, Marmot, Resnick, Fatusi et al., 2012). International evidence demonstrates that school-based interventions designed to improve the mental health and wellbeing of young people can yield positive outcomes, including reduced involvement in risky behaviours, improved educational outcomes and better social relationships (Carta, Fiandra, Rampazzo, Contu, & Preti, 2015).

2.3iv Adverse Childhood Experiences (ACEs)

The Adverse Childhood Experiences (ACE) Study (Felitti & Anda, 2010) conducted in the USA highlights a relationship between early childhood adversity, inhibited brain development and associated longer term health repercussions. Higher levels of adverse childhood experiences indicates an increased likelihood of becoming a 'risk-taker' and therefore a greater tendency to be attracted to risky behaviours such as alcohol and drug misuse (Lanza & Rhoades, 2013). A correlation between early initiation of alcohol use and multiple adverse childhood experiences has been identified (Dube, Miller, Brown, Giles, Felitti, Dong et al., 2006). ACE studies conducted in the UK also report a strong association between increasing exposure to ACEs and long-term adverse behavioural, health and social outcomes (Bellis, Lowey, Leckenby, Hughes, & Harrison, 2014a). Almost half of the general population in England were found to have at least one ACE and over 8% reported four or more (Bellis, Hughes, Leckenby, Hardcastle, Perkins, & Lowey, 2014b). A systematic review and meta-analysis assessed the impact of ACEs worldwide and concluded that having multiple ACEs is a major risk factor for many health conditions, the outcomes most strongly associated with multiple ACEs being violence, mental illness and substance use (Hughes, Bellis, Hardcastle, Sethi, Butchart, Mikton et al., 2017).

2.3v Adolescence and peer influence

During adolescence, the individual develops a stronger recognition of their own personal identity which results in a tendency for them to become self-obsessed and to develop strong connections with their peer group (Curtis, 2015; Stang & Story, 2005; Steinberg, 2008). This is particularly evident during the middle phase of adolescence (14-17 years), characterized by growth in emotional autonomy and increasing detachment from family, when individuals become highly impressionable and particularly susceptible to peer influence (Curtis, 2015; Gardner & Steinberg, 2012; Gwon & Jeong, 2018). By the onset of puberty, the limbic region or pleasure centre of the brain is fully developed and is thought to override executive functions, such as decision making and forward planning that are controlled by the still developing prefrontal cortex (Blakemore & Choudhury, 2006; Curtis, 2015; Steinberg, 2008). It is suggested that this asynchronous brain development during adolescence can mean that individuals struggle to comprehend the longer term impact of their behaviour and to anticipate adverse consequences (Dumontheil,

2013). The logical reasoning abilities of 15 year olds are comparable to those of adults, however, adolescents being no worse than adults at perceiving risk or estimating their vulnerability to it (Steinberg, 2007). Yet, despite understanding the adverse consequences of any given action, the adolescent often acts on impulse, overriding the 'common sense' response to engage instead in a risky behaviour (Stang & Story, 2005). A strong desire to feel accepted within the peer group can outweigh any concern about risk, making adolescence a vulnerable time for risk taking (Curtis, 2015; Steinberg, 2014).

In addition to an increased tendency to engage in risky behaviours during adolescence, other social and environmental factors can also contribute to the suggestibility of young people. For example, the transition from primary to secondary school is widely understood to be a vulnerable point in a child's development (Burdzovic Andreas & Jackson, 2015; Howe, 2011; Mackenzie, McMaugh, & O'Sullivan, 2012; van Rens, Haelermans, Groot, & van den Brink, 2018). This transition presents a period of uncertainty as the individual must adapt to their new environment for example, facing increased educational demands and establishing new friendship groups. Adolescents are keen to be accepted by their peers, so the uncertainty of the transition into secondary education increases the risk of them being influenced to engage in more risky behaviours (Burdzovic Andreas & Jackson, 2015). Conversely, being part of a drinking minority in a school characterised by low rates of drinking was found to predict a decline in socioemotional functioning with negative implications for adolescents' academic grades by the end of high school (Crosnoe, Benner, & Schneider, 2012). These examples demonstrate the powerful influence of the peer group and the vulnerability of the adolescent in each scenario.

Low social economic status is also associated with less positive transitions (Evangelou, 2008) and considering the attainment gap between children from more disadvantaged backgrounds compared to those with more affluent families (16.1% difference at key stage 2 and 27.4% at GCSE in 2014) (Adams, 2015; Department for Education, 2015; Smith, 2014), there is an increased risk that pupils can start to disengage with education and be drawn towards engaging in negative/risky behaviours (Monahan, Oesterle, & Hawkins, 2010; Olumide, Robinson, Levy, Mashimbye, Brahmbhatt, Lian et al., 2014; Waters, Cross, & Runions, 2009).

2.4 Informing the Intervention – A Review of the Literature

The previous sections of this chapter have explored the prevalence of and trends in alcohol consumption amongst adults and young people aged 11-15. Risks relating to alcohol misuse have also been presented, highlighting associations with adolescence, mental health and socioeconomic status. This section presents a rationale for a preventative intervention designed to address alcohol misuse. The following initial questions: where should the intervention take place? what age is most appropriate for intervention? and what approach should the intervention take? (Section 2.4i) were used to help define the search criteria for a systematic literature search (Section 2.4ii). A universal school-based alcohol intervention programme is proposed, targeting 11-12 year olds as they take the transition to high school (Section 2.4iii).

2.4i Intervention – where, what and how?

Organisations worldwide advocate the use of educational intervention (ideally as part of a combined strategy across a range of stakeholders (NICE, 2010, 2019)) to address adolescent hazardous drinking (WHO, 2014). Schools provide the ideal place to promote health as young people usually spend much of their time there in an easily accessible non-stigmatising social environment (Carta et al., 2015; Ferreira, Valente, Duarte, Cabral, & Andrade, 2016; NICE, 2019; PHE, 2015).

The Chief Medical Officer's annual report (CMO, 2013) cites adolescence as a critical time for intervention. A systematic review of preventative interventions addressing underage drinking recommended earlier introduction of universal prevention (even as young as 3rd-5th grades USA, age 8-11 years) (Spoth, Greenberg, & Turrisi, 2009). Pomeroy and Steiker (2012) emphasise the merits of preventative intervention in tackling substance abuse, suggesting early adolescence as the appropriate time to address alcohol misuse, evidenced by the health statistics (*Figure 2.13*) (Pomeroy & Steiker, 2012). The fact that teenage brains remain malleable and continue to develop during adolescence also supports the rationale for targeting this age group (Curtis, 2015; Steinberg, 2014).

There is evidence that targeted interventions directed at individuals identified as being at risk of developing or already having a problematic relationship with alcohol can be successful (Armitage, Rowe, Arden, & Harris, 2014; Conrod, O'Leary-Barrett,

Newton, Topper, Castellanos-Ryan, Mackie et al., 2013). However, limited evidence is available to support universal school-based interventions to target alcohol misuse as effective (Emmers, Bekkering, & Hannes, 2015; Spoth et al., 2009). Prevention interventions directed at adolescents and targeting alcohol and drug education alone are generally found to be short-lived with at best limited sustainable impact (Faggiano, Vigna-Taglianti, Versino, Zambon, Borraccino, & Lemma, 2005; Spoth, Greenberg, & Turrisi, 2008). There is evidence that multi-component approaches are more effective (Peters, Kok, Ten Dam, Buijs, & Paulussen, 2009a; Wagner, Brown, Monti, Myers, & Waldron, 1999).

2.4ii Literature review

In preparation for developing an evidence-based intervention to address the research aims of this study (Section 1.1), a systematic literature search was conducted to examine what is currently known about school-based alcohol interventions. The review sought to identify both the successful aspects recorded in previous studies as well as potential gaps in knowledge and areas for improvement. It was intended that this search would reveal i) the effectiveness of previous interventions; ii) examples of successful interventions; iii) effective components identified across previous studies and; iv) potential areas for improvement.

A good literature review should be selective and present only work that is relevant to the research (Hart, 2018), Hart's suggested design issues and options were used to plan the search. The aim of this literature review was to inform the development of a new intervention programme, ie to establish evidence for what works, it was therefore decided that this would be an interventionist review *"to use all available valid and reliable evidence to make decisions in reaction to a condition or proactively to lesson some occurrence"*, (Hart, 2018, p. 93) as opposed to a scholastic one. To ensure that the relevant references were identified for selection, search inclusion criteria were defined. Articles included in this search were required to:

- Be published in English between 2009 and 2019 (to ensure the most up-to-date relevant information, and because reviews reflect evidence retrospectively and therefore encompass work prior to the past decade);
- Involve the implementation of a universal (rather than targeted) intervention;

- Address alcohol prevention (alone or alongside prevention of other substances);

- Take place in a mainstream primary or secondary school within school teaching hours;

- Report at least one outcome measure (consumption, attitudes, behaviour).

Searches were conducted using the following databases: The Cochrane Library, PsychINFO, Education Resources Information Centre (ERIC), British Education Index (BEI), PubMED and Web of Science. These databases were selected as they were the most commonly used in the reviews/systematic reviews resulting from initial searches. Web searches were also conducted, for example using Google Scholar and additional references were collected from other sources, such as the bibliographies of journal articles and reports and through citation tracking.

The key words identified for conducting the search included: alcohol, substance, intervention, prevention, adolescent, teenage, adolescence, school and education. Different combinations of these key terms were tested using Boolean operators (AND, OR, NOT) to search in each database, examples of the development of search strategies are included in Appendix I. After each search iteration the results were inspected to see how many articles had been selected and how accurately the outputs reflected the search criteria, judging from the article titles. This process was repeated until the search results appeared largely reflective of the specified search criteria (for example, one in three titles broadly matching the search criteria).

In total 1,509 articles were identified. This number was reduced to 1,192 once duplicates were removed. The titles and abstracts of the remaining articles were then screened in relation to the inclusion criteria and a further 1,038 were excluded from the database (*Figure 2.16*). The final 154 articles were divided into two categories: systematic reviews/reviews of reviews (N=39) and interventions (N=115); for a further screening process based on the full texts. After 77 more exclusions and the inclusion of seven articles identified from texts during the screening process, 84 studies were retained for inclusion in the review: 25 systematic reviews/reviews of reviews and 59 intervention studies. Information from the selected articles is summarised in Appendix II.

Figure 2.16 Flowchart of literature review selection

Database Search

PubMed	321
Psych Info	143
ERIC	205
BEI	55
Cochrane	502
Web of Science	226

N=1,509

Duplicates removed
N=317

1,192 titles and
abstracts screened
for inclusion

1,038 articles excluded

Not published in English	7
Ineligible study population	307
Ineligible intervention	195
Ineligible study focus	162
Non-educational setting	349
Other	18

154 full texts screened
for inclusion

63 articles excluded

Paper not accessible	4
Ineligible study population	3
Ineligible intervention	44
Ineligible study focus	7
Non-educational setting	1
Other	4

14 articles
excluded

115 articles
relating to
specific
interventions

39 systematic
reviews/reviews
of reviews

7 articles included from
other sources

59 articles
relating to 24 interventions

25 articles
relating to 23 reviews

systematic reviews	17
reviews of reviews	6

2.4iii Findings from the systematic reviews

The volume of papers included in this review reflects the proliferation of academic work in the area of school-based adolescent alcohol prevention and provided a very helpful overview as the foundation to this research. This review was restricted to articles published in the last ten years in order to obtain the most current information. However, the systematic reviews/reviews of reviews collectively represent more than two decades of work, so provided historical evidence mapping effective interventions and their development over the time period. They also identified effective components across those interventions and highlighted gaps in the evidence.

The 17 systematic reviews and six reviews of reviews mainly focused on analysing the overall effectiveness of school-based alcohol programmes aimed at adolescents (15 papers). Four of those identified specific intervention components that were effective. A further six papers evaluated the effectiveness of specific types of intervention programme (eg resilience-based or peer-led) or focussed on certain mechanisms within broader programmes. Two papers gave a descriptive overview of preventative interventions with no evaluation of effectiveness.

The 59 articles included in this review relate to 24 intervention programmes listed in Appendix II. Although the articles were published within the last ten years, in some cases they comment on intervention programmes which may have been conducted prior to 2009. Analysis of these studies helped to identify the effective components that might contribute to a successful intervention as well as highlighting potential areas for improvement.

The outcomes of the review are discussed according to the specified search aims to explore: i) the effectiveness of previous interventions; ii) examples of successful interventions; iii) effective components identified across previous studies and; iv) potential areas for improvement.

(i) Effectiveness of previous interventions

Across the range of systematic reviews/reviews of reviews, it was generally concluded that very little evidence existed to support the effectiveness of universal school-based interventions (Flynn, Falco, & Hocini, 2015; Jiloha, 2017; Lee, Cameron, Battams, & Roche, 2016; MacArthur, Harrison, Caldwell, Hickman, & Campbell, 2016; Stockings, Hall, Lynskey, Morley, Reavley, Strang et al., 2016) and

any reported effect sizes tended to be small (Agabio, Trincas, Floris, Mura, Sancassiani, & Angermeyer, 2015; Hale, Fitzgerald-Yau, & Viner, 2014; Jiloha, 2017; Stockings et al., 2016; Strøm, Adolfsen, Fossum, Kaiser, & Martinussen, 2014). It was concluded in several cases that interventions were not well designed, well implemented or properly evaluated (Emmers et al., 2015; MacArthur et al., 2016; Stockings et al., 2016).

(ii) Examples of successful intervention programmes

Of the successful interventions identified in the review, the School Health and Alcohol Harm Reduction Project (SHAHRP) (McBride, McKay, & Sumnall, 2013; Sumnall, Agus, Cole, Doherty, Foxcroft, Harvey et al., 2017) was found to be effective in both Australia and Northern Ireland showing its transferability to different contexts. The programme was skills-based and interactive, involving students in practical activities to increase impact and learning. Information provision, teacher training and a harm minimisation approach were also important components within the intervention. The Keepin' it REAL programme (KiR) (Hecht, Marsiglia, Elek, Wagstaff, Kulis, Dustman et al., 2003) has similarly been adapted to a number of countries. This was a culturally oriented programme which sought to promote antidrug norms and to develop social skills, including resistance strategies. Statistically significant effects on drug initiation, social norms and resistance strategies were reported. The European Drug Addiction Prevention (EU-DAP) programme, "Unplugged", took a comprehensive social influence approach and reported a delayed progression to frequent drinking and reduction in the occurrence of alcohol-related behaviour problems amongst European students (Faggiano, Vigna-Taglianti, Burkhart, Bohrn, Cuomo, Gregori et al., 2010). Norway's "Unge & Rus" (Youth & Alcohol) intervention (Strom, Adolfsen, Handegard, Natvig, Eisemann, Martinussen et al., 2015), reports positive outcomes in terms of alcohol-knowledge acquired. Both programmes include a peer-led component in their intervention. The Australian Drug Education in Victorian Schools (DEVS) programme (Midford, 2010; Midford, Mitchell, Lester, Cahill, Foxcroft, Ramsden et al., 2014) combined key components from the school interventions evidence-base with a community element. The community investment was designed to reinforce the programme messages beyond the timescale of the intervention. A cluster randomised control trial of the ten-week programme reported an increase in student knowledge about drugs (including

alcohol), improved communication with parents about alcohol and a reduction in alcohol consumption and harm.

(iii) Effective components from intervention programmes

In terms of identifying effective intervention components, evidence was mixed. Some themes were clearly identifiable. At the beginning of the review period, Peters et al (2009a) found five effective elements of school health promotion that featured prominently across three behaviour domains and that were evidenced by strong reviews; i) use of theory, ii) addressing social influences/social norms, iii) cognitive behavioural skills, iv) training of facilitators and v) multiple components. A review of reviews by Stigler et al (2011) recommended effective elements essential in school-based alcohol prevention that in addition to the five elements suggested by Peters et al, should also include; the use of interactive teaching techniques such as small-group activities and role plays; use peer leaders (same age) to facilitate delivery of the programme; connect with other members of the community such as parents; multiple sessions across multiple years; and be appropriate for the cohort in cultural and developmental terms. Some of these themes emerged more strongly over time and were further evidenced in more recent reviews. For example, the importance of developing adolescent social skills was evidenced in several of the reviews (Jiloha, 2017; Lemstra, Bennett, Nannapaneni, Neudorf, Warren, Kershaw et al., 2010; Stockings et al., 2016). Other authors further confirmed some of these components, for example recommending the inclusion of peer-resistance strategies (Lemstra et al., 2010; MacArthur et al., 2016; Pöttgen, Samkange-Zeeb, Brand, Steenbock, & Pischke, 2016; Stigler et al., 2011). It was also concluded that interventions might be most effective when particular components were tailored to specific age groups (Onrust, Otten, Lammers, & Smit, 2016; Stigler et al., 2011).

(iv) Potential areas for improvement

This review has helped to identify several potential gaps in the evidence base that might provide the opportunity to improve upon previous universal preventative intervention. The first area relates to the target age group. Many of the interventions examined in this review targeted adolescents between 12-15 years old (*Table 2.2*), the age at which alcohol consumption becomes more prevalent. This age bracket is considered within the early adolescence period (approximately 10-15 years) (Curtis,

2015; Stang & Story, 2005), however, these interventions target the older years with some evidence for success. Only three of the interventions were directed at younger adolescents. IPSY and DARE targeted 10-11 year olds and the Life Skills Training was provided to 4th and 5th grade students (aged 9-11 years). These programmes all took a social skills approach and positive outcomes were reported (Kindle, 2013; Lee et al., 2016). Research on adolescent development suggests that the individual is more likely to engage with/be more receptive to the adjustment of social norms before the mid-adolescence stage, whilst they remain responsive to parental and teacher influence (Carver, Elliott, Kennedy, & Hanley, 2017). Findings from this review support the view that it is important to intervene in earliest stages of adolescence (Jiloha, 2017; Martínez, Olalde, & Aguirre, 2018). The review by Onrust et al (2016) concluded that interventions need to be tailored according to the different developmental stages of adolescence. In their meta-analysis of universal interventions, they identified components that would predict alcohol use according to age group. Their results show that the only predictors for alcohol use in the 13-15 year old category (peer education and refusal skills training) had negative effects (Onrust et al., 2016). By mid-adolescence, the peer group is more likely the dominant influence and the individual becomes highly vulnerable to making risky decisions at this stage. If key messages about safe alcohol consumption and risk avoidance can be embedded at an earlier age, this may serve as a protective factor as the individual progresses through adolescence.

The literature review identified that interventions need to use theory (Lee et al., 2016; Peters, Kok, Ten Dam, Buijs, & Paulussen, 2009b; Stigler et al., 2011). However, it was not clear that all interventions had a theoretical foundation. This may account for the limited success reported in the area of universal school-based alcohol prevention. The consequences of not using theory are that: the intervention may not be effective because it doesn't target the components necessary to impact on the behaviour; and it may not be effective because the change indicators are not measured or evaluated correctly (Moore, Audrey, Barker, Bond, Bonell, Hardeman et al., 2015). After decades of research in this area, why is there still only limited success? There is some suggestion that interventions have effectively influenced other substance use, including tobacco and illicit drugs but not alcohol (Hodder, Freund, Wolfenden, Bowman, Nepal, Dray et al., 2017b). This could mean that the

theories being used to target the prevention of alcohol consumption aren't comprehensive enough and perhaps new methods are needed (Flynn et al., 2015).

Many of the interventions discussed in this review that did use theory took a social influence approach aiming to educate young people about alcohol consumption behaviours and raising their awareness of the risks involved (Faggiano, Allara, Giannotta, Molinar, Sumnall, Wiers et al., 2014; Natvig & Aaro, 2014; Strom et al., 2015). However, research shows that adolescent impulsivity will often result in them making a risky choice despite understanding the consequences (Steinberg, 2007). A key element that appeared to be missing from these studies is motivation. Whilst many of the studies aim to develop peer resistance strategies (Beckman, Svensson, Geidne, & Eriksson, 2017; Hecht, Shin, Pettigrew, Miller-Day, & Krieger, 2018; Kovach Clark, Ringwalt, Hanley, & Shamblen, 2010) and some seek to raise self-esteem as an important component in employing such strategies (Hansen & Dusenbury, 2004; Hodder et al., 2017b), there was little mention of motivation, especially autonomous motivation. Without strong intrinsic motivation to avoid or moderate alcohol consumption, the adolescent is unlikely to employ the resistance strategies.

Several authors advocate the strength of multi-component interventions for targeting alcohol or substance use (Das, Salam, Lassi, Khan, Mahmood, Patel et al., 2016; Flynn et al., 2015; Foxcroft & Tsertsvadze, 2011b; Martínez et al., 2018; Stockings et al., 2016) but it is suggested that more holistic interventions, that target more than one risk factor are likely to be more effective (Hale et al., 2014; Karki, Pietilä, Länsimies-Antikainen, Varjoranta, Pirskanen, & Laukkanen, 2012; Stockings et al., 2016).

To conclude, the findings from this review suggest that a successful universal prevention intervention should be based on theory, target younger adolescents, encourage intrinsic motivation and take a multi-component and holistic approach. In addition, the following components were identified for inclusion:
- Information provision
- Risk awareness raising
- Peer resistance strategies
- Social skills development

- Interactive teaching and learning
- Group work/peer learning
- Trained facilitators/teachers
- Group activities/active learning

It is anticipated that the development of an intervention that incorporates these components might optimise the chances of achieving successful outcomes from the programme.

2.5 Theoretical Framework – the foundations of an intervention

This research aims to influence the future behaviour of adolescents through preventative intervention work. It is evident from the literature review that influencing future alcohol consumption (behaviour) will require a complex combination of multiple interactive components. To maximise the effectiveness of this work, UK Medical Research Council guidance for developing and evaluating complex interventions was used (Moore et al., 2015; MRC, 2008). It is necessary to have a good theoretical understanding of behaviour and behaviour change, to understand *"how the intervention causes change, so that weak links in the chain can be identified and strengthened"* (Moore et al., 2015, p. 588). Theories and models help to explain behaviour (explanatory theory), as well as suggesting how to develop effective ways to influence and change behaviour (change theory) and are based on an understanding of the social determinants of health and health behaviour. It is suggested that behavioural interventions that are based on theory are more likely to be effective (Davis, Campbell, Hildon, Hobbs, & Michie, 2015; Faggiano et al., 2014; Lee et al., 2016; Michie, Johnston, Francis, Hardeman, & Eccles, 2008; Peters et al., 2009a; Senn, Kirsch, Sanz, Karlou, Tulus, De Leeuw et al., 2013). Therefore, a range of theoretical models concerned with health behaviour and health behaviour change (Glanz, 2016; Nutbeam, Harris, & Wise, 2010; Simons-Morton, McLeroy, & Wendel, 2011) were considered in relation to the aims and objectives of this study.

Firstly, a social ecological perspective was used to understand the broader context of the research in which the individual shapes and is shaped by the social environment (Golden & Earp, 2012). This was important to establish where the influence might best be directed. Behavioural theories widely used in the field of

health psychology were then explored to explain how factors such as socioeconomic status and mental health (risk factors for alcohol misuse identified in Section 2.3) interact and impact on behaviour. The constructs common across all the theories discussed in this section were used alongside a systematic behaviour change technique taxonomy (Michie, Richardson, Johnston, Abraham, Francis, Hardeman et al., 2013) to construct a theoretical framework for this research. This process was employed to ensure that any areas that may have been overlooked in previous intervention research were included.

2.5i Social ecological model (SEM)

It is generally recognised that public health and health promotion interventions are most likely to be effective if they adopt an ecological perspective addressing interpersonal, organisational and environmental factors that influence health behaviour rather than solely targeting individuals (Glanz, 2016). There are weaknesses associated with these models in that they provide a general approach, they do not specify the variables or processes likely to effectively influence behaviour, they do not specify how influences and processes may vary for different behaviours nor do they state that it may not be feasible to intervene on all levels (Glanz, Rimer, & Viswanath, 2015). However, social ecological models provide a strong framework for integrating other theories and models to create a comprehensive approach to study design (Glanz et al., 2015; Golden & Earp, 2012). People do not act in isolation, so it is important to understand the ways in which they interact with and are influenced by the communities and environments that surround them. The SEM helps to describe the multiple levels of influence (individual, interpersonal, organisational, community and public policy) and the factors that affect behaviour. There are many versions of this model that have developed over decades from Bronfenbrenner's Ecology of Human Development (Bronfenbrenner, 1977, 1979) which conceives the environment as a set of nested structures (*Figure 2.17*).

Figure 2.17 Social Ecological Model
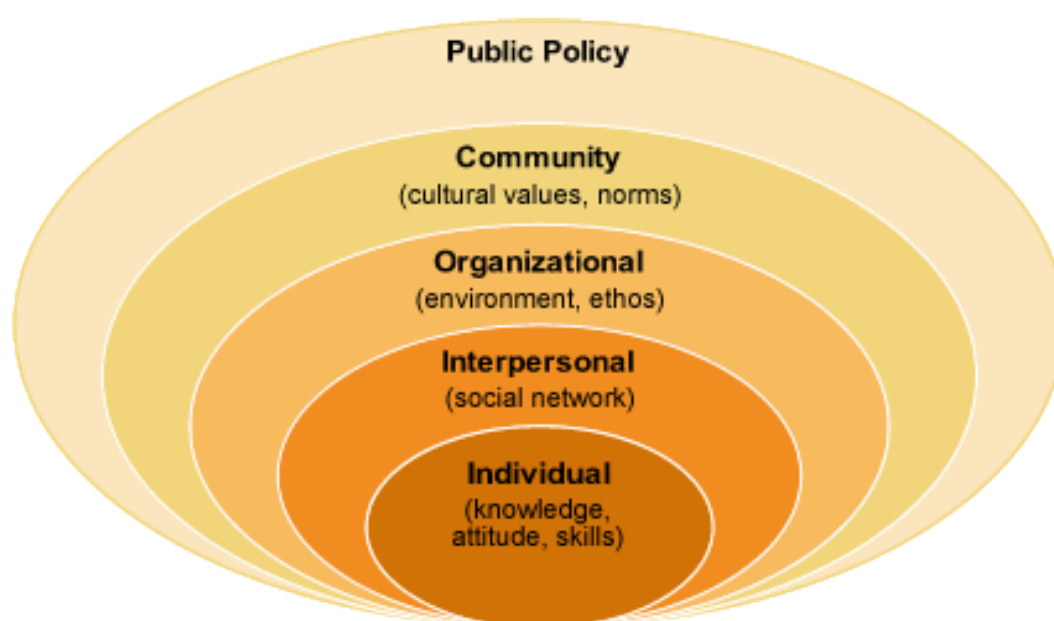
Source: Glanz, K. (2016) adapted from Bronfenbrenner, U. (1977).

In the context of this study, the inner circle represents the individual with their own set of attributes, including their personal knowledge, skills, attitudes and beliefs relating to alcohol. They are influenced to varying degrees by the outer circles. At the interpersonal level, influences come from social networks such as family and friends - research evidence suggests that the biggest influence on young peoples' drinking behaviour comes from the family and peer group (Bremner, Burnett, Nunney, Ravat, & Mistral, 2011; Maimaris & McCambridge, 2014; PHE, 2016a). This is highly relevant in the local context of this research, as participants were likely to live in some of the most socially deprived households in England, where factors such as alcohol misuse, mental health issues, poor parenting, domestic abuse are prevalent and therefore impact on their social norms – in this case, their understanding of drinking behaviour. The next circles represent influences from organisations, such as schools or local authority institutions and from the broader community in terms of social standards or social norms established through formal and informal networks. Again, drinking behaviours are modelled in the local community context; through the media (including TV and social media); and information is provided by organisations such as health centres and schools. There are many ways in which the environmental context may influence the health of individual people differently, depending on their unique beliefs and practices. For example, one of the biggest

influences on family drinking, impacted by socio-economic status, is the price and availability of alcohol (Burton, Henn, Lavoie, O'Connor, Perkins, Sweeney et al., 2016; Holmes, Guo, Maheswaran, Nicholls, Meier, & Brennan, 2014), another strong influence can be religious or cultural beliefs (for example, drinking alcohol is forbidden in Muslim culture). Finally, the outer circle of the model represents the broad environmental and cultural context in which alcohol is legal and socially accepted in the UK.

The social ecological model has been widely used in behavioural intervention research, including alcohol studies (Golden & Earp, 2012), for example, to test social ecological mechanisms that influence adolescent depression and substance use (Mason, Mennis, Russell, Moore, & Brown, 2019); to assess the effect of drinking contexts on consumption levels (Gruenewald, Remer, & LaScala, 2014); and to examine the role of factors in different levels of the Social Ecological Model (individual, relationship, organisational, and community) in comparison to high-risk drinking and alcohol-related negative consequences (Smith, 2017). Universal school-based interventions have the potential to influence behaviour change across different layers of this model, but it is impractical to target all levels in this type of research. It is therefore recommended that interventions should aim to target at least two levels (Blas & Kurup, 2010; Golden & Earp, 2012). The next stage in the study was to select behaviour change theories that might integrate into this social ecological framework.

2.5ii Behaviour change theories
The literature review indicated that not all interventions had a clear theoretical foundation and that a variety of different theoretical models were used across the range of studies. Social cognitive theory, including the use of social norms (Midford, Ramsden, Lester, Cahill, Mitchell, Foxcroft et al., 2014) and social influence models (Natvig & Aaro, 2014; Strøm, Adolfsen, Handegård, Natvig, Eisemann, Martinussen et al., 2015) featured most frequently. Other reviews of behaviour change interventions also identified that studies were often not based on any theoretical foundation: Golden and Earp reported that a third of the 157 studies in their review had no theoretical base (Golden & Earp, 2012); in a review of 235 guideline development and implementation studies, only 22.5% used theories of behaviour

change (Davies, Walker, & Grimshaw, 2010). It is important to use theories in intervention development because they specify key relationships in the process of behaviour change and describe the conditions in which behaviour change is most likely to occur (Cane, Richardson, Johnston, Ladha, & Michie, 2015). In terms of behavioural theories, perhaps the most influential and well-established models are: the theories of reasoned action (TRA) and planned behaviour (TPB), the health belief model, the transtheoretical (stages of change) model, social cognitive theory (SCT) and the information-motivation-behavioural (IMB) skills model (Davis et al., 2015; Glanz, 2016; Nilsen, 2015). However, there are many other behavioural theories (Davis et al identified a total of 82 (Davis et al., 2015)) including variations of these well-established models, so making sense of them can be challenging (Atkins, Francis, Islam, O'Connor, Patey, Ivers et al., 2017; Nilsen, 2015). It is difficult to identify the specific processes underlying successful behaviour change, especially relating to complex intervention work. Theory needs to be informed by a clear assessment of the behavioural issue otherwise relevant theoretical constructs can be overlooked. When applying more than one theory problems can arise from overlapping constructs (Cane, O'Connor, & Michie, 2012; Nigg, Allegrante, & Ory, 2002).

2.5iii Theoretical Domains Framework (TDF)

In recent years, various authors have worked to simplify psychological theory, to help standardise research approaches and to better understand the affective constructs in behaviour change (Cane et al., 2012; Fishbein, Triandis, Kanfer, Becker, & Middlestadt, 2000; Michie et al., 2008). Michie et al (2005) agreed a theoretical domains framework (TDF version 1), comprising twelve domains to explain and help understanding of behaviour change (Michie, Johnston, Abraham, Lawton, Parker, & Walker, 2005). In 2008, they went on to map their theoretically derived behavioural determinants to 93 behaviour change techniques (Michie et al., 2008) which resulted in a complete behaviour taxonomy (Michie et al., 2013; Michie, Wood, Johnston, Abraham, Francis, & Hardeman, 2015). Validation of the TDF, through a consensus approach involving a sample of 37 behavioural experts, resulted in a slight modification of the domains resulting in a list of 14 (TDF version 2): knowledge; skills; social/professional role and identity; beliefs and capabilities; optimism; beliefs and consequences; reinforcement; intentions; goals; memory, attention and decision

processes; environmental context and resources; social influences; emotion; and behavioural regulation (Atkins et al., 2017; Cane et al., 2012; Cane et al., 2015; French, Green, O'Connor, McKenzie, Francis, Michie et al., 2012). However, the behaviour change technique taxonomy (BCTT) approach to intervention development has been criticised for being too systematic. Ogden argues for the importance of variability suggesting that the high level of prescription does not, for example, account for variability in practice (Ogden, 2016). Another critique of the BCTT is that although it incorporates effective behaviour change techniques, ineffective methods and possibly even counter-effective methods may also be included (Kok, Gottlieb, Peters, Mullen, Parcel, Ruiter et al., 2016). Nevertheless, the approach has been effectively applied in a range of areas (both in research and practice) including; physical activity, weight loss, hand hygiene, dental hygiene, diet, smoking and medication adherence (Atkins et al., 2017; Michie et al., 2015).

2.5iv Behaviour Change Wheel (BCW)

The TDF helps to define the essential components of behaviour, but the influences on behaviour also need to be incorporated into a theoretical framework. The Behaviour Change Wheel (BCW) provides a complementary theoretical approach to integrate these two aspects. It was developed alongside the TDF to help identify which domains are likely to be important in changing behaviour (Cane et al., 2012; Michie, Atkins, & West, 2014). The BCW offers a holistic approach to intervention design because it incorporates all the essential components synthesised from the 33 most influential behaviour change theories identified in a systematic literature review (Michie et al., 2014; Michie, Van Stralen, & West, 2011), 84 theoretical constructs and the 14 theoretical domains from TDF version 2 (Michie et al., 2014). The BCW is structured as three levels: sources of behaviour; intervention functions; and policy categories. The target behaviour at the centre of the model is characterised in terms of three sources of behaviour: *Capability* (psychological and physical capability) *Opportunity* (social and physical opportunity); and *Motivation* (reflective and automatic motivation) (the COM-B system) (Cane et al., 2012) (*Figure 2.18*). The premise of the model is that for a behaviour to occur, the individual, group or population must have the capability, opportunity and motivation to perform it. So, for example, in relation to responsible alcohol consumption the individual must: know the facts about alcohol and what responsible drinking is (capability); have the

motivation to drink responsibly (or abstain), which includes understanding both the pleasures and the risks of drinking alcohol; and have positive environmental influences and support to be able to abstain or moderate their alcohol consumption (opportunity).

Figure 2.18 The Behaviour Change Wheel
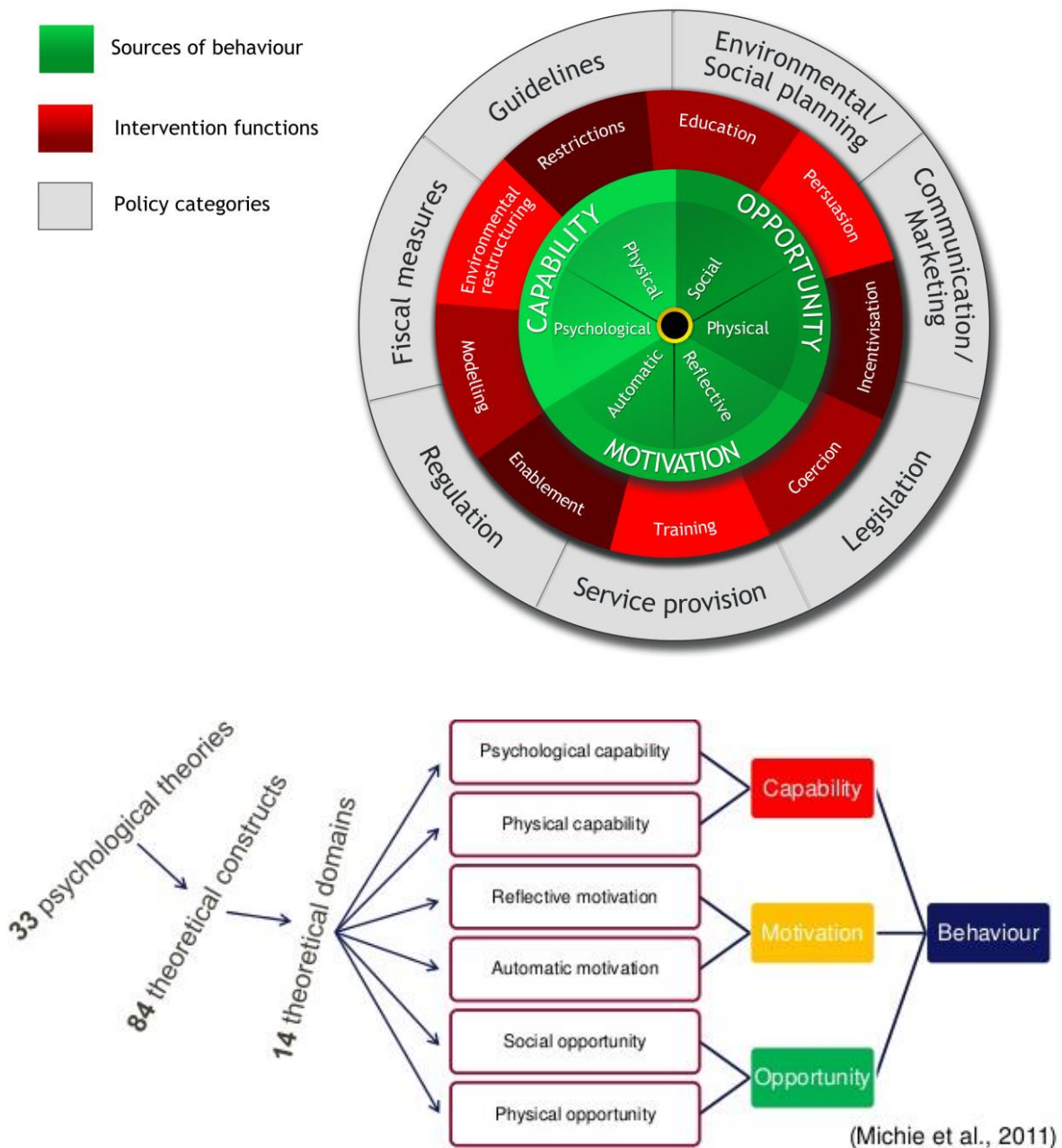
Source: *The behaviour change wheel: A new method for characterising and designing behaviour change interventions* (Michie et al., 2014; Michie et al., 2011).

The three central components, capability, motivation and opportunity, each have two sub-domains. Capability consists of physical and psychological capabilities, for example, the physical and psychological skills to perform the behaviour. In the case of moderate alcohol consumption or abstinence this might involve the practical skills to resist peer influence (physical), an ability to perceive cause and effect, and understanding why they want to moderate their drinking/abstain (psychological). Motivation is sub-divided into reflective and automatic motivation. Reflective motivation can be understood as what the individual believes about the behaviour, for example, an individual might believe that moderating their alcohol consumption (or abstaining) is healthier, requiring them to actively control this behaviour. Automatic motivation is associated with wants, needs and impulses, for example, an individual might join with their peers in a heavy drinking session without considering the consequences of their actions. The sub-domains of opportunity are physical and social, in terms of alcohol consumption physical opportunity might be situations in which alcohol is available, for example, at a party or it might include having the money to buy alcohol or someone older who is prepared to buy it on your behalf. The social sub-domain includes factors such as social norms, the behavioural influences that surround the individual, for example, regular and excessive alcohol consumption may be the normal accepted behaviour in the individual's home and local community context.

The nine intervention functions in the model are linked to the 14 domains (TDF version 2) and 93 behaviour change techniques (BCTs) which are used to guide the user in selecting the relevant components for their intervention (Michie et al., 2014). Figure 2.19 illustrates how the TDF domains integrate into the BCW and where their influence impacts according to the COM-B (Atkins et al., 2017).

Figure 2.19 Domain influences on behaviour

Soc – Social influences
Env – Environmental Context and Resources
Id – Social/Professional Role and Identity
Bel Cap – Beliefs about Capabilities
Opt – Optimism
Int – Intentions
Goals – Goals
Bel Cons – Beliefs about Consequences
Reinf – Reinforcement
Em – Emotion
Know – Knowledge
Cog – Cognitive and interpersonal skills
Mem – Memory, Attention and Decision Processes
Beh Reg – Behavioural Regulation
Phys – Physical skills

Source: *A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems* (Atkins et al., 2017).

2.5v Developing the theoretical framework

The TDF, BCW and COM-B provide a comprehensive approach to developing a complex behaviour change intervention which can be applied to the area of alcohol prevention (Michie, Whittington, Hamoudi, Zarnani, Tober, & West, 2012). The behaviour change taxonomy incorporates all the constructs from the range of existing theories (which individually have their limitations) to ensure a more thorough approach to intervention development and evaluation. Whilst some interventions in the literature review (Section 2.4) were based on theory, none used such a broad systematic approach. It is therefore proposed that using this approach may be the answer to improving effectiveness in an area which has previously struggled to report convincing successes. It was therefore used, alongside the MRC guidance on complex interventions (Moore et al., 2015), to inform both the development (Chapter 3) and evaluation of the intervention (Chapter 4). Michie et al (2014) provide a three-stage process to developing theory-driven interventions using the TDF, BCW and COM-B approach (*Figure 2.20*) (Michie et al., 2014) which was used as described in the following sections.

Figure 2.20 Three-stage process

---

1. Understand the behaviour
   - Define the problem
   - Select the target behaviour
   - Specify the target behaviour
   - Identify what needs to change

2. Identify intervention options
   - Identify intervention functions
   - Identify policy categories

3. Identify context
   - Identify behaviour change techniques
   - Identify mode of delivery

2.5v-a Stage One – understand the behaviour

The first stage, *to understand the behaviour*, has already been discussed in the earlier sections of this chapter and the target behaviour specified as delayed, reduced or lack of future alcohol consumption or the intention to consume alcohol. The main factors that influence alcohol consumption were identified as: socioeconomic status, mental health/wellbeing, peer influence, misconception of social norms and self-efficacy (Section 2.3). This information was used to perform the COM-B analysis which involved identifying barriers/facilitators from the literature review that might prevent the desired behavioural outcome (the areas that need to be targeted by the intervention either at the individual or environmental level). The target areas were mapped to the six sub-domains of the COM-B (*Table 2.3*).

2.5v-b Stage Two – identify intervention options

The second stage in the process, *to identify the intervention options*, involved deciding how the barriers might be removed (or facilitators enabled). Michie et al (2014) provide two systems to inform this stage; i) mapping the theoretical domains from the BCW against the COM-B components (listed in the final column in Table 2.3) and ii) mapping the intervention functions using a matrix provided by Michie et al (2014) (*Table 2.4*). The unshaded cells (supplied by Michie et al (2014)) on the matrix indicate which intervention functions might be appropriate for use within each of the COM-B components.

Table 2.3 Key factors that influence alcohol consumption

COMB-B Component		Identified barriers/ facilitators for alcohol consumption	TDF domain
Capability	Psychological	• Knowledge about alcohol • Awareness of risks associated with drinking • Confidence, strategies and skills to enact desired behaviour (ie moderate drinking/abstinence)	• Knowledge • Cognitive and interpersonal skills • Memory attention and decision-making processes • Behavioural regulation
	Physical	• Access to alcohol (eg having money to buy alcohol or someone older who is willing to provide it)	• Physical skills
Opportunity	Physical	• Access to alcohol (eg availability at home or at a party)	• Environmental and context resources
	Social	• Role models • Family habits/behaviours • Social norms amongst friends and peers	• Social influences
Motivation	Reflective	• Awareness of consequences of alcohol misuse • Beliefs around impact on future goals	• Professional/social role and identity • Beliefs about capabilities • Optimism • Beliefs about consequences • Intentions • Goals
	Automatic	• Mental health (eg low self-esteem) • Peer acceptance • Established habits	• Reinforcement • Emotion

Table 2.4 Matrix of links between COM-B and intervention functions

	Intervention Functions								
COM-B components	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Physical capability					■				■
Psychological capability	■				■				■
Physical opportunity					■	■	■		■
Social opportunity						■	■	■	■
Automatic motivation		■	■	■	■		■	■	■
Reflective motivation	■	■	■	■					

Source: The Behaviour Change Wheel: A guide to designing interventions (Michie et al., 2014).

The intervention functions are also itemised according to suggested ways in which they might influence capability, opportunity and motivation (Michie et al., 2014, pp. 117-118). For example, the constructs (in italics) that might be used to influence capability are linked to the intervention functions (in bold) as follows:

Knowledge:	**Educate** about ways of enacting the desired behaviour or avoiding the undesired one.
Skill:	**Train** in cognitive, physical or social skills required for the desired behaviour or avoid the undesired one.
Strength:	**Train** or **enable** development of mental or physical strength required for the desired behaviour or to resist the undesired one.
Stamina/endurance:	**Train** or **enable** endurance required for desired behaviour or sustained resistance to undesired one.

This guidance outlined what the options for behaviour change were likely to be within each construct and contributed to the selection of behaviour change techniques for the intervention which is described in Stage Three.

2.5v-c Stage Three – identify context

The focus of stage three was to *identify the context* for the intervention, which involved choosing which behaviour change techniques would be most effective in supporting the desired behaviour change. Critiques of the BCT warn that poor

selection at this stage could jeopardise the effectiveness of the intervention. Kok et al (2016) recommend that for a behaviour change method to be effective: it must target a determinant that predicts behaviour; it must be able to change that determinant; and it must be translated into a practical application in a way that preserves the parameters for effectiveness and fits with the target population, culture, and context (Kok et al., 2016). Michie et al (2014) provide lists that link the behaviour change techniques to the intervention functions (in this case the BCTs are itemised according to those most frequently and less frequently used) and to the theoretical domains (ie two different systems, agreed by expert consensus) to guide this process. Using these lists as guidance, the BCTs were then appraised for their appropriateness, using the APEASE criteria (affordability, practicability, effectiveness/cost-effectiveness, acceptability, side-effects/safety, equity) for an intervention to reduce the likely future consumption of alcohol. It is noted by Michie et al (2014) that the process of deciding what is most appropriate for the context of your work does involve an element of judgement (Michie et al., 2014). Therefore, to inform the decision-making, some of the most widely used theories of behaviour change were also consulted to help identify what the most influential mechanisms for change were likely to be. Michie et al (2012) also, in a separate earlier study, identified 42 reliable BCTs specifically for use in interventions to reduce excessive alcohol consumption (Michie et al., 2012). This list devised from analysis of clinical and self-help guidance documents and treatment manuals used to reduce excessive alcohol consumption was also considered alongside the broader taxonomy because of its relevance to alcohol intervention.

One problem with designing this intervention in-line with existing theory, was that most of the target population have not yet engaged in the behaviour of drinking alcohol. The intervention sought to influence the intentions and motivations relating to alcohol consumption. Michie et al (2005) categorised psychological theories into *motivational*, *action* and *organisational* theories. Motivational theories were classified through consultation with experts in theory, as those to explain behaviour change in people who have not yet established an intention to engage in a particular behaviour - a definition highly appropriate to this research - and included the theory of planned behaviour (TPB), social cognitive theory (SCT), social learning theory (SLT), social identity theory (SIT) and self-determination theory (SDT). These theories (a mixture

of behavioural theories and learning theories), identified both by Michie et al (2005) and in the literature review were considered for an understanding of their mechanisms for behaviour change (Appendix III). Tables III i – III iii in Appendix III document the process of selecting the BCTs and Table 2.5 shows the final list of BCTs according to: the TDFs and intervention functions from the BCW (first and second columns); intervention functions specified for reducing excessive alcohol consumption (third column); and theories used to inform the selection process (final column). The BCTs selected (*Table 2.5*) represent relevant or feasible techniques (active components) that might be included in the intervention and provide a provisional plan for the intervention design and evaluation (Chapter 3.0).

Table 2.5 Final selection of behaviour change techniques

Behaviour Change Techniques	TDF domain	Intervention function	Intervention function for reducing excessive alcohol consumption	Theory
Health consequences	Knowledge	Education Persuasion	Motivation	IMB[1]
Antecedents	Knowledge	Education		
Behavioural rehearsal/practice	Skills	Training	Self-regulation General aspects of interaction	SCT[2]
Verbal persuasion to boost self-efficacy	Beliefs about capabilities Optimism	Persuasion Enablement	Motivation	TPB [3] SDT[4] SCT
Valued self-identity		Enablement		TPB
Emotional consequences	Beliefs about consequences Emotion	Education Persuasion Enablement		TPB IMB
Salience of consequences	Beliefs about consequences	Persuasion Enablement	Motivation	TPB IMB
Anticipated regret	Beliefs about consequences	Coercion Enablement		TPB IMB
Social and environmental consequences (Behaviour cost)	Beliefs about consequences	Persuasion Coercion		TPB IMB
Comparative imagining of future outcomes	Beliefs about consequences	Enablement		TPB IMB
Vicarious reinforcement	Beliefs about consequences	Enablement		TPB IMB

[1] Information Motivation Behavioural model
[2] Social Cognitive Theory
[3] Theory of Planned Behaviour
[4] Self Determination Theory

Behaviour Change Techniques	TDF domain	Intervention function	Intervention function for reducing excessive alcohol consumption	Theory
	Social influences			
Pros and cons	Beliefs about consequences	Enablement		TPB IMB
Social reward	Reinforcement Social influences	Incentivisation		TPB
Anticipation of future rewards	Reinforcement			
Goal setting (outcome)	Goals	Enablement	Motivation	SCT
Incentive		Incentivisation	Motivation	
Discrepancy between current behaviour and goal		Incentivisation Coercion Enablement		MI[5]
Restructuring the social environment	Environmental context & resources Social influences	Environmental restructuring Enablement	Self-regulation	
Avoidance/changing exposure to cues for the behaviour	Environmental context & resources	Enablement		
Social comparison	Social influences	Persuasion		TPB
Normative information			Motivation	TPB
Social support or encouragement (general)	Social influences Emotion	Enablement	Adjuvant activities	TPB SCT
Information about others' approval	Social influences	Education Persuasion		TPB
Modelling or demonstrating the behaviour	Social influences	Training Modelling	Motivation	SCT
Identification of self as role model	Social influences	Persuasion Enablement		SCT
Reduce negative emotions	Emotion	Enablement		
Self-assessment of affective consequences	Emotion			
Conduct motivational interviewing			Motivation	SDT MI

---

[5] Motivational Interviewing

Behaviour Change Techniques	TDF domain	Intervention function	Intervention function for reducing excessive alcohol consumption	Theory
Advise on avoidance of social cues for drinking (Resistance strategies)			Self-regulation	
Facilitate barrier identification and problem-solving			Self-regulation	
Emphasise choice			General aspects of interaction	
Assess current and past drinking behaviour			General aspects of interaction	
Tailor interactions appropriately			General aspects of interaction	
Build general rapport			General aspects of interaction	MI
Use reflective listening			General aspects of interaction	MI
Provide reassurance			General aspects of interaction	
Summarise information/confirm decisions			General aspects of interaction	MI
Elicit and answer questions			General aspects of interaction	MI
Elicit views			General aspects of interaction	MI

There was considerable overlap in the BCTs selected from the TDF and the intervention functions (Table 2.5 first and second columns), which were also widely supported by the theories discussed in Appendix III. However, the BCTs derived from the taxonomy specified for reducing alcohol consumption were notably different (Table 2.5 third column). Whilst there was some common ground between the two systems, the latter strongly emphasised the use of motivational interviewing (MI). MI was identified in the initial stages of establishing the broader taxonomy (Michie et al., 2013) however, did not feature in the final version. The exclusion of MI as a BCT is perhaps due to MI being a complex intervention itself, comprising smaller components which were likely distilled down into BCTs. The definition of a BCT being *"a specific, irreducible, component of an intervention designed to change behaviour and a putative active ingredient in an intervention. BCTs can be used*

alone or in combination with other BCTs and their effectiveness can be assessed" (Michie et al., 2012, p. 1432). A more recent study evaluated and validated a significant overlap between MI techniques and the BCTs from Michie et al (2013) (Hardcastle, Fortier, Blake, & Hagger, 2017). Therefore, MI was included in the selection and considered as a mechanism for change within the intervention.

The BCW was used as the overarching theory of change for this research because it encapsulates the constructs from the entire field of behaviour change theory. For example, beliefs about capability and about consequences of behaviour reflect the TPB; the importance of social influences and addressing misperceptions about behaviour resonate with SCT and SNT; developing self-efficacy and inspiring motivation concur with SDT, as well as TPB, IMB and SCT. The BCW also provides a systematic process that identifies where and how an intervention can bring about behaviour change. The theoretical framework constructed for this study is illustrated in Figure 2.21.

Figure 2.21 Theoretical framework

Figure 2.21 Theoretical framework

Intervention constructs	**Intermediate outcomes**

Long-term outcomes

CAPABILITY
- Psychological
- Physical

MOTIVATION
- Reflective
- Automatic

OPPORTUNITY
- Social
- Physical

Intervention constructs:
- Knowledge
- Cognitive & interpersonal skills
- Physical skills
- Beliefs about capability
- Beliefs about consequences
- Optimism
- Goals
- Emotion
- Reinforcement
- Social influences
- Environmental context & resources

Intermediate outcomes:
- Improved knowledge and awareness of alcohol and associated risks and consequences (knowledge)
- Developed skills to communicate with peers and enact resistance strategies (skills)
- Improved confidence, self-esteem and wellbeing (self-efficacy)
- Established goals and aspirations for future (incentive)
- Established healthy drinking norms (attitudes)
- Developed awareness of support networks and sources of information (support)

BEHAVIOUR
Reduced alcohol consumption compared to national trajectory

Mechanisms of change

Selected Behaviour Change Techniques (***Table 2.5***), Motivational Interviewing approach (SDT, TTM) & role play (SCT, SLT, Active learning theory)

2.5vi Motivational Interviewing (MI)

Motivation is central to the BCW and features as a prominent construct in many behaviour change theories, including TPB, SCT, SLT, SIT, IMB and SDT. The behaviour change taxonomy of intervention functions and behaviour change techniques recommended for reducing excessive alcohol consumption (Michie et al., 2012) also identifies key motivational components, including the use of motivational interviewing (MI) (*Table 2.5*). MI, as a 'bottom up' approach has been shown to be compatible with broader theories. MI has been widely associated with the Trans Theoretical Model of change (TTM) (Prochaska & DiClemente, 1983, 2005), for example, which has been used to understand an individual's readiness to change their behaviour. However, it should be noted that MI was not based on the TTM and more contemporary use of MI and revised versions of the approach have moved away from (and are not exclusively linked with) using the TTM. Research has shown a complementarity between MI and SDT in their focus on promoting autonomous self-regulation and perceived competence (Deci & Ryan, 2012; Patrick & Williams, 2012; Zoffmann, Hörnsten, Storbækken, Graue, Rasmussen, Wahl et al., 2016). Hardcastle et al (2016) also found significant overlap between behaviour change techniques from MI and from the Michie et al (2013) taxonomy (Hardcastle et al., 2017).

MI is described as a *"collaborative conversation style for strengthening a person's own motivation and commitment to change"* (Miller & Rollnick, 2012, p. 12). It was developed by Miller and Rollnick in 1991 as a therapeutic intervention designed to elicit behaviour change in young people specifically relating to substance abuse. MI strives to support behaviour change intrinsically rather than imposing sanctions and rewards (extrinsically). MI does not assume that the individual wishes to change their behaviour, but through a process of open-ended discussion that is empathetic and non-judgemental the individual is supported towards making their own decision to change. MI has been shown to impact positively on adolescents (Atkinson & Woods, 2003; Jensen, Cushing, Aylward, Craig, Sorell, & Steele, 2011; Woods, McArdle, & Tabassum, 2014). This success may be due to the underlying principles of MI, such as valuing an individual's autonomy and using a collaborative approach, aligning well with the needs of adolescents for independence and identity formation (Kaplan, 2014). MI has principally been used to address substance misuse, including problem

drinking (Rollnick, Kaplan, & Rutschman, 2016) but has also been used to target other conditions including wellbeing (Moss, 2014) and school disengagement (Snape & Atkinson, 2015). The approach aims to promote self-esteem, self-efficacy, internal attribution and increase knowledge and concern (McNamara, 2009; Moss, 2014). These MI principles complement the theoretical framework as a means of facilitating the desired behaviour and the MI approach was therefore incorporated into the intervention design.

2.5vii Role play

The use of group activities/active learning was recommended from the literature review (Lee et al., 2016; Stigler et al., 2011). Behavioural rehearsal/practice was also identified as one of the behaviour change techniques (*Table 2.5*) for this intervention research. Role play, as an example of active learning (Revans, 1981) is founded on assumptions from SCT and SLT that are represented in the theoretical framework (*Figure 2.21*). These theories have their roots in Vygotsky's well-established learning theories (Ginsburg & Opper, 1988; Vygotsky, 1978; Wertsch, 1985) including social development theory which states that social interaction plays a fundamental role in the development of cognition. Vygotsky theorised in his early *Psychology of Art* (Smagorinsky, 2011) about the importance of the creative process, including drama, in linking emotion and thought to influence cognitive development.

Role play has been evidenced as an effective tool in helping young people to explore differing perspectives on a subject and in doing so, develop confidence, engagement and empowerment (Cahill, 2002; Sajnani, Jewers-Dailley, Brillante, Puglisi, Johnson, Sajnani et al., 2014 (b); Sajnani & Johnson, 2014 (a)). Schneider et al (2006) stress the importance of the imagination as a *"catalyst for learning"* (Schneider, Crumpler, & Rogers, 2006). They document the use of classical and contemporary texts to explore hypothetical scenarios concluding that if students are unable to imagine things from different perspectives, they will struggle to make changes to their own circumstances. A literature review by Zarobe et al (2017) concluded that, despite limited research evidence, providing structured group arts activities can help to build resilience and contribute to the positive mental wellbeing of children and young people (Zarobe & Bungay, 2017). A meta-analysis of 47 quasi-experimental intervention studies using drama-based pedagogy reported significant impact on

achievement outcomes in educational settings as well as positive effects on psychological and social factors (Lee, Patall, Cawthon, & Steingut, 2015). A more recent American study (Lo, 2017) explored the use of simulations and role-play to influence students' civic identities and found that this mode of learning provided students with a sense of empowerment and a means of engaging with political processes. It is proposed that this approach be applied to the consumption of alcohol to similarly empower young people, by increasing their self-efficacy and self-esteem, to engage in healthy alcohol consumption and to build a responsible identity in respect to alcohol. In addition, playing out particular roles in relation to hypothetical scenarios - such as a parent drinking heavily at home and becoming violent or a young adolescent getting drunk on the street and becoming unconscious - and having to play the spouse, the parent, the sibling, the teacher, the police officer, the friend – will facilitate a greater understanding of what alcohol misuse can mean. Therefore, the use of role play as a mechanism for change, would support the intermediate outcomes identified on the theoretical framework (*Figure 2.21*): to facilitate improved knowledge and awareness of alcohol and the associated risks and consequences of drinking; to provide the opportunity to develop and practice communication skills; and to develop and enact resistance strategies to moderate or avoid alcohol consumption in specific situations. This type of group activity would also boost self-esteem resulting in increased and improved motivation towards healthy drinking behaviours.

2.6 Intervention timing

The transition from primary to secondary school is a vulnerable point in a young person's development, a time when new friendship groups are formulated and a potential 'danger point' in terms of negative peer influence (Chein, Albert, O'Brien, Uckert, & Steinberg, 2011; Steinberg, 2005). The literature review (Section 2.4) identified that much of the existing alcohol prevention research has targeted mid-stage adolescents who are likely to be already drinking. These studies reported only limited success in terms of preventing alcohol consumption, hence, it was proposed that preventative intervention aimed at early adolescents could be more successful in influencing attitudes towards alcohol. The intervention would intercept participants before they are subjected to the powerful influence of the peer group that magnifies as they progress through adolescence. It is proposed that this would facilitate the

development of healthy attitudes towards alcohol amongst the peer group, a collective understanding that they have negotiated together. At the age of transition to secondary education (aged 11-12) young people remain receptive to the influence of key adults in their lives, for example parents and teachers (Kriegbaum, Villarreal, Wu, & Heckhausen, 2016; Moore, Rothwell, & Segrott, 2010). This evidence also suggests that intervention work might more effectively targeted at the younger age bracket (11-12 years old) before the majority have even tried drinking alcohol.

2.7 It's My Life: Staying in Control

The central construct of this research, illustrated in the theoretical framework (*Figure 2.21*), is to encourage autonomous motivation, to empower the individual to take responsibility for their own behaviour. Based on the intervention constructs, the intervention sought to equip the participants with the necessary attributes (including knowledge about alcohol consumption, awareness of the associated risks and consequences of drinking and self-efficacy to behave according to their intentions) to make informed decisions about their behaviour. The intervention is for them and about them taking control, hence was given the title *"It's My Life": Staying in control*. The next chapter describes how the intervention was developed based on the theoretical framework presented in this chapter.

Chapter 1
Introduction
Background information: describing the problem

Chapter 2
Literature Review
Exploring the issues,
- Approaches to addressing the problem
- Theoretical Framework

Chapter 3
Methodology: developing the intervention
- Intervention mechanisms
- Intervention structure

1.2 Hypothesis and Objectives
hypothesis & objectives

Chapter 4
Methodology: testing the intervention
- Study design
- Evaluation measures

3.3 Intervention Structure
- Components
- Structure

4.2 Feasibility Study 1
- Process evaluation
- Spring 2016

Chapter 5
Implementation

4.3 Feasibility Study 2
- Case studies
- Spring 2017

Chapter 6
Results: Quantitative Data

Chapter 8
Discussion & Conclusions
- Implications
- Reflections
- Future directions

Chapter 7
Results: Qualitative Data

Chapter 3 Methodology: Developing the Intervention

3.1 Introduction

This chapter describes the process of developing a school-based intervention designed to achieve the objectives specified in Section 1.1. Chapter 2.0 described the formulation of a rationale and theoretical framework to support the hypothesis that a carefully designed school-based intervention programme could successfully evoke healthy behaviour regarding alcohol consumption in young adolescents, resulting in a reduction in future alcohol consumption. Building an intervention on this secure theoretical foundation would maximise its potential effectiveness. The next step was to design the intervention. Reviews of the literature and theory discussed in Chapter 2.0 indicated that alcohol-related behaviour is influenced by multiple interacting components. This fits the MRC's definition of a complex intervention (Moore et al., 2015) and hence MRC guidance on developing and evaluating complex interventions was used to inform this research (Moore et al., 2015; MRC, 2008). In designing a complex intervention, the MRC guidance stresses the importance of first understanding the causal assumptions, derived from theory, that underpin the intervention. The Behaviour Change Wheel (BCW) (Michie et al., 2014) was selected as a comprehensive theory to frame the causal assumptions, according to 11 out of 14 theoretical domains, which would inform the intervention development (*Figure 2.21*). The causal assumptions and mechanisms of change are discussed in Section 3.2. The intention was also to create an intervention that could be easily implemented in an educational setting. The behaviour change techniques taxonomy provided a systematic approach to developing an intervention to influence behaviour that was applicable in this context (Michie et al., 2014; Michie et al., 2015). The intervention was constructed using the selected behaviour change techniques (*Table 2.5*) as described in Section 3.3.

3.2 Intervention mechanisms

Motivation, as discussed previously, is central to the BCW and therefore to the intervention. All the 14 theoretical domains (*Figure 2.18*) interact with and influence motivation (hence the decision to include the MI approach as a mechanism of change). Self-efficacy is an important enabling factor for motivation according to social cognitive theory (Bandura, 1971). The effective intervention would therefore

strive to develop the self-efficacy of participants to 'feel in control' and to 'take control' of their actions. Based on the theoretical framework for this research (*Figure 2.21*), it is proposed that challenging the normative and control beliefs of young people could influence subjective norms (social influences) and perceived behavioural control (beliefs about capabilities). This process could encourage both the motivation to formulate a positive behavioural intention regarding alcohol consumption, as well as the empowerment (self-efficacy) to behave in the intended way. As illustrated in Lo's American study (Lo, 2017), the young persons' control beliefs and perception of power relate to their self-esteem and the extent to which they are confident to act according to their own values and beliefs.

The theoretical framework identified (*Figure 2.21*) (based on Michie's behaviour change wheel) suggests that the intervention should seek to improve self-esteem, and increase self-efficacy, and in so doing influence changes to attitude and behaviour. However, much of the research literature refers more broadly to relationships between wellbeing, socio-economic status and health outcomes. This raises the question of whether the intervention should target (and measure) self-esteem specifically or wellbeing more broadly.

3.2i Wellbeing

The theoretical structure of wellbeing has been widely researched over several decades and various definitions are evident in the literature. Perhaps the simplest definition of wellbeing is *"a generalised feeling of happiness"* (Schmutte & Ryff, 1997, p. 551) and some studies adopt the simple and perhaps rather narrow definition of 'happiness' to represent wellbeing (Barrington-Leigh & Helliwell, 2008). Ryff (1995) viewed wellbeing as a construct that represents aspects of positive functioning and devised a multi-dimensional model of psychological wellbeing which included: self-acceptance; personal growth; purpose in life; environmental mastery; and autonomy. Ruderman et al (2002) further refined the aspects of wellbeing as: life satisfaction; self-esteem and self-acceptance. UNICEF (2007, 2013) include six main dimensions in their index of child wellbeing: i) material wellbeing, ii) health & safety, iii) educational wellbeing, iv) family and peer relationships, v) behaviours and risks and vi) subjective wellbeing. The Children's Society describe wellbeing as *"an umbrella term that can be measured via 'baskets' of indicators that together build up a picture of the quality of people's lives"*. The definition they use (in the Good Childhood

Index), was established in consultation with children by asking what they needed to have a good life and includes:

- Your relationships with your family
- The home that you live in
- How much choice you have in life
- Your relationships with your friends
- The things that you have
- Your health
- Your appearance
- What may happen to you later in your life
- The school that you go to
- The way you use your time

The latter definition seems most to this research in that it is directly relevant to children and encompasses many of the components addressed in this research.

3.2ii Self-esteem

Self-esteem is regarded by some as a component of wellbeing, but there are varying conceptualisations of self-esteem. Various articles use terms such as, self-concept, self-evaluation, self-confidence and self-respect to describe self-esteem. Rosenberg et al (1995) drew attention to the relevance of and relationship between global self-esteem (the individual's positive or negative attitude towards the self as a totality) and specific self-esteem (for example academic self-esteem). They found global self-esteem to be strongly associated with psychological wellbeing, where specific (in this case academic) self-esteem was a better predictor of school performance. Their hypothesis derived from the Theory of Reasoned Action (Fishbein and Azjen, 1975), that *"the power of an action to predict a behaviour is a function of how closely that attitude relates to the act in question – the more specific the attitude, the greater its predictive power"* (Rosenberg et al, 1995 p144). Other researchers consider that self-esteem is a predictor of wellbeing, believing self-esteem to be the cause and wellbeing the effect (Baumeister et al, 2003; Valkenberg et al, 2006).

Taking the concept of self-esteem as the cause and wellbeing as the effect, the intervention in this research sought to improve the self-esteem of young people and measured wellbeing for evaluation purposes. As the research was concerned with improving the wellbeing of young people aged 11-12, it also seemed appropriate to use the term 'wellbeing' in keeping with the UNICEF terminology. The intervention

attempted to address young people's self-esteem and aspirations, and through raising awareness of their own skills and potential sought to develop their confidence and improve their sense of wellbeing. Improved wellbeing could in turn lead to an increase in self-efficacy, an important component of motivation. The intervention was designed to encourage young people to think about their future goals and to explore the possible facilitators and barriers that may help or hinder them in achieving those goals. Alcohol misuse, as an example of a possible barrier, was included as a component of the intervention to be investigated through hypothetical role play scenarios that the young people would be invited to explore from a range of different perspectives ie a parent, sibling, teacher, neighbour. It was proposed that through raising awareness of themselves, their actions and interactions, the actions of others and possible consequences, strategies could be discussed that might help to avoid having to engage in an undesirable activity or situation.

3.2iii Motivational Interviewing

The theoretical underpinning of MI, as discussed in Section 2.5vi, integrates closely with key components of the theoretical framework. MI has been widely evidenced for its effectiveness on a one-to-one level with individuals, both adults and adolescents, but there is also evidence for its effectiveness when applied in small group settings (Wagner & Ingersoll, 2012). MI has also been used in schools often in the form of student-focused applications to address specific change problems, for example to improve student health issues such as obesity, asthma or to increase physical activity (Blaakman, Cohen, Fagnano, & Halterman, 2014; Bonde, Bentsen, & Hindhede, 2014) as well as to reduce drug and alcohol use (Barnett, Spruijt-Metz, Unger, Sun, Rohrbach, & Sussman, 2012; Stewart, Siebert, Arlt, Moise-Campbell, & Lehinger, 2016). Atkinson (2014) maintains that *"in a school-based setting, it is likely that both MI and the TTM are not used in their purest forms but instead have become frameworks for thinking about how to support and facilitate pupil change in a positive direction"* (Atkinson, 2014, p. 28). At the time of this research there was no evidence that MI had been used in a whole class situation to reduce alcohol consumption. However, the approach was successfully incorporated into a whole class brief intervention for university students to improve examination performance (Reich, Howard Sharp, & Berman, 2015). Some interventions have incorporated MI into school-based alcohol interventions with positive effects, but as a targeted, brief

intervention directed at individuals or small groups (Bailey, Baker, Webster, & Lewin, 2004; Sussman, Sun, Rohrbach, & Spruijt-Metz, 2012). However, building on promising outcomes from trials conducted in small group settings it was proposed that using the MI framework at whole class level should be feasible (Atkinson, C, personal communication). Findings from the literature review of universal school-based intervention research and evidence of the effectiveness of MI supported the conclusion that a combined approach might be an effective solution to influence positive attitudes and behaviour regarding alcohol consumption in the school context. This research sought to assess the feasibility of designing and implementing such a programme in preparation for future effectiveness studies.

The spirit (*Table 3.1*) and principles (*Table 3.2*) of MI were incorporated into the intervention and pupils were encouraged to work collaboratively with one another to explore the issues around alcohol misuse. The teacher or researcher delivering the programme was instructed to guide the learning by setting the objectives and activities but not to dictate positive or negative attitudes to the class. An important aspect of the intervention was that the climate in the classroom was empowering for the pupils and that they be allowed to formulate their own (healthier) attitudes. The MI approach *"is not about imparting information but finding things within the person and drawing them out. It requires finding intrinsic motivation for change from within the person and evoking it"* (Atkinson, 2013) (*Table 3.1*). It should be noted that a perceived tension within the intervention might exist between the sharing of factual (and potentially sensitive) information relating to alcohol and the technique of evocation as described in Table 3.1. This is an ethical consideration, discussed further in Section 4.4. The MI approach seeks to evoke healthy attitudes towards the specified behaviour and the motivation to carry out those behavioural intentions. The exploration of facts through practical peer-focused activities could encourage shared social norms and lead to healthier attitudes. The collaborative element of the MI spirit (*Table 3.1*) was an important aspect of the intervention as it has been found to support social interaction and develop a sense of connectedness. This links into the social influences construct in the theoretical framework (*Figure 2.21*).

Table 3.1 The Spirit of Motivational Interviewing

> ***Collaboration:*** The method of motivational interviewing involves exploration more than exhortation, and support rather than persuasion or argument
>
> ***Evocation:*** MI is not about imparting information but finding things within the person and drawing them out. It requires finding intrinsic motivation for change from within the person and evoking it.
>
> ***Autonomy:*** Any responsibility for change is left with the client, no matter what the views of the professionals. It is the client rather than the counsellor that should ultimately present arguments for change.

Source: *Facilitating Change 2: Motivational Interviewing using the menu of strategies* (Atkinson, 2013).

Table 3.2 The Principles of Motivational Interviewing

> ***To express empathy*** – to view matters from the client's point of view, to establish their trust, allowing them to share their thoughts with you, thus facilitating discussion that might result in their desire to change.
>
> ***Support Self-Efficacy*** – helping the client to stay motivated. Maintaining that there is 'no right way' to change is a useful MI technique and perhaps sharing stories of other clients' success stories.
>
> ***Roll with Resistance –*** don't challenge client resistance, but 'roll' with it harnessing the momentum to explore further viewpoints. The aim is to reduce resistance and discourage the client from becoming more argumentative.
>
> ***Develop Discrepancy*** - work to examine the discrepancies between where the client is now and where they'd like to be in the future. Guide the client to the self-realisation that if they make changes to their behaviour, those future goals might be achievable.

Source: *Facilitating Change 2: Motivational Interviewing using the menu of strategies* (Atkinson, 2013).

In addition, the MI interaction technique OARS (which stands for Open-ended questions, Affirmations, Reflective listening and Summary) (*Table 3.3*) was included. As the intervention was intended to be delivered by teachers and other non-psychology trained staff in schools, the OARS provided guidance on how to adhere to the MI spirit and principles. It was proposed that the technique would easily transfer into a classroom situation as several key elements of MI echo good teaching practice, Rollnick et al state that *"the overlap between MI and conversations in schools are striking"* (Rollnick et al., 2016, p. 8). They describe evocation, resolving ambivalence, affirmation, autonomy and open questioning as compatible elements that naturally translate from teaching to MI. Explanations are offered in Table 3.4.

Table 3.3 OARS Interaction Technique

Open-ended questions	A question that cannot be answered with yes or no, that opens up a larger conversation
Affirmations	Recognition of the pupils' strengths
Reflective listening	Listen to the pupils and focus on change talk. Reflect back to them what they have told you, making connections between themes.
Summary	Announce that you are going to summarise, list selected elements of what the pupils have told you, and ask them to make meaning of these things.

Source: *Facilitating Change 2: Motivational Interviewing using the menu of strategies* (Atkinson, 2013).

The OARS technique is used in MI to help move a person's attitudes forward (for example, from the pre-contemplative to the contemplative stage when used with the TTM (Prochaska & DiClemente, 1983, 2005)) by eliciting 'change talk' otherwise defined as self-motivational statements. It is assumed that the person holds a position of ambivalence, in which they hold reasons both for and against continuing with a specific behaviour. Change talk is the argument for change and sustain talk is the counter argument against change. MI recognises that ambivalence is a normal human condition and that the ambivalent person holds the answers themselves (ie the reasons both for and against change). In the case of this research, change talk would represent healthy attitudes towards alcohol consumption. The opposite view, sustain talk, would be the argument for continuing with an established behaviour, for example to continue smoking or to carry on drinking heavily. In the intervention, sustain talk would reflect attitudes that encouraged or favoured heavy drinking. The aim of this school-based intervention was to evoke change talk and in so doing encourage the pupils to collectively form healthy and responsible attitudes towards alcohol, which in turn might result in more responsible drinking behaviour and either halt or reduce consumption compared with the national trends. Change talk during MI has been described as a predictor of change in alcohol use (Gaume, Bertholet, & Daeppen, 2016). Change talk is organised into four categories: problem recognition; concern about the problem; commitment to change; and belief that change is possible. Different components of the intervention programme, identified in the

theoretical framework, sought to address these areas. For example, the information sharing and awareness raising (knowledge) elements contributed to the problem recognition and concern about the problem (beliefs about consequences); work around young people's aspirations (goals) and role play activities (social influences) sought to evoke the commitment to change (or in the case of this research, to adopt a healthy behavioural intention); and work on the young people's strengths (beliefs about capabilities, optimism) and strategies to negotiate scenarios in which they might be challenged to carry out their behavioural intentions (skills) alongside taking a collaborative peer-focused approach (social influences) was intended to inspire the belief (beliefs about capabilities) that the intended behavioural outcome is possible.

Table 3.4 Techniques compatible between teaching and MI

"Evocation"
The word "education" is derived from the Latin verb ducere, "to lead or guide", which points to the value of a teacher who "draws forth" learning from students. MI focuses on the conversation techniques for exactly this "drawing forth", to enhance motivation to change. We call it evoking, a refinement of what has been called a Socratic style of education.

"Resolving Ambivalence"
Experience in the classroom, supported by evidence, tells us that students learn best when they actively participate and willingly take responsibility for their own behaviour and learning, supported by skilful teaching techniques. This is easier said than done. Students often seem ambivalent about participating and taking responsibility for themselves or downright opposed to the idea. MI provides the tools for encouraging participation, resolving ambivalence, and helping students to verbalise their own routes to change.

"Affirmation"
There is solid evidence that giving students specific, accurate, and positive feedback increases motivation. "Affirmation" is a highly tuned way of doing just this and a core skill in MI.

"Autonomy"
Respecting and encouraging autonomy is a part of MI and is supported by educational research. Students perform better on tests, and feel more competent and motivated to learn, when teachers actively support their autonomy.

"Open Questioning"
Teachers routinely ask open questions. In MI, open questions are followed by the use of - further skills like reflective listening that encourage more discussion. If open questions are like knocking on a door, the other skills help you walk inside with greater ease.

Source: *Motivational Interviewing in Schools* (Rollnick et al, 2016)

3.2iv Peer-focussed learning

The intervention was designed with a pupil peer learning focus, which means that pupils were encouraged to work together through discussion and group activities, including role play, to collectively explore and form opinions and attitudes relating to alcohol misuse. It did not mean that pupils were mentoring or teaching other pupils, a teacher or researcher was present to facilitate the sessions. According to self-determination theory (Deci & Ryan, 1985) and the MI approach, the motivation to change attitudes or behaviours must be intrinsically inspired. If a teacher were to simply tell young people how they should behave, for example, using a strict didactic teaching approach where they impart information to their class (like the "banking" model fiercely criticised by Freire (Freire, 1972)), this is unlikely to influence meaningful or lasting changes in attitude or behaviour. It is a well-accepted psychological concept that when someone argues for one side of ambivalence (for example, emphasising the reasons to change), the natural human reaction is to defend the opposite (Yes, but …) (Miller & Rollnick, 2012). It is literally possible to talk oneself into or out of change, and it is this principle that is harnessed in MI. The skill in MI is in *"arranging conversations so that people talk themselves into change, based on their own values and interests. Attitudes are not only reflected in but are actively shaped by speech"* (Miller & Rollnick, 2012, p. 4). In selectively summarising change talk as raised by the individual and reflecting these messages back helps to reinforce and focus the argument for change. More recent studies report on the effectiveness of evoking change talk to reduce alcohol-related negative consequences (Apodaca, Borsari, Jackson, Magill, Longabaugh, Mastroleo et al., 2014; Magill, Janssen, Mastroleo, Hoadley, Walthers, Barnett et al., 2019). Poulin et al (2019) reported that incorporating MI into cognitive behaviour therapy (CBT) was associated with a significant decrease in the most detrimental type of motivational language compared to using CBT alone (Poulin, Button, Westra, Constantino, & Antony, 2019).

This intervention programme (*It's My Life: Staying in Control*) sought to encourage young people to explore issues themselves, together as a group (and in the spirit of MI - collaboration, evocation and autonomy) ideally coming to a collective consensus on alcohol. The European Drug Addiction Prevention (EU-DAP) programme "UnPlugged" and "Unge & Rus" both included this type of peer-led focus (Strom et al,

2015) which was evidenced to encourage improved self-esteem and wellbeing, intrinsic motivation to change and improved school engagement. It was therefore proposed that incorporating a peer-focussed approach would support the intervention in achieving the research objectives (Section 1.1), particularly in helping individuals to improve their self-esteem and psychological wellbeing to enable them to be confident in taking responsibility for their own behaviour; and encouraging them to have the motivation and self-confidence to consider and moderate their future alcohol consumption.

3.3 Intervention Structure

The structure of the intervention was based around the theoretical domains identified as the main constructs in the theoretical framework (*Figure 2.21*). The framework assumes that capability, opportunity and motivation interact to influence behaviour. Intervention constructs are identified according to capability, opportunity and motivation as the areas that need to be targeted to influence behaviour. (In the case of this preventative intervention research the aim is to influence future behaviour rather than bring about behaviour change.) Behaviour change techniques that can be used to influence behaviour have been identified according to each intervention construct. This was the theory used to develop the intervention.

As previously discussed in Section 3.2iii, MI was identified as a mechanism of change that would strengthen the intervention in influencing the desired behaviour. MI has been extensively used as a therapeutic intervention by psychology professionals working in medical and clinical settings. However, over the last 15 years, school-based MI started to emerge as an academic discipline (Atkinson & Woods, 2003). Atkinson et al (2007, 2009, 2010) offered guidance and structure on how the approach might be used in schools with children and young people (Atkinson & Amesu, 2007; Kittles & Atkinson, 2009; McNamara & Atkinson, 2010). This work led to the development of *Facilitating Change,* (Atkinson, 2005) a resource pack to support a diverse range of stakeholders, including teachers and paraprofessionals to use MI across a range of settings. A revised version of the pack, *Facilitating Change 2* (Atkinson, 2013), incorporated an adaptation of the *Menu of Strategies* (*Table 3.5*) to provide a more structured approach based on the core principles of MI (Atkinson, 2013; Rollnick, Heather, & Bell, 1992). The pack has

been successfully used to elicit behaviour change in young people (Cryer & Atkinson, 2015). It was also independently evaluated and found to be effective for developing self-esteem amongst secondary school students in a randomised control trial (Moss, 2010; 2014). The Menu of Strategies from *Facilitating Change 2* was further adapted to suit the focus of this study, providing a structure which would accommodate the BCTs representing the components from the theoretical framework to develop an intervention suitable for delivery in a school classroom setting.

Table 3.5 Motivational Interviewing - Menu of Strategies

1. Opening discussion
2. A typical day/My lessons
3. The good things and the less good things
4. Providing information
5. The future and the present
6. Exploring concerns
7. Helping with decision-making

Source: The Menu of Strategies, Facilitating Change 2 (Atkinson, 2013) adapted from Negotiating behaviour change in medical settings: The development of brief motivational interviewing (Rollnick et al., 1992).

The Menu of Strategies falls under seven broad headings which logically translated into a six- or seven-week programme of work, a timeframe that was also suitable for school delivery. Alcohol education is usually delivered as part of the compulsory school curriculum through Personal, Social and Health Education (PSHE) and school topics are often planned in half-termly blocks. The intervention was therefore designed to fit into an academic half-term. Schools also struggle to timetable additional elements into an already crowded curriculum so, the intervention was designed to be integrated into the existing timetable through PSHE. However, the programme could also be delivered via other subject areas such as English or drama. Another key consideration in creating this intervention was that it incorporated the intervention constructs identified in the theoretical framework (*Figure 2.21*) into one holistic programme. The literature review suggested that more holistic interventions and those with multiple components would be more likely to be effective (Section 2.5). This type of design would also be more practical for schools

to implement. Finally, in recognition that schools vary considerably, for example in terms of timetabling, resourcing, staffing and curriculum planning, the intervention was designed with some flexibility in order to fit with differing half-term lengths. The structure of the *It's My Life: staying in control* intervention was planned accordingly, using the Menu of Strategies (***Table 3.5***) as shown in Table 3.6.

Table 3.6 Mapping the intervention against the Menu of Strategies, intervention constructs and behaviour change techniques

Menu of Strategies	Behaviour Change Techniques	Intervention Constructs	Intervention: It's My Life: Staying in Control (version 1)
Opening Discussion	Build general rapport Valued self-identity Verbal persuasion to boost self-efficacy Reduce negative emotions Assess current and past drinking behaviour	Beliefs about capabilities Optimism Emotion	Introduction: "All about you" (Week 1) Attitudes and experiences survey (Week 1 and Week 6) Q-sort (Week 1)
A typical day/ My lessons	Build general rapport Valued self-identity Verbal persuasion to boost self-efficacy Reduce negative emotions	Beliefs about capabilities Optimism Emotion	What you enjoy doing, activities, hobbies etc (Week 1) Strengths *"everyone has their strengths"* (Week 2) *What you are good at, but also character traits such as being reliable, friendly, communicative etc*
The good things and the less good things	Discrepancy between current behaviour and goal Social and environmental consequences Pros and cons Comparative imagining of future outcomes Modelling or demonstrating the behaviour Information about others' approval Avoidance/changing exposure to cues for behaviour	Beliefs about consequences Social influences Environmental context and resources	Role Play - Teenager: Good day/not so good day (Week 4/5) Role Play - Young adult: Good day/not so good day (Week 4/5) Role Play - Adult: Good day/not so good day (Week 4/5)
Providing information	Health consequences Antecedents Social support	Knowledge Social influences	Alcohol Quiz, including units of alcohol experiment (Week 3)
The future and the present	Goal setting Incentive Anticipation of future rewards Social reward Social comparison	Goals Reinforcement Social influence	Local role models Aspirations *"where do you want to be in the future?"* Drawing activity – what your future lifestyle will look like (Week 2)

Menu of Strategies	Behaviour Change Techniques	Intervention Constructs	Intervention: It's My Life: Staying in Control (version 1)
	Discrepancy between current behaviour and goal		
Exploring concerns	Emotional consequences Salience of consequences Anticipated regret Social and environmental consequences Vicarious reinforcement Elicit and answer questions Social support	Beliefs about consequences Social influences	Meet 'Lucy' the reformed alcoholic – her story, question and answer session (Week 3)
Helping with decision making	Behavioural rehearsal/Practice Discrepancy between current behaviour and goals Facilitate barrier identification and problem-solving Avoidance/changing exposure to cues for behaviour	Skills (physical and cognitive & interpersonal) Environmental context and resources	Barriers/facilitators *"how will you achieve your goal? (Week 2)* Conscience Alley – positive and negative influences (Week 6) Strategies to avoid or drink less alcohol (Weeks 4/5/6)

Source: The Menu of Strategies (column 1) adapted from Negotiating behaviour change in medical settings: The development of brief motivational interviewing (Rollnick et al., 1992). Behaviour change techniques identified in Table 2.5 and intervention constructs from Figure 2.21.

3.3i Opening Discussion and A Typical Day/My Lessons

The first two sessions in the Menu of Strategies are designed to firstly establish a rapport with the young person involved in the intervention, giving them an opportunity to talk about themselves and their current situation in a safe environment (Opening Discussion); and secondly to describe a typical day when a particular problem behaviour did or did not occur, and in doing so enable the facilitator to identify potential triggers (A typical day/My lessons) (Atkinson, 2013).

BCTs incorporated: Build general rapport, valued self-identity, verbal persuasion to boost self-efficacy, reduce negative emotions, assess current and past drinking behaviour, goal setting, incentive, anticipation of future rewards, social reward, social comparison, discrepancy between current behaviour and goal.

The *It's My Life* intervention incorporated BCTs in the first sessions of the intervention to build general rapport within the class, making it a safe and confidential place in which to discuss the subject. Week 1 activities focussed on the individual - *"All about you"* explored hobbies and interests with the aim of building rapport. Participants were also able to consider other activities that they would like to do and the reasons preventing them from doing so at present, which may include, cost or opportunity. This activity was designed to highlight a discrepancy between current and possible future circumstances which would influence and motivate them in their goal-setting activity (week 2).

The first session was also designed to collect survey information in order to assess drinking behaviour and attitudes, sense of wellbeing and risk-taking tendencies. A Q-sort activity was also part of this session, which comprised 28 cards containing statements such as: *"I don't really care what other people think about me"*; *"If I don't want to do what my friends are suggesting, I just go and do my own thing"; "I get on well with people and have a lot of friends"; "I know what I want my future to be like".* The intervention was designed so that pupils could sort the cards into the categories 'agree', 'disagree' or unsure about/indifferent to. It was anticipated that these activities would provide participants with an opportunity to reflect upon their own experiences, attitudes and behaviour.

In week 2, the intervention was designed whereby individuals were encouraged to think about their personal strengths and to recognise and describe the strengths of their peers, noting the difference between character traits, such as being reliable, patient or communicative and skills such as being good at sport or maths. This activity was designed to encourage a sense of optimism, reducing negative emotions and boosting self-esteem. The activities and hobbies identified in the previous session could be used as a starting point in helping to reveal some of their strengths.

3.3ii Future and Present

The session on the Future and Present from the Menu of Strategies allows the exploration of present circumstances to help elicit a desire for change. A typical question might be, *"How would you like things to be different in the future?"*

BCTs incorporated: Build general rapport, valued self-identity, verbal persuasion to boost self-efficacy, goal setting, incentive, social comparison, discrepancy between current behaviour and goal, anticipation of future rewards, social reward, barrier identification

The BCTs incorporated in this session focussed around incentivisation and social influence and looked at aspirations and goal setting. The session was designed so that pupils could consider their future goals in terms of possible career choices and what sort of lifestyle they aspire to lead. It was proposed that local role models would be used, as a means of social comparison, to inspire optimism regarding future aspirations and to generate anticipation of future rewards. Examples of inspirational success stories would be provided, showing that ordinary people from the local neighbourhood made good careers and futures for themselves, including footballers such as Marcus Rushford recently recruited to Manchester United Football Club and members of the school staff. This activity was designed to prompt the participants to consider that their future life could be different to their present one (this would be particularly relevant in locations of significant socioeconomic deprivation where, for example children may never have been on holiday or visited the seaside and don't go out for meals or to the cinema). The intention was to evoke discrepancy between current and future situations, to provide an incentive for the desired behaviour (yet to be introduced at this stage of the intervention).

The final part of this session was designed to discuss factors that might help pupils to achieve their future goals and those that might hinder their progress. This is the point in the intervention where alcohol would be introduced as a potential barrier and the class would discuss why alcohol might prove a hindrance.

3.3iii Providing Information

The Menu of Strategies was developed to include a session on providing information. This is an area that should be dealt with in a sensitive manner and may involve describing what other young people in the same situation have done. It was anticipated that this strategy would be a helpful part of the decision-making process.

BCTs incorporated: health consequences, antecedents, social support

Week 3 of the *It's My Life* intervention, was designed to help participants to find out the facts about alcohol and involved an alcohol quiz. Part of the quiz was a practical activity in which the pupils could pour wine-coloured and beer-coloured water into various glasses to indicate what a unit of alcohol looks like. Another aspect of the quiz explored the appropriateness of alcohol as a means of dealing with stress, pupils could brainstorm alternative/better strategies for alleviating stress, such as sport, talking with a friend, or watching a humorous movie.

3.3iv Exploring Concerns

Rollnick et al (1992) describe this as perhaps the most important strategy of all. It involves getting the young person to identify their reasons for concern about a particular behaviour. In the therapeutic context, it involves listening carefully to what they are saying and helping them to identify positive changes so they can make a 'step forward,' perhaps to a different stage of readiness for change or to where they can see things from a slightly different perspective.

BCTs incorporated: health consequences, antecedents, social support, emotional consequences, salience of consequences, anticipated regret, social and environmental consequences, vicarious reinforcement, elicit and answer questions

The Week 3 *It's My Life* session also involved a question and answer session with a teacher in role character as 'Lucy' the recovering alcoholic. This activity was designed to be carried out following the alcohol quiz, to further extend the

information sharing and awareness raising. The pupils would be introduced to 'Lucy' and invited to be respectful and to ask sensitive questions in order to find out her back story. This situation was designed to enable pupils to ask questions in a safe and anonymous context – it considered that they may have had personal experiences or concerns relating to alcohol in their home situation and were able to ask questions and explore their concerns without having to mention or discuss their own personal circumstances. For pupils without any alcohol-related concerns, this exercise could serve to raise their awareness of potential problems. It was proposed that Lucy's story would help the class to understand some of the consequences (social and emotional) of alcohol misuse, to comprehend the salience of those consequences and her grave sense of regret.

The intervention was designed so that information about sources of support for anyone suffering with alcohol-related issues would be available to the class.

3.3v The good things and the less good things

Using the Menu of Strategies, the young person should be given the opportunity to talk about the good things and the less good things about a particular behaviour. For example, truanting might mean they have fun with friends but get into trouble with teachers. It is important to describe the 'less good things' rather than the 'concerns' as this allows the young person to identify problem areas without feeling that these behaviours are being labelled as problematic.

BCTs incorporated: modelling or demonstrating the behaviour, pros and cons, social and environmental consequences, comparative imagining of future outcomes, information about others' approval, discrepancy between current behaviour and goal, avoidance/changing exposure to cues for behaviour

Weeks 4 and 5 of the intervention were devoted to role play. The sessions were designed so that pupils would work in small groups of five or six to develop scenarios involving different age groups: teenagers (perhaps 14-15 year olds); young adults (in their early 20s); and older adults (perhaps their parents' age) in which the actors are drinking alcohol. In each case, pupils would create role play scenarios to reflect 'a good day' drinking where people are having fun and enjoying themselves and also 'a not so good day' where an individual or individuals drink too much. Each group

would then perform their scenarios in front of the rest of the class to show what might happen in each case. It was anticipated that the participants would draw ideas from the previous sessions on information sharing and awareness raising to inform their role plays. It was also proposed that developing and enacting the scenarios would help to embed and reinforce the learning. The next activity designed for the sessions in weeks 4 and 5 involved pupils identifying a point in their role play scenario in which the good day could start to become a not so good day. The class would then discuss strategies that might prevent the situation from turning into the latter situation.

It was proposed that the role playing would allow pupils to explore some of the pros and cons of drinking including social and environmental consequences and the approval of others. Enacting drinking situations amongst different age groups would allow pupils to explore the potential future outcomes of a character as they progress through life as an excessive drinker. Again, this activity was designed to highlight discrepancy between future aspirations and the possible negative consequences of misusing alcohol, serving to reinforce the desired behavioural intention to moderate alcohol consumption (or abstain) in the future.

3.3vi Helping with decision making

This final strategy from the Menu of Strategies is intended for use with young people who indicate that they want to make some sort of behavioural change. Rollnick et al (1992) highlight a number of key principles in helping with decision making:

- Do not rush young people into making decisions about changing their behaviour.
- Present options for the future, rather than one single course of action.
- Describe what other young people have done in similar circumstances.
- Emphasise that the young person is the expert in their own behaviour and may be the best judge of what is best for them.

Failure to reach a decision to change does not mean that the work carried out has been in vain. Change is a complex process and sometimes the time and circumstances need to be right for the young person to effect a positive change to their behaviour. The work carried out in this stage allows the young person to make more informed choices about their behaviour and its consequences.

BCTs incorporated: behavioural rehearsal/practice, discrepancy between current behaviour and goals, pros and cons, facilitate barrier identification and problem-solving, avoidance/changing exposure to cues for behaviour

In *It's My Life* intervention was designed so that pupils would consider choices or decisions at various points throughout the intervention. They would be given the message that it is their responsibility to make those choices for themselves. In Week 1, some of the Q-sort statements would pose interesting questions about whether they would always follow their peers' actions, such as *"If I don't want to do what my friends are suggesting, I just go and do my own thing",* pupils would be invited to reflect upon such issues and discuss what they would do. In Week 2 of the intervention, participants would be required to consider the potential facilitators or barriers that they may encounter in achieving their life goals and what they might do to avoid those barriers and to stay 'on track'. Throughout Weeks 4 and 5, in each role play scenario, pupils would be asked to discuss how they might avoid drinking or how they might moderate their consumption in order to avoid some of the repercussions encountered in the 'not so good day' drinking situations. Finally, the session in Week 6 of the intervention would involve participants brainstorming the positive and negative influences (or voices) that their conscience might be telling them when faced with a decision to drink alcohol, for example *'go on, have another drink, don't be so boring'* or *'don't have another one, you have to get up for school in the morning'*. The pupils would then enact a 'Conscience Alley' where the person with the drinking dilemma would walk between a line of pupils who would deliver their positive and negative influences from either side. It was proposed that this activity would encourage the class to identify the pros and cons of drinking (which in MI terms represent the change and sustain talk used to resolve ambivalence) and to enact the argument as a role play could be viewed as behavioural rehearsal for negotiating future situations. In this activity, and in the earlier role plays of good and not so good days, the class would be encouraged to think of resistance strategies that they might use to avoid excessive drinking or to moderate or abstain from drinking.

3.4 Summary

This chapter has built on the theoretical development outlined in Chapter 2.0 to apply the behaviour change techniques to an intervention, *It's My Life*. The following chapter describes two phases of feasibility testing. The first version of the intervention (Appendix IV – version 1) was developed and adapted during the implementation process in Feasibility Study 1. In particular, the teachers in School A were proactive in offering their advice and expertise to firstly, fit the proposed sessions into the school timetable and into the classroom context; secondly to make suggestions regarding delivery and content. The finished version (Appendix IV – version 2) as described above, includes these adaptations.

The development of the intervention was on-going throughout the preparation and implementation of the first feasibility study (described in the next section) with staff at one of the secondary academies recruited and with academics and professionals.

Chapter 1
Introduction
Background information: describing the problem

Chapter 2
Literature Review
Exploring the issues,
- Approaches to addressing the problem
- Theoretical Framework

Chapter 3
Methodology: developing the intervention
- Intervention mechanisms
- Intervention structure

1.2 Hypothesis and Objectives
hypothesis & objectives

Chapter 4
Methodology: testing the intervention
- Study design
- Evaluation measures

3.3 Intervention Structure
- Components
- Structure

4.2 Feasibility Study 1
- Process evaluation
- Spring 2016

Chapter 5
Implementation

4.3 Feasibility Study 2
- Case studies
- Spring 2017

Chapter 6
Results: Quantitative Data

Chapter 8
Discussion & Conclusions
- Implications
- Reflections
- Future directions

Chapter 7
Results: Qualitative Data

Chapter 4 Methodology: Testing the intervention

4.1 Introduction

This chapter describes how the developed intervention was tested and evaluated, starting with the research design and detailing the stages of feasibility testing, adaptation and development.

The longer-term goal of the research, beyond the scope of this study, is to test the efficacy and effectiveness of the designed intervention as a cluster randomised controlled trial (RCT), using school class as the unit of randomisation (Kendall, 2003; Moore et al., 2015; Torgerson & Torgerson, 2001). The RCT model is favoured by some of the major funding bodies in the UK, within both the fields of educational (Education Endowment Fund (EEF) (Humphrey, Lendrum, Ashworth, Frearson, Buck, & Kerr, 2016)) and public health research (National Institute for Health Research (NIHR)), and is considered by the MRC as the most reliable means of providing the 'gold standard' level of evidence that an intervention is effective and worthy of implementation (Craig, Dieppe, Macintyre, Michie, Nazareth, & Petticrew, 2011; Moore et al., 2015; MRC, 2008).

However, in preparation for a large-scale effectiveness study, the intervention must first undergo the necessary stages of development, feasibility testing and adaptation (Humphrey et al., 2016; Prestwich, Conner, & Kenworthy, 2017) in order to optimise the likelihood of success (Domitrovich, Bradshaw, Poduska, Hoagwood, Buckley, Olin et al., 2008; Moore et al., 2015; O'Cathain, Croot, Duncan, Rousseau, Sworn, Turner et al., 2019). It is the preliminary stages of developmental work and feasibility testing that form the focus of this study.

4.2 Research Design

The intervention development outlined in Chapter 3.0 resulted in a complex multi-component design. The MRC recommend using a process evaluation to test the feasibility of this type of programme prior to conducting effectiveness trials (Moore et al., 2015; MRC, 2008). Feasibility studies are recognized as a key component of the MRC guidance for developing and evaluating complex interventions (Moore et al., 2015; MRC, 2008). The guidance suggests that the feasibility stage should explore the acceptability of intervention procedures, estimate the recruitment and retention of research participants and calculate likely sample sizes. It is important at this stage to

explore implementation issues, to assess fidelity, to identify causal mechanisms and to explain contextual factors that might impact on the intervention outcomes (Craig, Dieppe, Macintyre, Michie, Nazareth, & Petticrew, 2008; Moore et al., 2015). In recognition of the necessity for this evaluative work, MRC recommend using a combination of qualitative and quantitative research methods appropriate to the research questions (Moore et al., 2015) suggesting that a mixed methods approach would be appropriate for this study. A recent framework for developing complex interventions to improve health and health care (a consensus study funded by MRC & NIHR) also recommends the use of a wide range of research methods – qualitative to understand the context in which the intervention will operate and quantitative to measure change in intermediate outcomes (O'Cathain et al., 2019). MRC guidance prompts researchers to consider the importance of context and variability of the intervention when planning their evaluation approach, concluding that *'a mixture of qualitative and quantitative methods is likely to be needed'* and *'depending on the results, a series of studies may be required to progressively refine the design'* (MRC, 2008, p. 10). Contexts differ in numerous ways, for example being affected by socio-economic variables and other population characteristics, severity of a problem and how that problem is caused and sustained, therefore must be considered when designing and evaluating an intervention.

The above guidance accordingly informed the research design for this study, which was constructed as a mixed-methods design incorporating a process evaluation. This design, as illustrated in MRC Case Study 3 (MRC, 2008, p. 19) has been widely used in feasibility studies to evaluate complex interventions (Klimas, Anderson, Bourke, Bury, Field, Kaner et al., 2013). The following sections explore the practicalities and offer further rationale for the chosen methodology.

4.2i Mixed Methods Research

Randomised control trials are considered the 'gold standard' in terms of providing evidence for the effectiveness of interventions (MRC, 2008). However, during the early stages of intervention development, a broad range of aspects need to be assessed which, in the case of this research included, the feasibility of delivering the intervention in a regular mainstream school setting as part of the compulsory school curriculum and its transferability to school practitioners, including training teachers to

deliver the intervention. A purely quantitative approach might provide statistical evidence for intervention impact (although, unlikely in a small-scale feasibility study and not the primary aim of this study) but it would not provide the detailed descriptive information necessary to evaluate issues relating to implementation, dosage, fidelity etc that is increasingly required by policy makers (Moore et al., 2015). Therefore, to fully explore the research questions, it was necessary to include both an inductive qualitative approach, involving the collection of data from observations and interviews and the quantitative data collection.

The application of the mixed methods approach to research has become increasingly popular over the past 15-20 years and is now widely accepted as a legitimate research approach (Creswell & Clark, 2011). The approach has been described as the *"third methodological movement"* (Teddlie & Tashakkori, 2003) or *"third research paradigm"* (Johnson & Onwuegbuzie, 2004). Creswell and Clark noted a distinct change in perceptions between the first (2006) and second editions (2011) of their handbook *Designing and Conducting Mixed Methods Research* from a time when *"researchers were mostly curious about this developing approach called mixed methods"* to *"people no longer wonder what this approach is and whether it is a legitimate model of inquiry. Their interests now have gravitated toward the procedures of research, actually how to conduct a mixed methods study"* (Creswell & Clark, 2011, p. 1)

The mixed methods approach to research involves combining both qualitative and quantitative data collection techniques. The basic concept is that integration of the two approaches can maximize the strengths and minimize the weaknesses of each type of data. It was considered appropriate for this study because it takes advantage of using multiple ways to explore a research problem and is therefore highly flexible and intuitive in allowing for thorough exploration of the research question.

> *"mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (eg use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration."*
>
> (Johnson, Onwuegbuzie, & Turner, 2007, p. 123)

Selection of an appropriate design depends upon the research question, chosen sequence and type of data collection and analysis (Creswell & Clark, 2011). There are many designs for mixed methods research, so to help with the decision-making process it is important to firstly understand the ways in which they differ according to timing, priority, single or multiphase, point of interface and analytic logic. These factors are detailed in Table 4.1.

Table 4.1 Different attributes of mixed methods designs

Timing: qualitative and quantitative data can be collected concurrently (advantageous in maximising the amount of data that can be collected in a limited time frame) or in a sequence with one phase of collection following another (useful when results from an initial phase of data collection are used to inform a subsequent phase).

Priority: some mixed methods studies give equal emphasis to the quantitative and qualitative elements of the research. Other studies prioritise one approach over the other (this might occur when the researcher embeds a secondary dataset within a larger, primary design or reports unequal quantitative or qualitative components in the study).

Single study or multiphase programme of enquiry: some mixed methods studies comprise a single 'stand-alone' study where others consist of multiple studies, some quantitative and some qualitative, that build on each other and contribute to an overall program objective or purpose.

Point of interface: the point where the mixing of the methods occurs depends on the research design. This point might occur during data collection (when quantitative items and qualitative open-ended questions are collected on the same survey), during data analysis (when qualitative data are converted or transformed into quantitative scores or constructs to be compared with a quantitative dataset), and/or during data interpretation (when results of quantitative analyses are compared with themes that emerge from the qualitative data).

Analytic logic: design possibilities are dependent upon the reasons for using mixed methods, for example, whether the quantitative and qualitative datasets will be merged into one analysis, interpreted to address the research questions, or whether one dataset will build on the results of an initial dataset.

Source: *Best practices for mixed methods research in the health sciences* (Creswell, Klassen, Plano Clark, & Smith, 2011).

These aspects, when considered in relation to the research question, help to inform the selection of an appropriate design. The main mixed methods designs are described in Table 4.2.

Table 4.2 Mixed methods research designs

Convergent, parallel or concurrent designs involve the collection of both quantitative and qualitative data to address the research study aims. Data analysis consists of merging and comparing the two sets of data and results.

Sequential designs involve one data set building on the results of another. There are three types of sequential design:

> ***Explanatory (QUAN-Qual):*** whereby the collection and analysis of quantitative data is followed by collection and analysis of qualitative data. In this approach, qualitative results are used to assist in explaining and interpreting the findings of a quantitative study.

> ***Exploratory (QUAL-Quan):*** which involves an initial phase of qualitative data collection and analysis followed by a phase of quantitative data collection and analysis. This approach is used to explore a phenomenon and can be useful when developing and testing a new instrument.

> ***Transformative:*** which involves the collection and analysis of either quantitative or qualitative data first. However, the results are integrated in the interpretation phase rather than building on whichever data were collected first. In this design, a theoretical perspective is generally used (reflected in the purpose or research questions of the study) to guide methodological choices.

Embedded or nested designs give priority to one of the methods which is used to guide the project, while another is embedded or "nested." The purpose of the nested method is to address a different question aside from the dominant research question or to seek information from different levels.

Triangulation designs employ two or more methods to confirm, cross-validate, or corroborate findings within a study. Data collection is concurrent and both methods are used to overcome a weakness in using one method with the strengths of another.

Source: *Best practices for mixed methods research in the health sciences (Creswell et al., 2011)*

Creswell suggests that the basic designs – convergent, explanatory and exploratory can be embedded within more advanced designs – intervention, transformative and multiphase (Creswell, 2013). The objectives of this research were to develop and test the feasibility of a preventative universal school-based intervention in preparation for a future effectiveness trial. Therefore, it was proposed that the research would involve an on-going process of development and adaptation that would happen throughout the feasibility study. For example, quantitative research instruments would be developed and tested in preparation for capturing statistical evidence of impact in a future study. These would be tested for appropriateness with

participants and adapted where necessary. Implementation of the intervention would be evaluated alongside, and adaptations made according to qualitative research outcomes. It was therefore decided that a multiphase approach would be appropriate.

Quantitative data were used to answer some of the research questions specified for the feasibility study (see objectives, Section 1.1i) by measuring aspects such as alcohol experience, attitudes towards drinking and levels of self-esteem and psychological wellbeing before and after the intervention. Quantitative data alone, however, would not capture all the necessary information, for example relating to motivation and behavioural intention, neither would it provide the necessary information to evaluate feasibility according to the process evaluation criteria: fidelity, dosage, quality, responsiveness, evaluation, adaptation and impact. Qualitative data were required to evaluate these aspects. This research study was accordingly structured using a convergent parallel design constructed as a multiphase model (*Figure 4.1*). Using this design, both qualitative and quantitative data could be collected throughout the course of the feasibility study (including during implementation of the intervention) informing adaptations and developments to the intervention, programme delivery and survey measures as the study progressed.

Figure 4.1 Study design
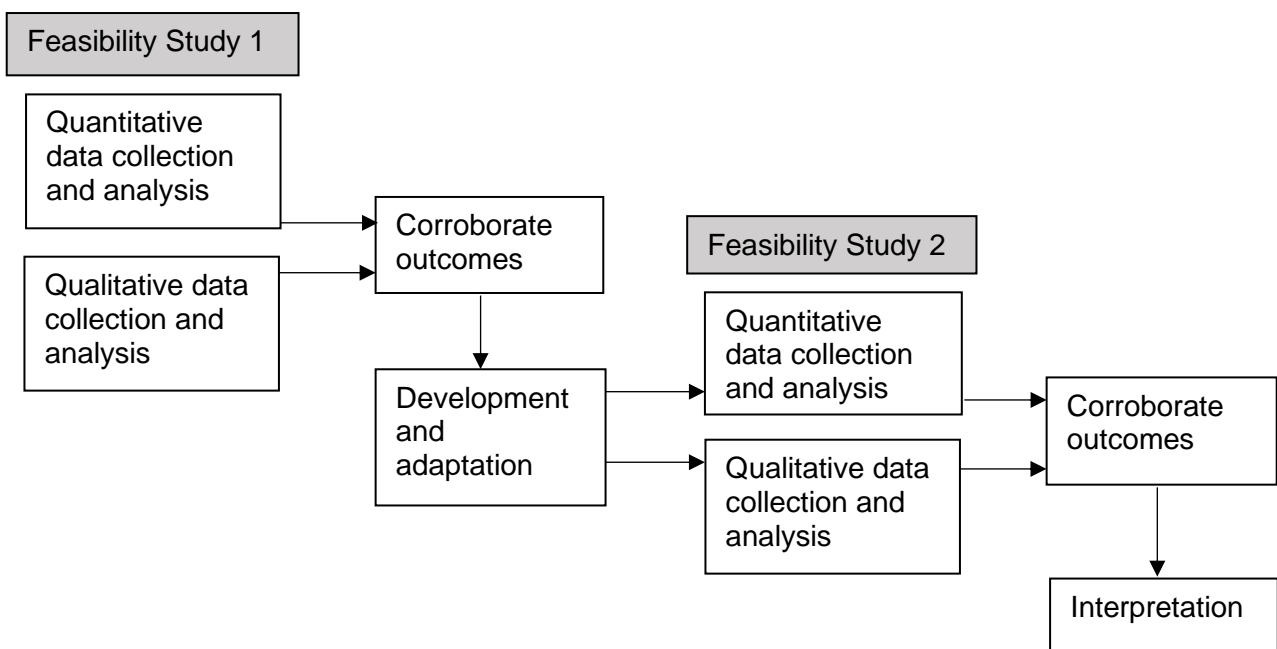
A quantitative survey was developed to provide descriptive information about the participants, such as their experiences of and attitudes towards alcohol and their level of psychological wellbeing. Interview and observation data explored other aspects of the study, such as implementation issues and participant engagement with the programme. The intervention programme was delivered over a six-week period during which time observation data were collected. The survey was used to collect quantitative data before and after delivery of the intervention and interview data were also collected afterwards.

Quantitative and qualitative data were analysed independently (as is usual practice for the convergent design). In part, this was because they addressed different elements of the research objectives (Section 1.1). Where applicable, however, common themes across the different data sets were compared to corroborate and further explain findings. Following the first stage of feasibility testing (FS1), the research instruments and intervention programme were adapted according to the outcomes of the evaluation. This was followed by a second stage of testing (FS2) in which an adapted version of the intervention and the research measures were implemented and evaluated according to the objectives specified in Section 1.1ii. Data analysis across the different data sets, across the contexts within each study and across the two phases of the research were viewed for comparison.

The researcher was involved to varying degrees in all applications of the intervention, which were not conducted in isolation and at some points in time were being implemented concurrently. This facilitated a more holistic and interactive approach to the research, allowing opportunities to share emerging ideas, issues and developments with the school staff participants as well as allowing school staff and students to feed back to influence the study design, preparation, data collection and analysis. The process applied at all stages of the research, both within and between schools and also across phases of data collection.

4.2ii Reflexivity

Qualitative research methods have often been criticised for lacking scientific rigour, a common accusation being that studies lack scientific objectivity and are susceptible to researcher subjectivity and bias (Freshwater, 2005; Rolfe, 2006). Consequently, it is good practice to reflect upon the role of the researcher in the process and their

potential for introducing bias into the study. Reflexivity is a means by which validity and trustworthiness can be reinforced within qualitative research studies and hence has become an established feature in this type of research (Banister, Burman, Parker, Taylor, & Tindall, 1994; Berger, 2015). The reflexive stance recognises that knowledge is co-constituted between the researcher and the research participants and is a product of their relationship. Meaning is 'negotiated' and formulated through the researcher's interaction with the participants within their social context. The researcher is situated as a central figure who is actively involved in constructing the collection, selection and interpretation of data (Finlay, 2003). Reflexivity is described as *"a challenge to conventional ideas of science which favour professional distance and objectivity over engagement and subjectivity"* (Finlay, 2003, p. 5) and acknowledges the importance of *"self-in-relation-to-others".* It is important to clearly state the researcher's position in relation to the research, in terms of their motivations, interests and attitudes, their experiences and pre-conceptions that they bring to the research and that may impact on all aspects of the work from establishing the research agenda, the aims, objectives and study design to influencing the outcomes. Reflexivity accepts that the research findings are shaped by the individual researcher and that a different researcher may unfold a different story from the same research context. It is, therefore, important to offer a high degree of transparency in this respect, reflexivity implies that the researcher *"make visible their individuality and its effects on the research process"* (Gough, 2003, p. 23) revealing any subjective factors that may interfere or bias the research outcomes. This process requires *"critical self-reflection of the ways in which the researchers' social background, assumptions, positioning and behaviour impact on the research process"* (Finlay, 2003). The approach is helpful, not only in terms of justifying the research findings but the continual monitoring and auditing of the research process (Finlay, 2003) also provides a complementary mechanism by which to inform the methodology.

Reflexivity should be a process of continual internal dialogue and critical self-evaluation in recognition of the fact that researcher position may affect the research process and outcome (Bradbury‑Jones, 2007). Researcher position can include personal characteristics including gender, race, age, sexual orientation, social background, personal experiences, beliefs, biases, theoretical, political and

ideological stances and emotional responses to a participant (Berger, 2015; Bradbury‑Jones, 2007). Berger (2015) describes how this positioning can impact on research: i) gaining access to the 'field' as respondents may be more willing to share their experiences with a researcher they perceive as sympathetic to their situation; ii) shaping the researcher-researched relationship which may affect the information that participants are willing to share; and iii) the researcher's background affects the way they construct their view of the subject, their use of language, the way they pose questions and interpret meaning to shape findings and conclusions (Berger, 2015). The researcher should therefore monitor such effects *'accounting for researcher values, beliefs, knowledge and biases'* (Cutcliffe, 2003, p. 137) to enhance the accuracy and credibility of their research. In terms of reflexivity, different types of researcher relationship should also be considered: when the researcher shares the experience of study participants; when the researcher moves from the position of an outsider to the position of an insider in the course of the study; and when the researcher has no personal familiarity or experience with what is being studied (Berger, 2015).

4.2iii Researcher position

As discussed in the previous section, reflexivity is a highly relevant component in qualitative research whereby the instinct and trustworthiness of the researcher are important factors. The researcher position should therefore be considered as a central role in relation to this research and the corresponding motivations, attitudes and experiences that the researcher brings to the work must be recognised.

Much of my previous research experience has been rooted in an interpretivist paradigm. Investigation has often been explorative and interactive (Thanh & Thanh, 2015) and has involved me spending time in a context, working with and getting to know participants.

I have worked in the field of educational research as a Research Associate (formerly Research Assistant) for over twenty years on a range of studies, many of which focused on aspects relating to educational disadvantage: *Removal of Spare Bedroom Subsidy (Bedroom Tax)* exploring the impact of bedroom tax on children, families and education (University of Manchester, Pilot Research Study); *Evaluation of the Pupil Premium* (Department for Education); *The From Boys to Men Project*

(ESRC Impact Acceleration grant) dissemination of research into why some boys become perpetrators of domestic violence; *The Rights of Undocumented Migrants* (ESRC Impact Acceleration grant); and several intervention evaluations aimed at supporting schools with more deprived cohorts commissioned by the Education Endowment Foundation including: *ReflectEd Meta-cognition: An approach to improving learning skills using digital technology*; *Talk of the Town process evaluation*; and the *FRIENDS Programme: An evaluation of academic and emotional health outcomes*. This work has given me insight into the UK education system and an understanding of the challenges faced, particularly by those in the more disadvantaged locations. Consequently, I have become increasingly concerned by the evident inequities in English society which are explicit within the education system. Through my involvement in many varied research projects I feel privileged to have witnessed the inspirational work of numerous people including school teachers, educational psychologists, family support workers, social workers as well as academics and other professionals working to support schools and to better understand the learning needs of pupils in our schools. I therefore strive through this research to make some contribution towards improving the health and educational outcomes of young people.

Alongside the practicalities of fieldwork, I have become aware of the importance of collaborative work and particularly, linking health and education. Since largely the same social determinants predict both health and educational outcomes, it therefore makes sense to target both areas simultaneously.

This insight resonates with my own experiences of researching in schools, whereby significant challenges faced by school educators stem from problems in the home and often relate to health issues, as well. For example, the headteacher of a Pupil Referral Unit in Greater London, told me that the majority of pupils excluded from schools and referred to her unit were subsequently found to be experiencing significant issues relating to their home circumstances that had not been identified by their original school. A secondary academy in Greater Manchester described a high prevalence of issues experienced by pupils in their home backgrounds. In a cohort where over three quarters were eligible for the Pupil Premium, almost two thirds (60%) of pupils were known to have more than one significant issue to contend with

at home – the list included domestic violence, depression, teenage pregnancy, substance abuse, bereavement and neglect.

Other studies, such as the *From Boys to Men Project* (Gadd, Corr, Fox, & Butler, 2013) in which the research team conducted life history interviews with the perpetrators of serious violence, revealed the damaged childhoods experienced by these 'criminals' – they were in most cases both victim and perpetrator – their adverse childhood experiences gave them the worst chances in life, leading them to struggle within the education system and unable to negotiate society more broadly. There is research that evidences the link between social disadvantage, educational disengagement and likelihood of substance abuse/risk taking (Castellanos-Ryan & Conrod, 2012) which is of relevance in this study.

The implications of my previous work experience on this research study should be taken into consideration. I did not conduct this work from a purely independent, impartial stance being sensitive to the contexts and issues that are the focus of this study. I have therefore tried to maintain an awareness of how I, as researcher, might be affecting the research.

In terms of my researcher position, I am female, white British and from a more advantaged social background than most of the student participants in my research. I come to this research with my own biases, derived in part from my previous research experiences as previously described. I do not consider myself to be particularly disadvantaged in society despite being a woman, however, perceive the world as unjust and ruled by inequality. I want to make a difference and am passionate about the intervention that I have developed. Hence, I acknowledge that my personal investment in this work influences my perceptions and impacts on my research. I am therefore aware that I must take measures to attempt to view the research more objectively.

Various measures are suggested for maintaining a reflexive approach such as, conducting repeated interviews with the same participants, prolonged engagement, members checking, triangulation, peer review, forming of a peer support network and back talk groups, keeping a diary or research journal for 'self-supervision', and creating an 'audit trail' of researcher's reasoning, judgment, and emotional reactions (Berger, 2015; Bradbury‑Jones, 2007). Therefore, to try to ensure a more objective

outlook to this research I took the following measures. Firstly, I was able to develop a prolonged relationship with all the participating schools. I visited all three schools on numerous occasions (for the duration of the intervention implementation in Schools B and C, with additional visits for meetings and interviews; I visited School A many more times before, during and after the intervention programme). I conducted several interviews (both formal recorded and informal) with staff, particularly in School A, as well as meetings, intervention planning, development and evaluation sessions and teacher training sessions. I believe that this level of engagement meant that I was able to develop my position as researcher from that of 'outsider' to 'insider', consequently building a level of trust with the participants that would encourage more honest and open discussions about the research.

As a means of validifying my interpretation of the interview data, samples of text were coded by members of my supervisory team. Interview transcripts, from both FS1 (3 interview transcripts, coded by two members of the supervisory team) and FS2 (3 interview transcripts, coded by one member of the supervisory team) were double or triple coded. In both cases, there was agreement over the accuracy of the interpretation and coding.

I also kept field notes throughout the research process, however, these weren't particularly focussed on my researcher position. In future studies, I could improve on reflexivity by making greater use of note-taking by cataloguing details of the processes of thoughts, responses and decisions throughout the research process.

4.2iv Process Evaluation

In testing the feasibility of a complex intervention, the MRC recommend using a process evaluation to ensure a thorough investigation of all the components of the intervention and its evaluation (Moore et al., 2015). They provide a framework for conducting and reporting process evaluation studies and their key recommendations for designing and conducting the process evaluation (*Table 4.3*) were used to inform this study. The first two recommendations - to describe the intervention and clarify causal assumptions; and to identify potential questions - were addressed through the literature review, theoretical framework (Chapter 2.0) and intervention development (Chapter 3.0). The third recommendation – to select a combination of methods appropriate to the research questions – will be addressed in this chapter.

In addition to the MRC guidelines, there are a number of other approaches to conducting a process evaluation recommended in the literature which generally outline the same key purposes. This includes, for example; to test the feasibility of the intervention; and to calculate the necessary sample size for a larger study – in general, the purpose being to enhance the likelihood of success (Evans, Scourfield, & Murphy, 2015; Saunders, Evans, & Joshi, 2005; Thabane, Ma, Chu, Cheng, Ismaila, Rios et al., 2010). Van Teijlingen and Hundley's (2002) approach was selected to use alongside the MRC framework as, whilst covering the broader areas for investigation as outlined in other approaches, their checklist provides a detailed and comprehensive structure to conducting the process evaluation (described in Section 4.3i).

Table 4.3 Key Recommendations for Process Evaluation: design and conduct

<div style="border:1px solid black">

- Clearly describe the intervention and clarify causal assumptions (in relation to how it will be implemented, and the mechanisms through which it will produce change, in a specific context.
- Identify key uncertainties and systematically select the most important questions to address
  Identify potential questions by considering the assumptions represented by the intervention
  - Agree scientific and policy priority questions by considering the evidence for intervention assumptions and consulting the evaluation team and policy or practice stakeholders
  - Identify previous process evaluations of similar interventions and consider whether it is appropriate to replicate aspects of them and build on their findings
- Select a combination of methods appropriate to the research questions:
  - Use quantitative methods to measure key process variables and allow testing of pre-hypothesised mechanisms of impact and contextual moderators
  - Use qualitative methods to capture emerging changes in implementation, experiences of the intervention and unanticipated or complex causal pathways, and to generate new theory
  - Balance collection of data on key process variables from all sites or participants with detailed data from smaller, purposively selected samples
  - Consider data collection at multiple time points to capture changes to the intervention over time.

</div>

Source: *Process evaluation of complex interventions: Medical Research Council guidance* (Moore et al., 2015).

The research objectives (Section 1.1ii) also sought insight regarding the interaction between various components of the intervention, the possible influence of contextual factors and the underlying processes (MRC, 2008; Grant et al, 2013). Humphrey et

al outline the key dimensions of and factors affecting implementation (*Table 4.4*), this framework was used as a reference for interpreting the qualitative data analysed in this study (Chapter 7.0).

Table 4.4 Key dimensions and factors affecting implementation

1. **Fidelity/adherence** – the extent to which implementers (eg teachers) adhere to the intended treatment model.
2. **Dosage** – how much of the intended intervention has been delivered and/or received
3. **Quality** – how well different components of an intervention of delivered
4. **Reach** – the rate and scope of participation
5. **Responsiveness** – the degree to which participants engage with the intervention
6. **Programme differentiation** – the extent to which intervention activities can be distinguished from other, existing practice
7. **Monitoring of control/comparison groups** (in a trial context) – determination of the 'counter-factual' (eg that which is taking place in the absence of the intervention)
8. **Adaptation** – the nature and extent of changes made to the intervention

Source: *Implementation and process evaluation (IPE) for interventions in education settings: A synthesis of the literature* (Humphrey et al., 2016).

The long-term purpose of the intervention is to reduce anticipated future alcohol consumption, measurable from long-term follow-up data in a larger study. The intervention was designed to instigate changes (intermediate outcomes), as described in the theoretical framework (*Figure 2.21*), the cumulative impact of which should lead to reduced alcohol consumption in the future. Due to the intervention's complexity in seeking to address a range of components including; self-esteem and psychological wellbeing, to increase self-efficacy and encourage intrinsic motivation as a means of influencing attitudes and inspiring healthy behaviours, there are many steps that contribute to the final behavioural outcome. These steps (or intermediate outcomes) can be viewed as indicators of change that lead towards the desired outcome. Whilst the purpose of this feasibility study was not to measure behaviour change, one element of the design was to explore indications of the potential impact of the intervention. A *Theory of Change* model (Laing & Todd, 2015) has been used to clarify the evaluation process (*Figure 4.2*) and to identify the stepping stones of change that might indicate that the intervention is impacting in the expected way

(according to the causal assumptions outlined in the theoretical framework (*Figure 2.21*)) that will contribute to the longer-term aim.

Figure 4.2 The Evaluation Process

Evaluation The steps towards achieving the intended outcomes		
Process	**Knowledge Acquired**	**Action**
What is the problem?	- Adolescent alcohol misuse - Associated risks both short- and long-term - Implications: cost to society, NHS	- Literature review - Stakeholder engagement
What needs to change?	- Future behaviour (alcohol consumption – measured as quantity & frequency) - Attitude towards alcohol - Self-esteem and wellbeing	
How will changes happen?	- Information sharing - Awareness raising - Social norms - Inspire aspiration - Develop self confidence - Encourage intrinsic motivation - Improve self-esteem/wellbeing - Strategies/skills development	- Six-week class-based intervention - Motivational Interviewing approach - Role play scenarios
What are the expected (intermediate) outcomes?	- improved knowledge and awareness of alcohol and the associated risks and consequences - developed skills to communicate with peers and enact resistance strategies - improved confidence, self-esteem and wellbeing - established goals and aspirations for future - established healthy drinking norms - developed awareness of support networks and sources of information	- Attitude and experiences survey - Interviews with pupils, parents and teachers - Observations – formal in class, informal in school
What are the longer-term outcomes?	- Behaviour change (reduction in alcohol consumption/abstinence compared with national trajectory, measured as quantity and frequency) - Sustained attitude change	Follow-on effectiveness trial

Source: Adaptation of model from *A Theory of Change* (Laing & Todd, 2015).

4.3 The Final Research Design

Two phases of feasibility testing were conducted, as illustrated in (***Figure 4.3***), the details of which are described in the following sections. Feasibility Study 1 (FS1) (Section 4.3i) was constructed with two main objectives (Section 1.1i):

1. To develop and adapt an evidence-based universal school-based intervention that:
    i. provides information and raises awareness about the risks associated with alcohol misuse (to inspire healthier attitudes towards drinking)
    ii. helps individuals to improve their self-esteem and psychological wellbeing to enable them to be confident in taking responsibility for their own behaviour
    iii. encourages individuals to have the motivation and self-confidence to consider and moderate their future alcohol consumption (whether or not they are already drinking)
    iv. provides strategies to help individuals carry out their intentions regarding their future alcohol consumption

2. To assess the feasibility of delivering the intervention in a mainstream (state-funded) secondary school setting as part of the compulsory school curriculum.

Developmental work on the intervention was conducted with teachers involved in FS1 both prior to and during the delivery of the intervention. Outcomes from FS1 informed adaptations of the research instruments, the intervention delivery and to the intervention itself. Feasibility Study 2 (FS2) (Section 4.3iv) was then conducted with three main objectives (Section 1.1ii):

1. To assess whether the revised intervention could be implemented in different school settings with varying contextual factors, such as the delivery model, staff support and class size.

2. To identify any key 'active' components evident within the intervention.

3. To explore how the intervention might be improved for future application to increase its impact and relevance for schools.

Figure 4.3 Research Study Design

```
┌─────────────────────────────────────────────────┐
│              Feasibility Study 1                  │
│                 Spring 2016                       │
└─────────────────────────────────────────────────┘
```

School Ai:
"Ganymede Academy"

Fully resourced and supported model

- Staff involved in development work
- Teacher delivered intervention
- Class of 28 pupils
- Signed parental consent

School B:
"Europa Academy"

Limited support model

- Researcher delivered intervention
- Group of 8 pupils
- Signed parental consent

Objectives:

i. Intervention development
ii. Process evaluation

```
┌─────────────────────────────────────────────────┐
│              Feasibility Study 2                  │
│                 Spring 2017                       │
└─────────────────────────────────────────────────┘
```

School Aii:
"Ganymede Academy"

Adapted model for full cohort roll-out

- Staff adaptation of intervention
- Trained teachers delivered intervention
- Four classes (180 pupils)
- Parental 'opt out' consent

School C:
"Callisto High"

Semi-supported model

- Teacher delivered intervention with researcher directing
- Class of 18 pupils
- Parental 'opt out' consent

Objectives:

i. Adaptability to different contexts
ii. Active components
iii. Future application

4.3i Feasibility Study 1

The initial feasibility study, conducted in the spring term of 2016 (January to April), was constructed as a mixed methods design. The components from van Teijlingen and Hundley's checklist were applied to the feasibility study objectives (*Table 4.5*). A combination of quantitative and qualitative research methods were used to answer these objectives, as indicated in Table 4.5.

Table 4.5 Feasibility Study Objectives

Component	Research application	Quantitative	Observation	Interviews
■ Developing and testing adequacy of research instruments	The research instruments had previously been validated, their appropriateness for this study when compiled into one survey document and feasibility in terms of being completed by the sampled pupils was tested – were the questions phrased in appropriate language? Length of time needed to complete? Ease of delivery in school?	✓	✓	✓
■ Assessing the feasibility of a full-scale study or survey	Was it feasible to implement the intervention – did it run as anticipated? Were there any school-related issues with implementation? Ability to minimise disruption to the school.		✓	✓
■ Designing a research protocol	A research protocol was prepared by the researcher prior to the study in the form of a research timetable (Table 4.7) and study schedule (Table 4.8)			
■ Assessing whether the research protocol is realistic and workable	Did the research protocol work? ie informing participants, obtaining consent forms, delivering surveys, scheduling interviews		✓	
■ Establishing whether the sampling frame and technique are effective	Schools were purposefully recruited for this feasibility study according to their contextual profiles to represent the more socially disadvantaged cohorts		✓	
■ Assessing the likely success of proposed recruitment approaches	Assessing recruitment rates according to parental 'opt-in' vs 'opt out' methods of consent, was it possible to recruit enough participants?	✓	✓	
■ Identifying logistical problems which might occur using proposed methods	Could the study be delivered as planned according to the proposed method? What logistics would be most challenging? How might these be overcome?		✓	✓
■ Estimating variability in outcomes to help determining sample size	Assess appropriate sample size for a future large-scale study	✓		

Component	Research application	Quantitative	Observation	Interviews
■ Collecting preliminary data	Collecting preliminary data involving a quantitative survey at the start of the intervention implementation and qualitative data in the form of researcher notes from meetings with staff and observation notes from intervention sessions	✓	✓	✓
■ Determining what resources, such as finance or staff, are needed for a planned study	What resources were necessary? Printed materials: participant information sheets, consent forms, surveys, classroom materials, instruction sheets. School resources: staff, space and time to deliver the intervention.		✓	✓
■ Assessing the proposed data analysis techniques to uncover potential problems	Testing out the proposed data analysis techniques to see assess whether there were any issues with the data collection? Missing data, invalid responses	✓		
■ Developing a research question and research plan	The research question and plan were prepared prior to the study – did they work or do they need to be revised?		✓	
■ Training a researcher in as many elements of the research process as possible	Training teachers to deliver the intervention employing the motivational interviewing principles – was it feasible to deliver training sessions in school? was enough time available? were all staff available for training? was training adequate?		✓	✓
■ Convincing other stakeholders that the main study is worth supporting	Schools must be convinced that the intervention is worth implementing for them to agree to participate in the study		✓	✓

Only components of relevance to this study have been included from the checklist.
Source: *The Importance of Pilot Studies* (van Teijlingen & Hundley, 2002).

The quantitative approach involved compiling a research instrument, the *Attitudes and Experiences Survey* to answer the first objective established for FS1 (Section 1.1i). The survey was tested for its appropriateness for a future study in terms of its suitability for the age of the pupils and ease of completion, as indicated in Table 4.5, and to test the data analysis techniques. The development of this survey is explained in Section 4.5. Pupils participating in the study completed the survey, both before and after the six-week intervention. The survey provided descriptive data on pupils' behaviours and attitudes towards alcohol for comparison with national trends, alongside their levels of wellbeing and demographic information. Quantitative data collected from the schools provided information about the number of children invited

to take part, the number who participated in the intervention classes and those who could be included in the evaluation (ie with signed parental consent).

Qualitative data were also collected, in the form of observation notes and recorded interviews, to provide information regarding fidelity and delivery of the intervention as outlined in Table 4.5.

4.3ii Sample Design

In qualitative research, it is common practice for an investigator to purposefully select individuals and research sites that can provide the necessary information to answer their research question. Purposeful sampling in this context means that researchers intentionally select (or recruit) participants who have experiences of a central phenomenon or key concept being explored in the study (Creswell & Clark, 2011). Accordingly, fifteen schools were purposefully sampled from the Greater Manchester area and invited to participate in FS1. The risks of alcohol misuse are greater in areas of significant socio-economic deprivation, and young people from more disadvantaged backgrounds would be most likely to benefit from the intervention (Erskine et al., 2010; PHE, 2015). Therefore, schools in the most deprived areas (those in the first decile on the Index of Multiple Deprivation) were targeted for recruitment.

The researcher used a targeted approach to sampling and recruitment, taking advantage of existing working relationships with schools and professional contacts to improve recruitment rates. The final sample consisted of two secondary academies who volunteered to take part, their profiles are described in Table 4.6. Both schools ranked in the first decile on the Indices of Multiple Deprivation and reported similar levels of pupil eligibility for free school meals (FSM) and for pupils who have been eligible for free school meals in the last six years (Ever 6) (indicated by bold highlighting in Table 4.6).

Schools and localities are unique, so despite selecting schools with similar socio-economic profiles, there were inevitable contextual differences between the sampled schools. School B had a larger ethnic mix than School A, for example (reflected in their % English as an Additional Language (EAL)). The research was not designed to explore specific demographics, such as ethnicity, culture or religion, but variation between the schools was explored in relation to the data analysis.

Table 4.6 Sample contextual profile

Variable	FS1 & FS2	FS1	FS2
	School A[1]	School B[1]	School C[2]
Age range	11-19	11-19	11-19
No of pupils on roll	532	853	786
% Special Educational Needs (SEN)	8.5	11.3	12.7
% English as an Additional Language (EAL)	**9.4**	**24.3**	**4.1**
% eligible for Free School Meals (FSM)	**47.4**	**42.6**	**39.0**
% eligible for FSM in the last 6 years (Ever 6)	80.8	73.5	67.8
% Absence	5.6	6.4	6.1
% 5+ A*-C GCSE (inc English and Maths)	51.0	36.0	36.0
% Eng Bacc	14.0	12.0	n/a
% GCSE equivalent	59.0	48.0	42.0
Local Authority ave % GCSE	51.4	51.4	55.3
National ave % GCSE	53.4	53.4	63.0
Rank on IMD[1]	**146**	**280**	**4,031**
Income Rank	323	540	5,453
Employment Rank	310	766	4,994
Health Deprivation and Disability Rank	29	382	468
Education Skills and Training Rank	238	644	4,421
Barriers to Housing and Services Rank	5,248	5,468	19,722
Crime Rank	4,722	882	9,156
Living Environment Rank	16,837	17,482	10,877

1. Index of Multiple Deprivation, 2015 (out of 34,753 Super Output Areas where 1 indicates most deprived)
2. Data for academic year 2014-15.
3. Data for academic year 2015-16.
Figures in bold highlight the main socio-economic indicators.

The successful recruitment of two schools and different circumstances encountered in each setting allowed the opportunity to explore different implementation models within FS1. School A (given the pseudonym *"Ganymede Academy"*) was enthusiastic in offering the opportunity for the researcher to carry out developmental work on the programme in consultation with staff prior to the intervention delivery. They also provided excellent staff resources throughout the programme, as well as a class of participants and adequate time and space to deliver the intervention. Hence, this was considered a *"fully resourced and supported model"* providing optimised

conditions for the research (*Figure 4.3*). School B (given the pseudonym *"Europa Academy"*) despite their willingness to support the research, struggled to provide any staff assistance. This school setting was therefore characterised as a *"limited support model"* (*Figure 4.3*). The contrasting circumstances encountered in the two schools resulted in the testing of two implementation models: firstly, the intervention being delivered by a trained teacher supported by the researcher and secondly, the researcher delivering the programme unsupported. Ultimately, to ensure sustainability of the programme, it is important to test whether the intervention can be delivered by trained teachers; however, in FS1 it was valuable for the researcher to test the intervention delivery in person under ideal conditions (ie as envisaged by the researcher with a full understanding of the intervention theory).

Once schools were recruited, the link teacher in each case was asked to select one mixed ability class to participate in the study, the school contexts are summarised as follows:

School A: "Ganymede Academy" – *a fully resourced and supported model*
School staff were involved in helping to develop and adapt the initial version of the intervention. The programme was delivered by a trained teacher with support from an experienced drama teacher and a sixth form pupil in a mentoring role. A class of 29 pupils were specifically selected by the school to participate on the basis that they might benefit from this type of programme – they had not been put together as a class previously. The researcher attended all sessions in a supporting role and to observe the intervention delivery. Ethical approval was given for parental signed 'opt in' consent.

School B: "Europa Academy" – *limited support model*
School staff were not available to support the intervention implementation. Space was provided in school to deliver the programme, which was facilitated by the researcher alone. Ethical approval was given for parental signed 'opt in' consent. A self-selected sample of nine pupils was recruited. The researcher was invited to 'canvas' for volunteers by talking to all the year 7 classes. Those who were interested in participating had to take a participant information pack home and return with parental signed consent before taking part.

4.3iii Research Protocol

A research timetable was prepared in readiness for FS1 (*Table 4.7*). This protocol determined the intended plan for delivering and evaluating the intervention, with a corresponding timescale. Part of the process evaluation was to assess whether this protocol worked in terms of informing participants about their involvement in the study, obtaining signed consent forms, the delivery of surveys and the scheduling of interviews (*Table 4.5*).

Table 4.7 Research Timetable

Action	Timetable
Approach school with invitation to participate – by email (allow at least two weeks to respond)	Several months prior to intervention delivery
Follow-up non-respondents with telephone call – resend email if required	Several months prior to intervention delivery
Visit school contact to discuss requirements of the study, obtain signed organisation consent to participate	Several months prior to intervention delivery
Teacher training (minimum one-hour session, more as required)	During the half term prior to intervention delivery
Host parental engagement sessions at school (where possible)	During the half term prior to intervention delivery
Send out letters, participant information sheets and consent forms to parents	At least two weeks prior to intervention delivery
Intervention delivery over six weeks of half term	
Survey collection – pre-intervention	Week 1
Request pupil volunteers for interview	Week 4
Send out letters, participant information sheets and consent forms to parents – inviting them for interview	Week 4
Survey collection – post-intervention	Week 6
Interviews	Week 6 or start of new half term

4.3iv Feasibility Study 2

The outcomes from FS1 informed a follow-on study, FS2. The exploratory nature of the mixed methods approach employed in FS1 lead to the further development of the intervention, the delivery model and adaptation of the survey measures.

FS2 conducted in the spring term of 2017 (January to June), was again constructed as a mixed methods design. Modified versions of the intervention and evaluation measures were prepared for delivery in schools. Teacher training materials were also developed so that teachers could implement the programme in the absence of support from the researcher. Teachers received training during the autumn term of 2016 and the spring term of 2017. FS2 examined the intervention in greater detail, testing the developments and adaptations resulting from FS1 in two school contexts. FS2 also examined whether school staff could be equipped to deliver the intervention effectively and assessed the likely resourcing implications for a future roll-out of the intervention.

4.3v Sample Design

The sampling strategy was to target recruitment across the North West region of England and specifically the Greater Manchester area. Schools in the more socially disadvantaged locations were targeted for participation. It can be challenging to recruit schools to take part in research projects as demands on their time and resources increase. Therefore, the sampling process incorporated several approaches intended to maximise recruitment as follows:

- **Healthy Schools, Manchester**

The researcher hosted a workshop in Manchester, funded by the Economic and Social Research Council (ESRC) as part of their Festival of Social Science designed to promote the research to academics, schools and members of the public. It was also hoped that this event would help with the recruitment of schools for the forthcoming stage of fieldwork. Preparation for the workshop led to a contact with the Health Improvement Specialist (Drugs and Alcohol) from the Manchester Healthy Schools Programme, who unfortunately could not attend the workshop but was interested in the research. Healthy Schools agreed to help with recruitment by promoting the research across their network of schools (approximately 80% of schools across Greater Manchester are registered with Healthy Schools). In addition, Healthy Schools offered to host an engagement/recruitment event, working in collaboration with the Alcohol Education Trust (AET), which was finally scheduled for 23 May 2017. The event was planned to promote the research directly to an audience of mainstream and EBSD (Emotional, Behavioural and Social Disorders)

schools and also for the AET to promote their work. Unfortunately, there was a very poor response to the event, likely due to the timing, and it was subsequently cancelled. One school did express an interest but failed to respond when invited to participate.

- ***Direct contact with schools***

181 secondary schools and academies in the Greater Manchester area were contacted by email and invited to participate in FS2. Initially schools in the Manchester, Salford and Tameside metropolitan authorities were targeted. Due to the lack of response, the invitation was widened to include Oldham, Trafford and Stockport, followed by Kirklees and Calderdale. These local authorities were specifically targeted to be within reasonable travelling distance for the researcher, who lives in Kirklees. It should be noted that the Greater Manchester schools invited to participate in this study, had already been contacted with the invitation to attend the ESRC workshop. Follow-on reminder emails were also sent to all schools. One school volunteered to take part in the research (School C). One school responded to decline the invitation but commented that the intervention work was of interest to them. However, having already taken on a number of different research projects at that time they didn't have the capacity to be involved.

- ***Targeted contact with schools***

Specific contacts were also called upon to help with recruitment, including:
  - An ex-civil servant and nationally regarded educational consultant who provided four specific contacts with schools who it was felt would value the intervention work proposed by this study. Three contacts sent positive responses to the invitation to participate, but in each case, upon further pursuit (usually when the contact had delegated the negotiations to another colleague) there was no take-up.
  - The regional representatives for the Teaching School Council for the North West and Yorkshire & Humberside regions. The representative for Yorkshire & Humberside responded immediately and circulated a request to all the schools in her area. She also recommended two specific school contacts, neither of whom replied to the research invitation. The governor from one school, who is also a National Leader of Governance, responded suggesting

the names of several schools who he felt might be interested in the work, this resulted in the recruitment of School E. A further school in response to the original request from the Teaching School Council, also volunteered to participate (School F).

In September 2017, prior to the recruitment procedure conducted for FS2, School A had announced that they would be rolling out the intervention programme across the whole of their new year 7 cohort (8 classes). This involved them adapting the programme to dovetail with their planned PSHE programme, which presented the opportunity to explore fidelity issues. They volunteered to continue their involvement in the research and were characterised as an *"adapted model for full cohort roll-out"* (*Figure 4.3*). To distinguish between the different stages of involvement in the research, the school (Ganymede Academy) is labelled Ai in reference to FS1 and Aii for FS2. The other school recruited for FS2, School C (given the pseudonym Calisto High School) provided a teacher to deliver the programme and space for the intervention to take place. The contextual profile of School C is summarised in Table 4.6. This setting is characterised as a *"semi-supported model"* (*Figure 4.3*) as the level of support and commitment was considered minimal compared to School A. The schools provided contrasting contexts in which the intervention could be further tested (see the individual pen portraits in Section 7.2).

Recruitment for FS2 resulted in the samples of participants described in the following school context summaries:

School Aii: "Ganymede Academy" – *adapted model for full cohort roll-out*
Following FS1, the school elected to embed the intervention into their PSHE curriculum the following academic year and roll it out across the whole of their new year 7 cohort. The researcher supplied teacher training and materials to the staff delivering the programme, however was not involved in the adaptation of the intervention. The school were happy to participate in the evaluation of the intervention which provided the opportunity to explore matters of fidelity that would likely arise in the future roll-out of the programme post-evaluation. Ethical approval was given for parental 'opt out' consent and four classes (120 pupils) were included in the evaluation. (Half of the cohort were timetabled to coincide with the scheduled research timetable, the other

half received the intervention in the autumn term but could not be included in the evaluation as ethical approval had not yet been granted).

School C: "Callisto High" – *semi-supported model*
Senior leadership were in support of the intervention. The head of year 7 was timetabled to deliver the programme alongside the researcher and a member of staff was allocated to provide behavioural support (she attended two sessions), but no time was allocated for teacher training. A class of 23 pupils were specifically selected by the school to participate on the basis that they might benefit from this type of programme – they had not been put together as a class previously.

4.4 Ethics

When conducting research it is necessary to consider the ethical implications of the study. This study was designed to test the feasibility of implementing a school-based intervention to influence changes to pupil wellbeing, attitudes towards alcohol and alcohol consumption. The participating schools signed up to deliver the intervention as part of their Personal Social Health and Economic Education (PSHE) curriculum, therefore consent from pupils and parents was not required for participation in the classroom learning activities, as the schools have responsibility for their curriculum content. The study, however, sought to evaluate the intervention which involved participants (pupils and teachers) completing surveys, classroom observations and interviews. The recipients of the intervention were children, aged 11-12 years, therefore it was essential that they understood their involvement in the evaluation. Parents also needed to be aware that their children would be taking part in a research study and what that would entail. The subject focus of the intervention, being on alcohol and its associated risks, was also potentially sensitive, therefore participants needed to be assured of confidentiality. Prior to taking part in the research, informed consent needed to be obtained from all participants. Participants all received detailed information regarding their involvement in the research, informing them of how data would be collected from them and how it would be used and stored. Teachers signed a consent form and pupils gave their assent (in writing for taking part in a recorded interview, assumed consent in the case of survey completion – if they didn't wish to take part they could leave their survey blank). In

the case of parents, two types of consent were considered: the 'opt in' method in which the parent had to give their signed consent for their child to take part in the evaluation; and the 'opt out' method in which parents could sign to withdraw their child from taking part in the evaluation. The application of these two methods are discussed in the follow sections, each feasibility study employing a different method of obtaining parental consent.

4.4i Feasibility Study 1

An ethics application was submitted to the university ethics review committee to proceed with FS1. The initial application proposed a parental 'opt out' method of consent on the basis that participants would not be placed at significant risk through their involvement in the study. It has been usual practice to use the 'opt out' method of consent in school-based studies of this type (Fox, Corr, Gadd, & Butler, 2014; Sumnall et al., 2017). It was posited that school leadership, as the gatekeepers of child safety, would not consent to the research study if they believed it presented any risks for the pupils involved. If they agreed to the delivery of an intervention that is designed to benefit the most vulnerable children amongst their cohort, their guidance should arguably be sought regarding consent procedures, both for reasons of best practice but also to maximise participation. It would be counterproductive to conduct the research if parental consent could not be obtained for the very children who are the focus of the research. Furthermore, the Economic and Social Research Council (ESRC) Framework raises the question of whether adult approval is appropriate in certain research contexts:

> *"Researchers should consider whether mature children can confirm consent without adult approval, for example there may be circumstances where seeking consent from parents could jeopardise the research (for example, in research into teenage sexuality or alcohol use). In such circumstances, researchers will need to regard the potential risk to the principal participants of the research as a priority."* (ESRC, 2015, p. 32).

In December 2015, the committee granted permission to proceed with this feasibility study, scheduled for the spring term of 2016. All documents including participant information sheets and consent forms necessary for the fieldwork were approved. (Appendix V). The final approved protocol accepted that pupils would all participate in the intervention as part of their school's compulsory curriculum, under the authority of School Leadership, in most cases this would be embedded within PSHE

lessons. However, as a condition of ethical approval, in order for pupils to participate in the evaluation of the intervention – the survey and interviews – the committee stipulated that pupil assent was required and parents were also required to actively opt in to the study by providing informed (signed) consent for their children to take part. The implications that this had for the study are evaluated in Section 5.2iv.

The ethical protocol for FS1 specified that all research participants in all schools be provided with participant information at least two weeks before the start of the study. They should be invited to discuss their involvement and ask questions before signing an 'opt-in' consent form to confirm their participation (teachers) or the participation of their child (parents). In the case of pupils, completion of the survey was taken as their assent – they were informed beforehand of the voluntary nature of the evaluation and that if they did not wish to participate they could leave their survey blank or alternatively request that it be withdrawn from the sample at a later date (up to one month after the end of the study). Pupils were required to give their written assent prior to being interviewed.

4.4ii Feasibility Study 2

An application for ethical approval was submitted to the University of Salford Ethics Review Committee for FS2. The application included a report, citing evidence from FS1, putting forward the case for allowing a parental 'opt out' clause in the next phase of the research (Appendix V, *Discussion paper on opt out consent*). The committee responded requesting a small number of minor amendments, before giving approval to proceed with the next stage of research employing the parental 'opt out' method of consent. This was a most encouraging outcome in terms of increasing the potential for success in FS2. Apart from the change in the method of parental informed consent from 'opt in' to 'opt out' the remaining ethical protocol remained the same as detailed for FS1.

4.4iii Feasibility Study Schedule

In the case of both FS1 and FS2, once participants had given their assent or consent according to ethical requirements, the study proceeded as outlined in Table 4.8.

Table 4.8 Feasibility Study Schedule

> ### At the start of intervention – during the first session
>
> Pupils complete the screening survey (Appendix VI: *The Attitudes and Experiences Survey*) to identify their attitudes towards and experiences of alcohol and their risk-taking characteristics as well as wellbeing/self-esteem indicators.
>
> Pupils take part in a Q-sort (see use of Q Method below) designed to explore their perceptions of alcohol and of their own wellbeing at the start of the intervention. This information, along with the survey data used to inform the grouping for some of the class activities.
>
> ### During the six-week programme
>
> Class-based sessions, applying the principles of motivational interviewing, delivered weekly (by the researcher in one treatment school and by a trained teacher in the other treatment schools) and involved helping pupils to recognise their own strengths and to build up their confidence and self-esteem. Pupils encouraged to think about their future direction, to explore aspects which may help or hinder them in their progress and to discuss possible routes to achieving their goals. Alcohol used as an example of a potentially risky behaviour. Pupils explore the effects of alcohol using role play in various hypothetical scenarios and encouraged to develop avoidance and self-management strategies.
>
> ### At the end of six weeks
>
> Pupils complete the questionnaire relating to their wellbeing/self-esteem, their decision-making capability and their attitudes towards and experience of alcohol (designed to measure any changes following the intervention in a future study). Interviews held with pupils, teachers and parents to explore opinions of their involvement in the intervention, including their willingness to engage with the programme (both pupils and teachers); and to identify possible modifications and any indicative or potential impacts of the intervention.

4.5 Outcome measures

The 'active' mechanisms within the intervention outlined in the theoretical framework (*Figure 2.21*) were designed to impact on pupils' wellbeing, their attitudes and motivations towards alcohol and ultimately their future alcohol consumption (behaviour). It would be necessary to measure changes to these aspects in a future effectiveness study, therefore the development and testing of measurement tools were required. The survey was compiled from existing validated measures as

described in the following section. In addition, contextual and biographical information was collected for comparison purposes, to assess how the sample of pupils compared with the national averages and to understand something of their social situation and experiences regarding alcohol.

4.5i Attitudes and Experiences Survey

This survey was compiled to gather biographical, contextual and attitudinal information and to measure the impact of the intervention according to the components identified in the theoretical framework (*Figure 2.21*). The survey questions and their sources are summarised in Table 4.9 and their selection is discussed in the following paragraphs.

Section A (Experiences) started with a very common question (Q1) used in many alcohol studies *"In the last three months have you ever used any of the following … alcohol (full drink not just a sip), cigarettes, recreational drugs"* (McKay, Konowalczyk, Andretta, & Cole, 2017; Phillips-Howard, Bellis, Briant, Jones, Downing, Kelly et al., 2010; Wells, Morgan, Worrell, Sumnall, & McKay, 2018). Section A incorporated items sourced from the ONS, 2012 (Q2-4) and the Understanding Society Survey (Q8-11) (ONS, 2014), for the purpose of national comparison, comprising questions about young peoples' experiences of alcohol (including alcohol consumption, the key measure for behaviour change for a future effectiveness study). This is a biennial national survey of secondary school pupils in England aged 11-15 years which captured the views of 13,664 teenagers in 2018 (NHS Digital, 2018b). It is suggested that sharing family meals (Q9) can be a protective factor against substance use/abuse (Eisenberg, Neumark-Sztainer, Fulkerson, & Story, 2008) and is associated with positive academic and behavioural outcomes (Larson, 2008). However, there is mixed research evidence to support these claims. Miller et al (2012) reported no significant relations between family meal frequency and either academic or behavioural outcomes in a study of 21,400 children aged 5-15 (Miller, Waldfogel, & Han, 2012); however, more recent research evidence suggests that sharing family meals at age 6 can have long-term influences on children's biopsychosocial well-being at age 10 (Harbec & Pagani, 2018). Based on this evidence, Q9 was included in the survey.

Questions to gather insight on family and social dynamics (Q5-7) were adapted from The North West Study of Teenagers, an alcohol survey used by Trading Standards North West (Bellis, Hughes, Morleo, Tocque, Hughes, Allen et al., 2007). This survey has been used in alcohol studies with over 50,000 school children (Bellis et al., 2007; Bellis et al., 2010; Bellis, Phillips-Howard, Hughes, Hughes, Cook, Morleo et al., 2009a).

Table 4.9 Selection of survey items

Attitudes and Experiences survey item	Question type	Source	Validity	References
Section A: Experiences				
Q1: Use of alcohol, cigarettes, e-cigarettes and drugs	Categorical	Commonly used in alcohol studies	Commonly used in alcohol studies	(McKay et al., 2017; Phillips-Howard et al., 2010; Wells et al., 2018)
Q2: Have you ever drunk alcohol (a full drink, not just a sip)?	Yes/No	ONS (2012)	Biennial survey of secondary school pupils in England aged 11-15 years N=13,664 (2018)	(NHS Digital, 2018b)
Q3: When did you last drink alcohol?	Categorical During the last week – more than six months ago			
Q4: How often do you usually drink?	Categorical Almost every day – only a few times a year			
Q5: Who do you drink with?	Unordered Categorical	Trading Standards North West, Alcohol Study	Ongoing biennial process established by Trading Standards in 2005 14-17 years N=10,271 (2005) N=9,833 (2010)	(Bellis et al., 2007; Bellis et al., 2009a)
Q6: Where do you drink?	3-point Likert scale Never - sometimes			
Q7: Experience of alcohol-related problems	Unordered Categorical			
Q8: Relationship/ communication with parents/guardians	Ordered Categorical	ONS Measuring National Wellbeing: Children's Wellbeing, 2014 (British	Annual national household survey of 40,000 homes	(University of Essex & Economic Research, 2017)

Attitudes and Experiences survey item	Question type	Source	Validity	References
Q9: Evening meals eaten with family in past 7 days	Most days – hardly ever Ordered Categorical None – 6-7 times	Household Panel Survey, part of the Understanding Society Survey since 2009)	Data collected through face-to-face interview or self-completed on-line survey. 10-15 year olds complete a youth survey 16+ year olds complete an adult survey	
Q10: What do you think about school?	5-point Likert scale Strongly agree – strongly disagree	Q10 & 11 also used in the Canadian Health Survey on Children and Youth (2019) and NW Study of Teenagers		
Q11: How often do you get bullied at school? (Physically/in other ways)	Not much – a lot			
Section B: Feelings				
Q12: Wellbeing	10 Scored items	YP-CORE	N=700 12-17 year olds Cronbach's alpha = 0.81 N=1,269 11-16 year olds Cronbach's alpha = 0.80	(O'Reilly, Peiper, O'Keeffe, Illback, & Clayton, 2016) (Twigg, Cooper, Evans, Freire, Mellor-Clark, McInnes et al., 2016)
Section C: Characteristics				
Q13: Confidence	5-point Likert scale Strongly agree – strongly disagree	NW Study Teenagers (an amalgamation from questionnaires used in alcohol, sexual health and wellbeing studies)	N=5,000 11-19 year olds	(Phillips-Howard, Madden, Mason, Kelly, Briant, Bellis et al.)

Attitudes and Experiences survey item	Question type	Source	Validity	References
Q14: Sensation seeking	5-point Likert scale Strongly agree – strongly disagree	Brief Sensation Seeking Survey The items were chosen for their high loadings on four factors that emerged from analyses of the SSS-V and for their appropriateness for adolescents. An advantage of this measure for many researchers is that neither alcohol nor drug use is mentioned in the items.	Study 1 N= 1,263 13-17 year olds Internal consistency of the eight item set was 0.76. Study 2 N= 6,368 12-18 year olds Coefficient alpha is 0.74	(Hoyle, Stephenson, Palmgreen, Lorch, & Donohew, 2002)
Section D: Attitudes				
Q15: Attitudes towards drinking	5-point Likert scale Strongly agree – strongly disagree	Youth Life-Styles Inventory (YLSI)	N=1,050 12-14 year olds	(McDonald & Towberman, 1993; Towberman & McDonald, 1993)

Section B comprised The Young Person's Clinical Outcomes in Routine Evaluation (YP-CORE) (Q12) (Appendix VII) (Twigg, Barkham, Bewick, Mulhern, Connell, & Cooper, 2009), a well-established, validated measure widely used by health practitioners in the UK to capture insight into young peoples' sense of wellbeing (Cooper, Pybis, Hill, Jones, & Cromarty, 2012; O'Reilly et al., 2016; Twigg et al., 2009; Twigg et al., 2016). The measure was found to have good reliability (Cronbach's alpha = 0.81) in a study of 700 12-17 year olds, good reliability was also reported across age groups and gender (Cronbach's alpha ranged from 0.74 to 0.78) (O'Reilly et al., 2016). A study of 1,269 11-16 year olds, reported that the YP-CORE satisfies standard psychometric requirements for use as a routine outcome measure for young people (Cronbach's alpha = 0.80). Good reliability was reported for four subsamples 11-13 year olds and 14-16 year olds by gender (Cronbach's alpha exceeded 0.71 in all cases) (Twigg et al., 2016).

The YP-CORE was based on the CORE-OM (Clinical Outcomes in Routine Evaluation – Outcome Measures), a widely used, validated 34-item survey designed to measure a 'core' of adults' global distress (Barkham, Mellor-Clark, Connell, & Cahill, 2006; Crawford, Robotham, Thana, Patterson, Weaver, Barber et al., 2011; Evans, Connell, Barkham, Margison, McGrath, Mellor-Clark et al., 2002). The CORE-OM has four broad domains: subjective wellbeing (4 items); commonly experienced problems/symptoms (12 items); life/social functioning (12 items); and risk to self or others (6 items) – all domains reported Cronbach's alpha of <0.95 in both clinical and non-clinical trials (Evans et al., 2002). The YP-CORE was developed for use with young people aged 11-16 years old and was thus a simplified, shortened version of the CORE-OM with 10-items that maintained the same overall domain structure: one risk item, one subjective wellbeing item and four items from each of the symptoms/ problems and functioning domains.

A range of other measures were considered, for example the Strengths and Difficulties Questionnaire (SDQ) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Some of the measures are designed for use in clinical settings to target more 'severe' cases and some are quite lengthy to complete, therefore were not considered appropriate for use this school-based study. The compiled survey needed to be easy enough for 11-year olds to complete and not too lengthy and

therefore time-consuming to complete. The SDQ and YP-CORE are the two measures perhaps most frequently used for the evaluation of young people, particularly in the field of counselling (Cooper, 2009). The YP-CORE, as a measure of wellbeing was selected in favour of self-esteem measures for consistency with the literature references used as the foundation for this research which tended to use the broader measure of wellbeing (PHE, 2015; The Children's Society, 2018; UNICEF, 2013) rather than on self-esteem as a component of wellbeing.

Section C brought together The Brief Sensation Seeking Survey (BSSS) (Q14) (Hoyle et al., 2002) with item cases from the NW Study of Teenagers to gather information on the pupils' sensation seeking tendencies (Q13). This information was used to explore correlations with other items on the survey, for example to see whether sensation seeking tendency related to alcohol consumption and/or attitudes towards alcohol. Sensation seeking is a proven risk factor and a potent predictor for certain problem behaviours, including alcohol misuse (Stephenson, Hoyle, Palmgreen, & Slater, 2003; Zuckerman, 1994). The BSSS, a self-report measure of sensation seeking, was developed for use with adolescents and was based on the Sensation Seeking Scale – V (SSS-V) (Zuckerman, Eysenck, & Eysenck, 1978). There have been various other adaptations of the SSS-V for children, but the BSSS is the most robustly validated and widely implemented in numerous fields/research studies. The internal consistency of the 8-item measure (Cronbach's alpha) was reported as 0.76 in a study of 1,263 13-17 year olds; and 0.74 in a study of 6,368 12-18 year olds (Hoyle et al., 2002). Hoyle et al (2002) also found that BSSS scores inversely correlated with negative attitudes towards drug use and positively with drug use. BSSS was evidenced as a strong predictor of intention to try marijuana in the future (Stephenson, Velez, Chalela, Ramirez, & Hoyle, 2007). The SSS-V is structured into four dimensions of sensation seeking: experience seeking; boredom susceptibility; thrill and adventure seeking; and disinhibition. The BSSS retains this overall structure, each domain being represented by two items (*Figure 4.4*). An advantage of this measure for many researchers is that neither alcohol nor drug use is mentioned in the items.

Figure 4.4 Brief Sensation Seeking Scale (BSSS) Domains and Items

---

Experience seeking
I would like to explore strange places.
I would like to take off on a trip with no pre-planned routes or timetables.

Boredom susceptibility
I get restless when I spend too much time at home.
I prefer friends who are excitingly unpredictable.

Thrill and adventure seeking
I like to do frightening things.
I would like to try bungee jumping.

Disinhibition
I like wild parties.
I would love to have new and exciting experiences, even if they are illegal

---

Section D consisted of 7 items adapted from Part B of the Youth Life-Styles Inventory (YLSI) (Q15) which measured pupils' attitudes towards alcohol including their perceptions of parental and peer attitudes towards drug and alcohol use (McDonald & Towberman, 1993; Towberman & McDonald, 1993).

4.5ii Q-Sort

Q-methodology allows the subjective measure of perceptions (Cross, 2004). Participants were presented with a set of cards containing statements relating to their experience and attitudes towards alcohol and their sense of wellbeing, which they were be requested to 'sort' according to levels of agreement and disagreement. This technique allows self-classification rather than researcher-imposed definition.

4.5iii Interview data

Three teachers were interviewed in School Ai – the Assistant Headteacher with responsibility for Safeguarding, the PSHE teacher who delivered the intervention and the Teaching Assistant (former Assistant Headteacher and Drama teacher) – and four pupil volunteers (two boys and two girls).

Interviews were conducted with five pupil volunteers in School B (four boys and one girl). No teachers were directly involved with implementation of the intervention in this school, so the only appropriate person to interview was the Assistant

Headteacher who had consented to the intervention trial on behalf of the school, but to date she has not been available for interview.

In School Aii, two teachers responsible for delivering the intervention were interviewed, one of them (a newly qualified teacher, NQT) delivered the programme to two classes. A focus group interview was conducted with four pupil volunteers (two boys and two girls).

The Assistant Headteacher, Director of Children and Family Services in School C was interviewed (also representing the views of the teacher involved with delivery of the intervention). Two pupil focus group interviews were conducted with seven pupils (two boys and two girls in one; two boys and one girl in the other).

Interviews were conducted using semi-structured schedules (Appendix V) and lasted approximately 30 minutes.

4.5iv Observation data

Throughout the research process, the researcher kept a journal of observations notes. Notes were taken following any interactions with participants, including formal and informal meetings, conversations, classroom sessions and teacher training sessions. These records documented the events and interactions that occurred as the research progressed and captured a range of information, including; the researcher's perceptions of participants' behaviour, such as how pupils responded to the intervention activities; teachers' responses to the training; contextual details mentioned by members of staff; information about survey completion times; what aspects of the intervention seemed to work well in the classroom; and ideas for ways in which the intervention might be improved. The notes were analysed to inform aspects of the process evaluation and to support some of the findings from analysis of the interview data. Memory alone is not a reliable source of information, especially after a lapse of time, so the notes ensured that the details of the researcher's thoughts and impressions were captured and could be accurately reported.

4.6 Data Processing

4.6i Quantitative data

All survey responses were manually entered into Microsoft Excel computer software according to a pre-designed coding frame (eg gender 1=female, 2=male etc) before

being imported into SPSS statistical software. The first stage prior to analysing the data was to check for errors. Simple frequency tables and descriptive statistics were used to check that the minimum and maximum values for each variable were within the allowable or expected range according to the coding frame. Frequency distributions were also assessed to see whether variables recorded a normal distribution. Missing data and outliers were inspected to ensure that coding errors hadn't occurred and to anticipate likely explanations.

Once the descriptive data had been thoroughly examined and any data entry errors or inconsistences amended, new variables were calculated as follows:

Age in months: Using date of birth and survey completion date, the age of participants was calculated in months using the SPSS date and time Wizzard, for both the pre-intervention and post-intervention surveys.

Alcohol-related problems: The question on alcohol-related problems (Q7) required pupils to indicate whether they had experienced a range of specific alcohol-related problems, this could either be their own experience or something they experienced happening to someone else. The response rate by sub-category (eg self, parent, sibling, friend) was very small, therefore, cumulative variables were computed for any reported experience (personal or affecting someone else) according to each category of alcohol-related problem as follows:

- experience of someone who couldn't remember what happened;
- experience of someone fighting or getting injured;
- experience of someone being in trouble with the police;
- someone getting grounded for drinking;
- any experience of an alcohol-related problem.

Wellbeing: The overall wellbeing score was calculated by adding together the component variables (Q12i – Q12x) - this included three items that were reversed and scored accordingly (Q12iii *I've felt able to cope when things go wrong*, Q12v *there's been someone I felt able to ask for help*, and Q12x *I've done all the things I wanted to do*). The maximum score is 40 and higher scores are indicative of lower wellbeing. In the clinical setting, scores of 25 and above are considered 'severe' (see Appendix VII).

4.6ii Qualitative data

Interviews were conducted with 18 individuals, as described in Section 4.5iii. All interviews were audio recorded and transcribed by the researcher. Any names mentioned in the transcribed interviews were substituted with pseudonyms and any names quoted in this thesis or any other published reports are pseudonyms. Other information contained in the transcripts that might lead to the identification of the schools involved or any of their personnel, for example teachers, pupils and parents, was similarly either removed or anonymised.

4.7 Data analysis

4.7i Quantitative data

Chi Square was used to test for associations between potentially predictive categorical variables and the binary dependent variable (ever drunk alcohol, Q2). Independent T-tests were used to analyse the continuous variables against Q2 and to compare the means for those pupils who have consumed alcohol against those who have not. The results are shown in Section 6.3.

Correlations between wellbeing score (Q12) and the ordinal variables (Q8 family relationships, Q9 meals eaten with family, Q10 relationship with school, Q11 bullying and Q13 personal characteristics) were tested with Spearman rank correlation coefficient and the relationship between wellbeing score and the continuous variable mean sensation seeking score (Q14) was tested using Pearson's Correlation (**Table 6.18**).

4.7ii Qualitative data

Interview data were analysed to explore how the intervention impacted on the participants, both in school and at home. Thematic analysis (Braun & Clarke, 2006; Braun, Clarke, & Terry, 2014) was selected as the method for analysing the interview material from the feasibility study, as this offers a means of *"systematically identifying, organising, and offering insight into patterns of meaning (themes) across a data set"*. This method is appropriate because it enables the researcher to *"make sense of collective or shared meanings and experiences"* and to identify and make sense of commonalities across a range of data sources, in this case interviews with teachers and pupils involved in the implementation of the *It's My Life: Staying in*

Control intervention. Thematic analysis also reveals patterns of meaning that help to answer specific research questions, but in an exploratory way that other qualitative approaches of analysis, such as grounded theory, discourse analysis, narrative analysis or phenomenology, tend not to employ. This method also offers a more simplistic approach to analysing qualitative data and was selected over the perhaps more thorough approach offered by Framework Analysis, in part due to the small number of interview transcripts available for analysis.

Braun and Clarke's Six Step Approach to thematic analysis (Braun et al., 2014) was used in the process of analysis, as follows:

Phase 1: Familiarising yourself with the data
The researcher designed the study and conducted all the interviews herself; she transcribed her own recordings and was therefore very familiar with the data. She also visited the schools on many occasions, so had a good knowledge and understanding of the school environment and the relevant contextual issues present within the catchment area.

Phase 2: Generating Initial Codes
The transcripts were read through several times and an initial set of codes were generated. The codes were adapted and re-coded as each transcript was analysed to establish a coding scheme that represented the whole data set. Samples of text were also double or triple coded by members of the supervisory team to establish agreement over the accuracy of the interpretation and coding.

Phase 3: Searching for Themes
The codes were then grouped into themes which related quite specifically to the process evaluation headings. In terms of more exploratory analysis, different themes might have been assigned, for example, there was interesting data relating to the community context which can be further explored in the future.

Multiple codes can be assigned to any part of the transcripts (Maguire & Delahunt, 2017). The themes are coded A-E and the sub-themes are numbered 1a, 1b, etc within those themes. If the coded subject is mentioned, for example if the interviewee mentions the student-centred nature of the intervention, or comments on the Q-sort activity, then that section of text has been allocated the relevant code – 1a for the

former example, 1g for the latter. The coding process was first conducted manually and then the final codes were entered into NVivo. This means that code categories can be revisited in the future and re-coded with greater nuance should this be useful.

Phase 4: Reviewing Potential Themes

The analysis process was inductive and generated themes that reflected the process evaluation criteria outlined by Humphrey et al (*Table 4.4*) (Humphrey et al., 2016) and corresponded to the questions set out in the Feasibility Study objectives (Section 1.1).

Phase 5: Defining and Naming Themes

The main themes identified relate to the process evaluation criteria (*Table 4.4*) and sub-themes defined within the main themes relate to components identified in the theoretical framework (*Figure 2.21*) and the feasibility study objectives (*Table 4.5*). The themes and sub-themes are labelled to reflect these components and are explained and illustrated in detail in Chapter 7.0.

Phase 6: Producing the Report

The descriptive output from the qualitative data analysis has been synthesised to inform the results that are presented in the next chapter.

The findings from the data analysis are detailed in Chapters 5.0, 6.0 and 7.0. Chapter 5.0 presents the findings based on observation notes from the feasibility studies. Chapter 6.0 presents the quantitative data analysis derived from the pre- and post-intervention surveys. Chapter 7.0 presents the qualitative data analysis derived from the interview transcripts. This chapter also incorporates data from the observations (formal and informal) where applicable to further illustrate the emergent themes.

4.8 Summary

This research focused on the development and evaluation of a complex multi-component intervention and presented a range of methodological challenges that are discussed in this chapter. The MRC framework (Moore et al., 2015; MRC, 2008) recommended that a process evaluation was a necessary part of testing the feasibility of the intervention. Guidelines suggested by Van Teijlingen and Hundley

(2002) were used to inform the process; their checklist provided a detailed list of components that should be considered. The strength of this approach was that it ensured all aspects of the process evaluation were covered.

A mixed methods design was selected to answer the process evaluation criteria in response to the feasibility study objectives. The collection of a combination of qualitative and quantitative data was necessary for this purpose, as outlined in Table 4.5. A convergent, parallel, multiphase approach allowed for the on-going development and evaluation of the intervention across the two stages of feasibility testing. It also meant that findings from the two research arms could be corroborated, as illustrated in Figure 4.1. This approach was employed in order to maximise the strengths and minimise the weaknesses of the research.

There were considerable challenges in conducting this research, namely in obtaining ethical approval and in the recruitment of schools. Both aspects presented potential weaknesses for the research. For example, the initial application for ethical approval had resulted in a requirement for parental 'opt in' consent, which as discussed in Section 4.4, meant that most of the participants were excluded from the evaluation, possibly those from the more disadvantaged homes. Similarly, the recruitment of schools may have impacted on the research outcomes, as only those willing to engage with the research volunteered to participate. These are common issues to address in this type of research and should be taken into consideration during the interpretation of outcomes.

A final aspect of the research design that may be considered a potential weakness is the researcher's position in relation to the research context and participants. Consequently, it was considered important that the researcher state their position in relation to the research, to be aware of their influence on the research and to offer as much clarity as possible throughout the process. It is also important to note that the relationship developed between the researcher and the research participants may also be considered a strength. The significant investment of time and effort afforded by a researcher in a particular research context may yield more insightful responses as a result of the relationships developed.
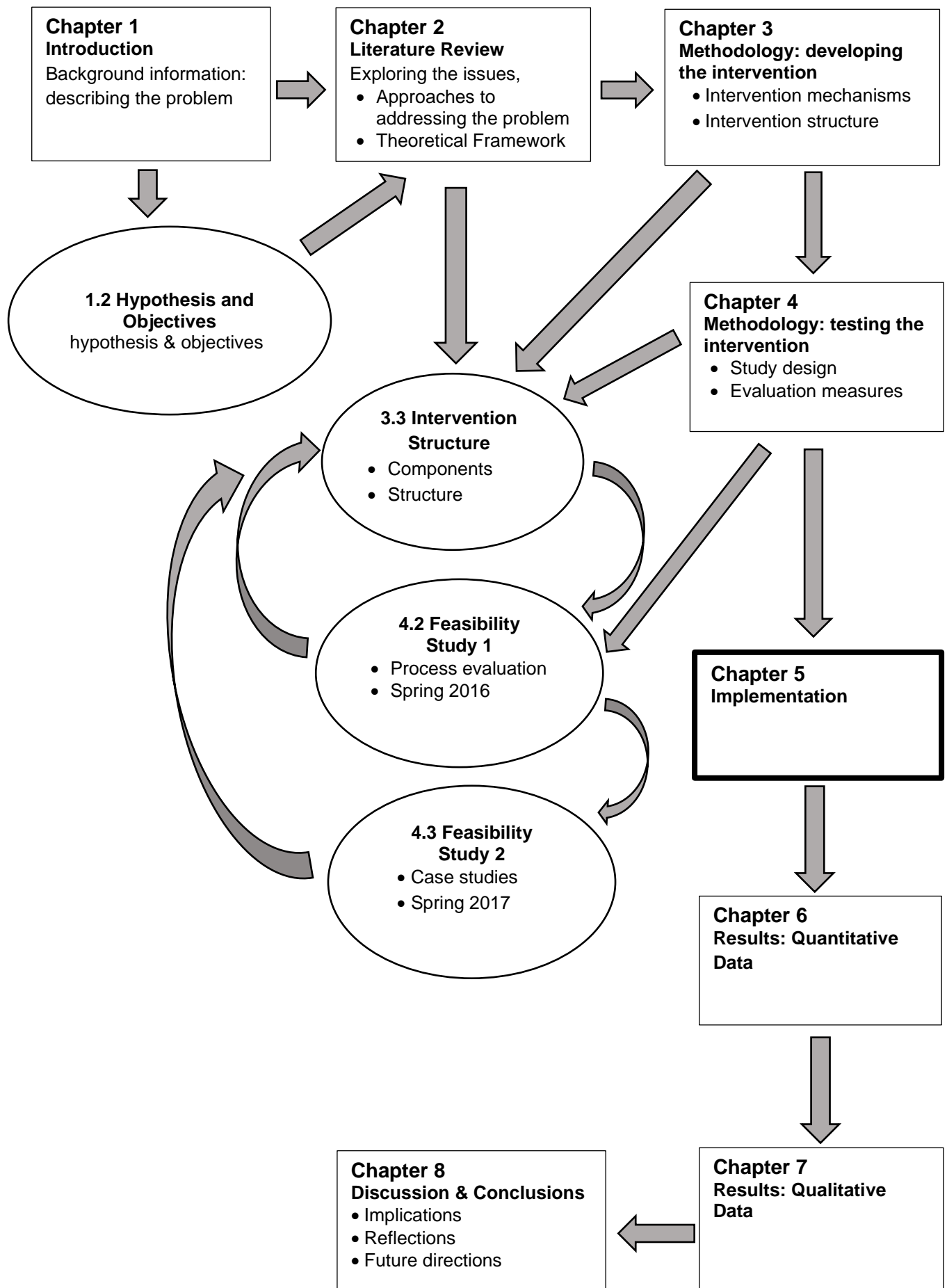
Chapter 5 Implementation

5.1 Introduction

The process evaluation was designed according the MRC Framework (Moore et al., 2015; MRC, 2008) and guidelines suggested by Van Teijlingen and Hundley (2002) and Humphrey et al (2016) were used to inform the procedure. As described in Chapter 4.0, a mixed methods approach, involving the collection of a combination of quantitative and qualitative data (interviews and observation notes), was used to answer to the research objectives specified in Section 1.1. Observation notes, drawn from a range of sources (classroom observations, meetings and staff engagement activities) were made by the researcher throughout the research process (before, during and after implementation of the intervention) and have been used to inform this chapter. Findings are presented according to the components identified in Van Teijlingen and Hundley's checklist of feasibility study objectives (*Table 4.5*) which have been grouped under the following broad headings:

Recruitment and engagement

- Assessing the likely success of proposed recruitment approaches
- Convincing stakeholders that the main study is worth supporting
- Establishing whether the sampling frame and technique are effective

Data collection

- Developing and testing adequacy of research instruments
- Collecting preliminary data

Implementation

- Developing a research question and research plan
- Assessing whether the research protocol is realistic and workable
- Identifying logistical problems which might occur using proposed methods
- Determining what resources, such as finance or staff, are needed for a planned study
- Assessing the feasibility of a full-scale study or survey

5.2 Recruitment and engagement

Assessing the acceptability and utility of the recruitment approaches is an important stage in process evaluation (*Table 4.5*) (MRC, 2008). The recruitment of schools and pupils to participate in the study is discussed in Sections 5.2i and 5.2ii; school

engagement, as part of the recruitment process, is discussed in Section 5.2iii; and the implications of ethical procedures on recruitment is discussed in Section 5.2iv.

5.2i Recruitment of schools

It was anticipated that schools would be interested in running the intervention, for the reasons outlined in Section 2.3. However, the reality of recruiting schools to participate in this research study proved more challenging than anticipated. The schools that volunteered to take part were indeed concerned about pupil wellbeing (as hypothesised when developing the rationale in Section 2.3) and this was an area that they were keen to address. However, only three schools responded out of fifteen that were approached for FS1. Recruitment was aided by calling upon professional links. One of the schools subsequently failed to participate in the study. In FS2, 181 schools were invited to participate, and professional contacts were again called upon to help with recruitment. As a result, three further schools volunteered to participate, but two of them, having received the intervention materials and training, subsequently failed to take part in the research. Having contacted the schools to check on progress with the intervention delivery, one responded that they were struggling to find the time to integrate the programme into their planning. The researcher sensed a lack of engagement with the training in the other school (a special school) and felt that the staff had not been convinced by the presentation. In both cases, responsibility for the intervention delivery was being delegated to teachers' already heavy workloads and whilst the senior leadership may have been committed to the programme, their colleagues may not.

5.2ii Pupil recruitment

Different approaches to pupil recruitment were used in each school. This was not planned in the research design but resulted from different circumstances. In School Ai and School C, following the specified protocol, the school contact was asked to nominate a class to participate in the intervention, however in both cases the senior leader selected pupils who they felt might particularly benefit from the programme. In each case the class comprised a selection of pupils who had not previously been grouped together as a class. However, School B, due to staff absences were unable to provide support for the intervention delivery and evaluation and failed to timetable a class to take part. The researcher was then invited to speak to each year 7 class,

informing them about the intervention and asking for volunteers who would like to participate.

In both recruitment models, the pupils seemed interested and excited about taking part in the intervention, which was something new and different from their regular curriculum and therefore had novelty value. In School B, 150 pupils volunteered to participate indicating an enthusiastic response.

5.2iii Convincing stakeholders that the main study is worth supporting

Before the schools agreed to participate in the research, the researcher made several contacts by telephone and email as well as visiting to discuss the intervention and the details of the study. Therefore, school engagement activity, which required a substantial investment of time, played a significant role in the recruitment of the schools for FS1.

The first school to engage with the research was not only keen to be involved but was prepared to provide school staff to support the study – this was School A who have been given the pseudonym *"Ganymede Academy"* (School Ai in FS1 and School Aii in FS2). They were highly co-operative in their response to the research and organised briefing meetings prior to FS1 in which the researcher was able to work with PSHE and drama staff to develop the intervention for classroom delivery. Meetings were conducted with the Head of PSHE and another member of the PSHE staff (nominated by the Assistant Headteacher to deliver the *It's My Life* intervention); and with the PSHE teacher and a drama expert.

The second school, School B, given the pseudonym *"Europa Academy"*, was also enthusiastic about participating in the intervention study. The senior leadership contact facilitated briefing meetings which were scheduled with members of the PSHE staff and the pastoral team to discuss implementing the intervention. However, due to sudden staff shortages, the school were unable to allocate any staff to support the intervention delivery. Therefore, given the circumstances, it was expedient for the researcher to implement the programme in this school.

The final school, School C, given the pseudonym *"Calisto High"*, was also keen to be involved in the study. At an initial meeting, the Assistant Headteacher explained that the intervention would be ideal in addressing their current wellbeing agenda. The

school seemed eager to accommodate the programme and timetabled a large classroom (suitable for the practical role play activities), an experienced teacher to deliver the programme and a behavioural support assistant. Due to timetabling constraints they were unable to supply a drama teacher and the teacher was not available to receive the intervention training. In this school, the teacher delivered the programme with the researcher alongside.

School engagement work is a valuable investment of time in that it facilitates the school recruitment process by convincing staff that the intervention is meaningful and of benefit to the school. An important part of this activity is also to demonstrate the professionalism and expertise of the academic researcher. In addition, an unpredicted outcome of the engagement meetings was the further development of the intervention, facilitated by School A, and their further involvement in the research (School A ii). Before implementing the programme of work, the proposed intervention needed to be planned more precisely to fit into the timetable and into the classroom context, a series of development meetings were conducted with teachers in School A.

5.2iv Ethical protocol

The schools all timetabled the intervention programme as part of their compulsory PSHE curriculum and pupils allocated to the intervention classes (in Schools Ai, Aii and C) were obliged to attend. School B was slightly different as pupils volunteered to participate. In either situation, however, the condition imposed by the ethical committee for FS1 (affecting Schools Ai and B) specified that the parental 'opt in' method of signed consent must be obtained for pupils to participate in the evaluation of the intervention (survey and interview) (Section 4.4). The ethical protocol proved to be a barrier in terms of pupil recruitment.

The schools involved in FS1 were briefed regarding the requirements to capture parental informed 'opt in' consent for all participants in the research. However, this was not executed as planned and out of 90 pupils anticipated for the first stage of feasibility testing (FS1), there were only 12 complete cases to analyse resulting from the two intervention schools.

School Ai initially disregarded the requirement for signed 'opt in' consent and the headteacher drafted her own letter to parents incorporating a parental 'opt out' clause – no objections were received from parents. A class of 29 pupils was nominated for the intervention which proceeded with the teacher delivering the intervention. Following researcher intervention, the class were requested to take letters home to their parents to ask them for their signed 'opt in' consent – three forms were returned. There were several requests for additional forms from pupils who had lost their letters. At the end of the intervention, nine pupils volunteered to be interviewed, but were informed that they would have to have signed parental consent in order to take part. The class were offered a prize draw raffle to all those who returned signed forms – two further forms were returned. Of the five pupils who ultimately returned signed parental consent, only four were present in the first lesson and had completed the pre-intervention survey. As a result, only four cases (those who had completed both the pre- and post-intervention surveys) were eligible for inclusion in the analysis as part of this study.

In School B, the link teacher failed to pass the participant information sheets and consent forms to his Personal Assistant for distribution in time for the scheduled intervention. No pupils had been selected to participate and no parents had received the information. The researcher was then invited to visit all the year 7 classes and speak briefly about the intervention trial to 'canvas' for volunteers. Pupils were invited to volunteer to participate and were instructed that they must get signed parental consent in order to take part in the evaluation component. They were given the relevant letters and forms to take home to for their parents to sign. Intervention delivery was then rescheduled for the following half term to allow time for parents to consider consenting to their child's participation. Out of the 150 pupils who took letters home, only 11 returned signed consent forms – and only 8 of these pupils were present in the first intervention class.

A third school recruited initially for FS1 commented on the difficulty in obtaining parental 'opt in' consent and were doubtful that they would get many responses. They subsequently failed to provide any completed student surveys or signed consent forms.

In preparation for the second phase of feasibility testing (FS2 involving schools Aii and C) ethical approval was granted for the parental 'opt out' method of consent. School Aii had elected to roll out the intervention to the whole of their new year 7 cohort and volunteered to participate in the next stage of the research. They had four classes available for the evaluation (120 pupils) – out of their cohort of eight classes, only half of the year group were timetabled for PSHE to coincide with the scheduled research (the other half were timetabled during the autumn term). School C selected a class of 23 pupils to take part in the intervention. The necessary letters and participant information sheets were distributed to parents two weeks prior to the scheduled intervention delivery. A total of 127 pupils took part in the evaluation of the intervention programme by completing surveys in FS2. Table 5.1 summarises the pupils recruited to participate in the intervention and evaluation according to school context.

Table 5.1 Participant recruitment

	Pupils in the intervention classes	Parental 'opt in' consent to participate in the evaluation	Parental 'opt out' - declining consent to participate	Pupils included in the evaluation	Complete datasets (both pre- and post-intervention surveys)
School Ai	29	5	n/a	5	4
School B	150[1]	11	n/a	9	8
School Aii	120[2]	n/a	2	109[3]	58[4]
School C	23	n/a	1	18	16
Total	**322**	**16**	**3**	**141**	**86**

1. All pupils in School B were invited to volunteer to participate, only 9 were able to participate.
2. Full year 7 cohort (4 classes) received the intervention.
3. Nine pupils declined to participate by leaving their surveys blank.
4. Reduced figure due in part to pupils being absent for either the pre- or post-intervention survey; and a batch of surveys from two classes were mislaid by the teacher.

5.3 Data collection

5.3i Developing and testing adequacy of research instruments

Survey measures to capture pupils' sense of wellbeing, their sensation seeking likelihood, their knowledge and experience of alcohol and their social context were selected and compiled into the *Alcohol and Experiences Survey* as described in the Methods Chapter 4.0 (see Appendix VI). The components of this research instrument were already validated (Hoyle et al., 2002; Stratford & Roth, 1999; Twigg et al., 2009) but their appropriateness for a future effectiveness study when compiled

into one survey document was tested along with feasibility in terms of being completed by the participating pupils. The survey was designed to serve two purposes: firstly, to assess the pupils' starting position, specifically whether they already had any experience of alcohol prior to the intervention classes; and secondly, to assess the feasibility of implementation for evaluation purposes. Analysis in a future effectiveness study would explore relationships between the variables, so tests were conducted to try out the analysis methods which included the production of descriptive outcomes for comparison with national statistics and exploring the dataset for anticipated statistical correlations.

All pupils participating in the intervention classes were asked to complete the survey at the beginning and end of the programme. In FS1, responses from the pre-intervention survey were used to inform some of the groups for the role play activities. For example, it was desirable to have at least one pupil with some experience or knowledge of the repercussions of heavy drinking, derived from question 7 (*Have you ever experienced any alcohol-related problems?*) in each group in order to enact both positive ('good' days) and negative ('bad' days) scenarios relating to alcohol consumption. The ethical application had specified that only researchers were able to see the personal data, therefore the use of data for class group work was not possible in FS2 where the intervention was delivered solely by teachers. In addition, only the survey responses completed by those pupils whose parents had provided informed signed consent were used in the actual evaluation of the intervention.

Testing the adequacy of the survey involved assessing: whether the questions were phrased using appropriate language for the pupils; the length of time needed to complete the survey; and the feasibility of delivering the survey in the school classroom context. The researcher was present for the administration of all pre- and post-intervention surveys in Schools Ai and B (FS1) and School C (FS2). This presented the opportunity to record observational data which included: specific questions and comments made by pupils and teachers regarding completion of the survey; information on survey completion times; and any logistical issues that arose.

In general, the language used in the survey questions was found to be appropriate. There were some queries over particular words, for example 'quarrel' in question 8,

which was subsequently replaced by the word 'argue'. There was also some confusion over the meaning of 'recreational drugs' in question 1, so the qualifying statement 'any drugs legal or illegal that are not taken for medical reasons' was added. In all schools, there were pupils with low levels of literacy who struggled to read and comprehend the questions. These pupils needed support in order to complete the survey. Staff in both schools confirmed that poor literacy presents a barrier to learning and is a constant struggle for certain pupils, who regularly need support. The teachers did not feel that the survey needed to be further simplified, but rather intimated that certain pupils would require some help.

Prior to the intervention delivery in FS1, the survey had been tested informally with the researcher's children (aged 8, 15 and 17) and survey completion time for the target population of 11-12 year olds was estimated at 10 minutes. However, due to varying levels of literacy in the FS1 classes, some pupils required considerably more time. The logistics of delivering the survey in the classroom were manageable, but additional time was necessary; in order to explain the ethical considerations; for handing out and collecting the survey after completion; and for helping students to understand questions and navigate the survey – those with particularly poor reading skills might even need to have the questions read for them. Survey completion in some cases took up to 30 minutes, leaving little time to complete the planned intervention activities for the week 1 session.

5.3ii Collecting preliminary data

As detailed in Chapter 4.0, quantitative data (in the form of the Attitudes and experience survey), qualitative data (comprising interviews with pupils and school staff) and observational data (both informal and formal) were collected in all four school settings across both feasibility studies. The main obstacle in collecting the survey data - obtaining parental consent proved problematic in all schools, particularly in FS1 resulting in extremely low survey response-rates (as discussed in greater detail in Section 5.2iv). However, this approach was subsequently challenged and for FS2 the ethical requirement for parental 'opt out' consent was granted resulting in a more successful recruitment rate (refer to Section 5.2iv). The findings, comparing the number of participants recruited from FS1 using parental 'opt in' (9%) and FS2 using parental 'opt out' (98%) support this conclusion (*Table 5.1*).

Aside from the requirement to obtain ethical consent which affected data collection in FS1, another data collection issue that could be addressed in a future study was that of parental engagement. It was proposed that interviews be conducted parent volunteers to obtain their views about the intervention and their child's participation in the programme. Invitation letters were sent to the parents of all pupils participating in the research and verbal reminders were also given to pupils. However, no parents responded.

Data collection, in general, was considered successful resulting in a matched sample of 86 pre- and post-intervention surveys and transcripts from 26 interviews (6 teacher interviews, 9 individual pupil interviews and 3 pupil focus groups). These data were analysed (as detailed in Chapter 4.0) and the results are presented in Chapters 6.0 and 7.0.

5.4 Implementation

5.4i Developing a research question and research plan

The research question for this research was derived from evidence presented in the literature review (Chapter 2.0) which highlights the trends in adolescent alcohol consumption and its associated consequences. The literature review also identifies the key risk factors for alcohol misuse including: poor parenting, lack of positive role models and low self-esteem. The schools involved in this research engaged with the intervention because they recognised the issues that are highlighted in the literature review as relevant to their socioeconomic context (and discussed in Section 7.3i). All three schools were located in areas of significant social deprivation and were already working to target social inequalities with various interventions and programmes. This confirmed that the research question was appropriate for the participants involved in this research.

5.4ii Assessing whether the research protocol is realistic and workable

The research protocol for this study consisted of a research timetable (Table 4.7) and a feasibility study schedule (Table 4.8). The research timetable itemised when the various research activities needed to take place, including the recruitment of schools, briefing and training sessions, participant correspondence (to ensure ethical requirements), delivery of the intervention and data collection. Various challenges were encountered in adhering to this timetable but it was generally found to be

workable. The initial task of recruiting schools to participate in the study, as discussed in Section 5.2, proved more difficult than anticipated. In a future large-scale study, it may be advisable to allow more time for this process and to employ strategies that might encourage greater engagement from schools.

Delivery of the intervention generally adhered to the suggested timeline. However, there were issues that compromised this. One issue was the collection of parental consent for ethical purposes, which caused a delay to the start time of the intervention in three of the schools. Another timing issue was due to data collection which caused some issues because completion of the survey took longer than anticipated (due to varying levels of pupil literacy). This activity therefore took over most of the time available in the week 1 session, leaving little time for the planned activities. There was a knock-on effect from this resulting in the intervention feeling rushed and, in some cases, whole classes being missed out.

5.4iii Identifying logistical problems

The researcher observation notes indicate that the main logistical problem was the initial recruitment of schools to participate in the study (discussed in Section 4.3). Issues were also encountered in liaising with teachers, it proved difficult in some schools to schedule time for meetings and training. Another substantial logistical exercise (discussed in Section 4.4) was in collecting the ethical consent for pupils to participate.

5.4iv Determining what resources are needed for a planned study

The main resources needed for the planned study were identified as support from senior leadership in the schools; teachers to deliver the intervention; pupils to participate in the classes; adequate space to accommodate the group role play activities; and time to plan, train teachers and deliver the intervention. Further evidence is presented in Chapter 7.0.

5.4v Assessing the feasibility of a full-scale study or survey

Researcher observations confirmed that it would be feasible to conduct a larger-scale study. This conclusion was based on the issues described in the previous sections of this chapter and will be discussed alongside evidence identified from analysis of the survey and interview data in Chapter 8.0.
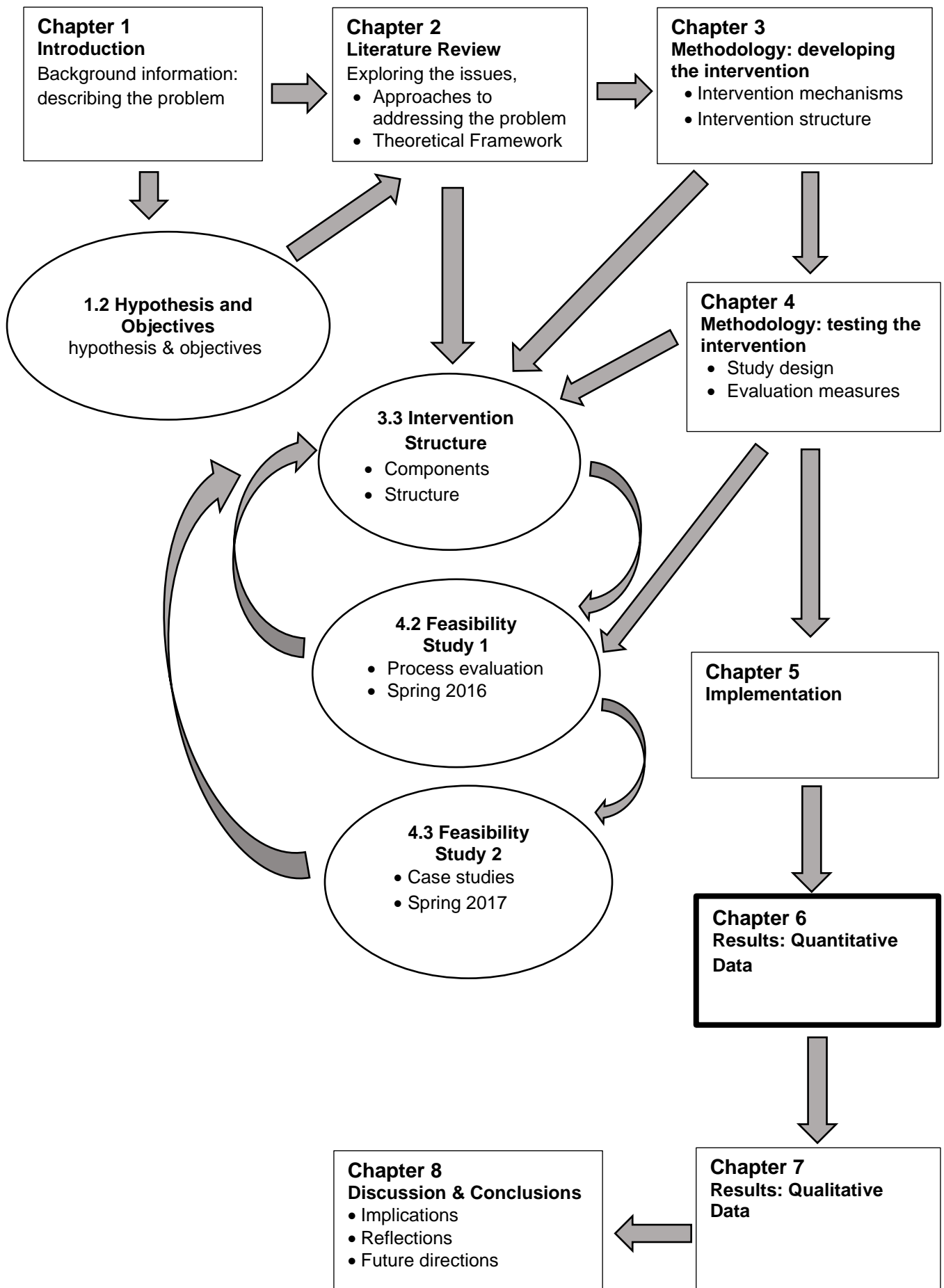
Chapter 6 Results: Quantitative Data

6.1 Introduction

Qualitative data (generated mainly from observation notes) discussed in Chapter 5.0 explored the feasibility of using the *Attitudes and Experience Survey* (Appendix VI) in the school classroom (including the impact of ethical requirements on data collection) and its appropriateness for use with 11-12 year olds. The purpose of this chapter, analysis of the quantitative data, was to test whether the survey could provide the necessary information to assess the effectiveness of the *It's My Life* intervention in a future larger study. Therefore, statistical tests were conducted that would be necessary in such a study to measure the impact of the outcomes proposed in the theoretical framework (*Figure 2.21*). The following sections describe the sample (Section 6.1i), descriptive statistics (Section 6.2) and tests for correlations (Section 6.3).

6.1i The Sample

The *It's My Life* intervention was delivered to a total of seven classes of year 7 pupils across the three participating schools (as described in Methodology Chapter 4.0). Schools A and B each supplied one class to take part in FS1. School C supplied one class and School A contributed a whole year 7 cohort of four classes for FS2. A total of 181 pupils took part in the intervention classes and 141 were included in the evaluation (40 pupils were excluded from the evaluation – 27 because parental consent was not given, 9 because pupils opted out by returning blank surveys and 4 pupils were absent for both surveys). 136 pupils completed the *Attitudes and Experience Survey* (Appendix VI) prior to taking part in the intervention classes (pre-intervention survey) and 96 pupils completed the post-intervention survey at the end of the programme. There were 86 pupils who completed both the pre- and post-intervention survey forming a matched sample. The pre- and post- survey samples are described according to survey point (pre- or post-intervention), school, class and gender in Table 6.1 and by survey and ethnicity in Table 6.2. Subsequently, only the matched sample of 86 was analysed to inform the results that are presented in this chapter. Data items from the pre-intervention survey will be labelled Q and those from the post-intervention survey will be labelled PQ throughout the remainder of the thesis.

Table 6.1 Number of survey participants by school, class and gender

School	Pre-intervention Survey N=136		Post-intervention Survey N=96[3]		Matched Sample N=86[1]	
	Female N (%)	Male N (%)	Female N (%)	Male N (%)	Female N (%)	Male N (%)
Feasibility Study 1						
School Ai[2] Class 1	3 (52.9)	1 (47.1)	3 (60.0)	2 (40.0)	3 (75.0)	1 (25.0)
School B Class 2	2 (22.2)	7 (77.8)	2 (25.0)	6 (75.0)	2 (25.0)	6 (75.0)
Feasibility Study 2						
School Aii Class 3	13 (46.4)	15 (53.6)	11 (40.7)	16 (59.3)	10 (40.0)	15 (60.0)
School Aii Class 4	15 (48.4)	16 (51.6)	3 (27.3)	8 (72.7)	3 (27.3)	8 (72.7)
School Aii Class 5	13 (65.0)	7 (35.0)	1 (100.0)	0 (0.0)	1 (100.0)	0 (0.0)
School Aii Class 6	18 (69.2)	8 (30.8)	16 (66.7)	8 (33.3)	13 (61.9)	8 (38.1)
School C Class 7	8 (44.4)	10 (55.6)	9 (45.0)	11 (55.0)	6 (37.5)	10 (62.5)
Total	**72 (52.9)**	**64 (47.1)**	**44 (45.8)**	**52 (54.2)**	**38 (44.2)**	**48 (55.8)**

1. The matched sample (N=86) includes only pupils who completed both pre- and post-intervention surveys.
2. 24 pupils from School Ai were excluded from the evaluation due to lack of parental 'opt in' consent, however, information from the school confirmed a 50:50 gender balance in the class.
3. The post-intervention survey had fewer respondents than the pre-intervention survey as one teacher in School Aii failed to return all the post-intervention surveys from their classes; nine pupils also chose not to complete the survey.

Table 6.2 Number of survey participants by ethnicity

Ethnicity	Pre-intervention Survey N=135[2]	Post-intervention Survey N=96[3]	Matched Sample N=86[1]
	N (%)	N (%)	N (%)
White British	102 (75.6)	72 (75.0)	65 (75.6)
White Irish	2 (1.5)	1 (1.0)	1 (1.2)
White European	9 (6.7)	7 (7.3)	7 (8.1)
Black/Black British	4 (3.0)	3 (3.1)	2 (2.3)
Asian/Asian British	8 (5.9)	6 (6.3)	5 (5.8)
Mixed White and Black	6 (4.4)	4 (4.2)	3 (3.5)
Other	4 (3.0)	3 (3.1)	3 (3.5)

1. The matched sample (N=86) includes only pupils who completed both pre- and post-intervention surveys.
2. N=1 missing case.
3. The post-intervention survey had fewer respondents than the pre-intervention survey as one teacher in School Aii failed to return all the post-intervention surveys from their classes; nine pupils also chose not to complete the survey.

6.2 Descriptive Statistics

Once data processing and error checking were completed, data were analysed as described in Section 4.7i. Descriptive statistics were used to describe the sample before (pre-intervention questions - Q) and after participation (post-intervention questions - PQ) in the intervention classes. The results are presented under sub-headings which correspond to the sections of the survey (Appendix VI) and are detailed in the following sections.

- Demographics
- Experiences of alcohol (Q1-6/PQ1-6)
- Experiences of alcohol-related problems (Q7/PQ7)
- Family background indicators (Q8-9/PQ8-9)
- Relationship with school (Q10-11/QP10-11)
- Psychological wellbeing (Q12/PQ12)
- Personal characteristics (Q13-14/PQ13-14)
- Attitudes towards alcohol (Q15/PQ15)

6.2i Demographics

The sample was slightly over-represented by boys (56% boys, 44% girls *Table 6.1*) and three quarters (75.6% *Table 6.2*) of the sample were of white British heritage. The average age of pupils at the time of the pre-intervention survey was 11.95 years, ranging from 11.37 to 12.62. At the time of the post-intervention survey the average age was 12.02 years, ranging from 11.42 to 12.73. The age range distributions are shown in Figure 6.1. Most of the participants in the matched sample (86%) were from schools Aii and C (*Table 6.1*).

6.2ii Experiences of alcohol

Pupils were asked about their experiences of alcohol, smoking and other drugs. Firstly, whether *in the last three months* they had used alcohol (this was specified as a full drink rather than just a sip). At the start of the intervention, only 9 pupils (10.5%) reported that they had, compared with only two pupils who admitted smoking (2.4%) and three pupils who had used e-cigarettes (4.1%). Six weeks later, having participated in the intervention, the figures had increased, with 11.8% reporting that they had used alcohol (percentage increase of 12%), 3.6% had used cigarettes (percentage increase of 50%) and 6.9% e-cigarettes (percentage increase of 68%).

Figure 6.1 Descriptive statistics for a) age pre-intervention; b) age post-intervention; and c) wellbeing

a) Age in years at first survey

Mean = 11.95
Std Dev = .288
N=82
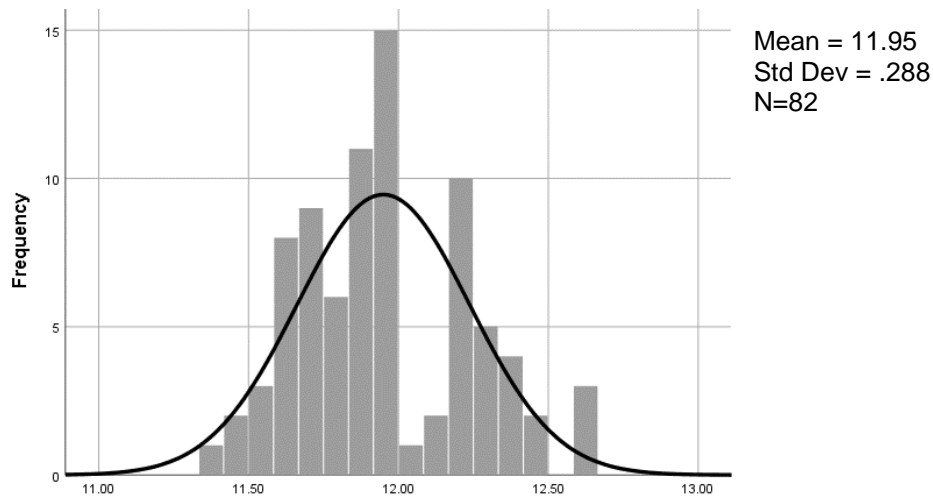
b) Age in years at second survey

Mean = 10.68
Std Dev = 7.156
N=76
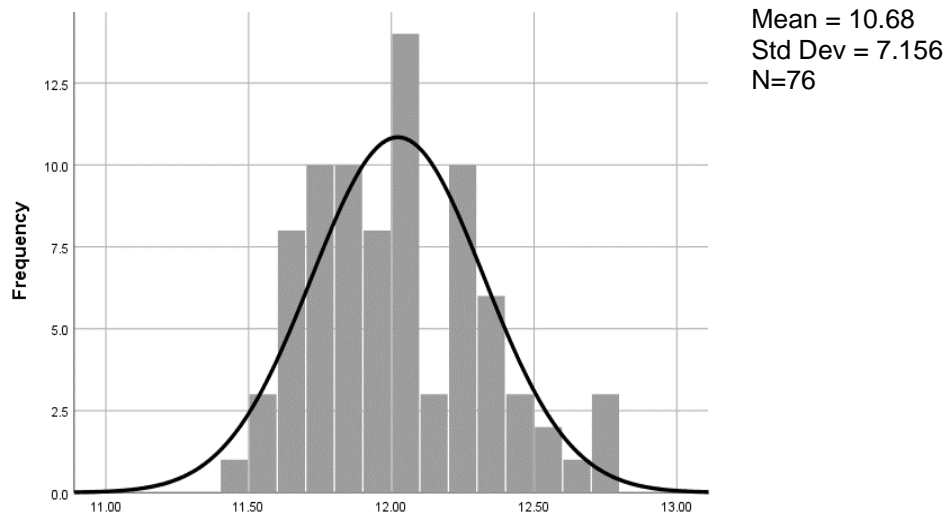
c) Wellbeing score[1]

Mean = 12.02
Std Dev = .302
N=82
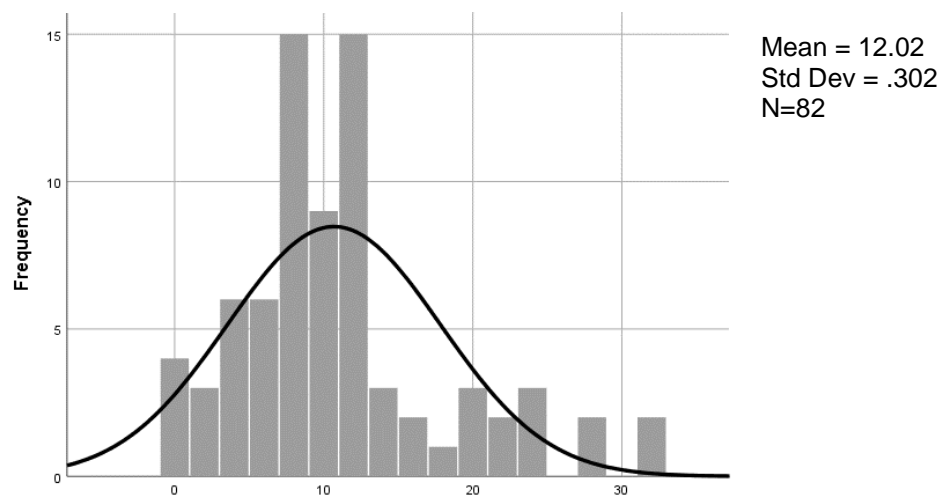
1. The wellbeing score (from the YP-CORE) ranges from 0-40 whereby scores of 5 or below are considered 'healthy' and scores of 25 or over are considered 'severe' (Appendix VII).

Table 6.3 Pupil drinking experience for those who have consumed alcohol (pre- and post-intervention)

		Pre-intervention		Post-intervention	
		N	%	N	%
Have you ever consumed alcohol (a full drink, not just a sip)?		(N=84)		(N=85)	
Yes		13	15.5	18	21.2
No		71	84.5	69	78.8
(If you have ever consumed alcohol…) When did you last drink alcohol?		(N=13)[1]		(N=16)[1]	
During the last week		2	15.4	1	6.3
One to four weeks ago		5	38.5	1	6.3
One to six months ago		2	15.4	4	25.0
More than six months ago		4	30.8	10	62.5
How often do you usually drink alcohol?					
About once a month		1	17.7	-	-
Only a few times a year		3	23.1	7	43.8
I don't drink now		9	69.2	9	56.3
Who do you drink with?					
On my own		2	15.4	2	13.3
With my parents		10	76.9	10	66.7
With older siblings		1	7.7	2	13.3
With friends		-	-	1	6.7
Where do you drink?					
At home	- Never	5	41.7	4	26.7
	- Sometimes	7	58.3	11	73.3
	- Often	-	-	-	-
If I go to a party	- Never	9	69.2	14	87.5
	- Sometimes	3	23.1	1	6.3
	- Often	1	7.7	-	-
In public places	- Never	12	100.0	15	100.0
	- Sometimes	-	-	-	-
	- Often	-	-	-	-
In bars/pubs	- Never	10	83.3	14	93.3
	- Sometimes	2	16.7	1	6.7
	- Often	-	-	-	-
At a friend's house	- Never	12	100.0	14	93.3
	- Sometimes	-	-	1	6.7
	- Often	-	-	-	-
At a family member's house	- Never	8	72.7	10	66.7
	- Sometimes	3	27.3	5	33.3
	- Often	-	-	-	-

1. N and % in the remainder of the table are out of those pupils who indicated that they had ever consumed alcohol (N=13 and N=18).

Pupils were also asked whether they *had ever* had a full drink of alcohol rather than just a sip (*Table 6.3*) and, prior to the intervention, 13 pupils reported having done so (15.5%). Following participation in the intervention classes, the percentage of pupils who reported having had a full drink of alcohol had risen by 5.7% to 21.2% (percentage increase of 37%). Pupils were asked further questions about drinking behaviours, but in such small samples (13 drinkers at pre-intervention and 16 at post-intervention), the percentages should be treated with caution. In general, the pupils from the pre-intervention sample who reported having had a whole drink of alcohol were infrequent drinkers, three individuals (23.1%) stated that they had a drink 'only a few times a year' and nine (69.2%) claimed that they 'don't drink now'. Most of the group reported that their drinking experience had been with their parents or another family member (84,6%) and that they had been at home (58.3%) or at another family member's house (27.3%). In the post-intervention survey, pupils reported drinking alcohol a little more frequently – seven pupils (43.8%) indicated 'only a few times a year' - but their drinking experiences were still mostly with parents or other family members (80.0%).

6.2iii Experience of alcohol-related problems

Pupils were asked about the types of incidents and behaviours that they had either experienced themselves or were aware that others had experienced due to alcohol consumption (*Table 6.4*). Prior to taking part in the intervention, 37 pupils (43.0%) reported having experience or awareness of one or more of the listed alcohol-related problems (Q7). Over a third of pupils (36.0%) had experienced someone losing their memory from drinking, this was most commonly reported as parents (N=22) or siblings (N=5). Seventeen pupils (19.8%) knew of someone fighting or being injured after drinking, again this was mostly parents (N=8), siblings (N=5) or other family members (uncle N=2). Six pupils (7.0%) experienced someone being in trouble with the police due to drinking (sibling N=4) and 10 pupils (11.6%) knew someone who had been grounded for drinking, this was most commonly siblings (N=5) or friends (N=4). No pupils reported personal experience of any of the alcohol-related problems.

Table 6.4 Experience of negative consequences of alcohol consumption pre- and post-intervention

N=86	Myself		Parent		Sibling		Friend		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Got drunk and couldn't remember what happened												
Pre-intervention	-	-	22	25.6	5	5.8	4	4.7	2	2.3	31	36.0
Post-intervention	1	1.2	18	20.9	3	3.5	5	5.8	4	4.7	26	30.2
Got into a fight or was injured after drinking												
Pre-intervention	-	-	8	9.3	5	5.8	1	1.2	3	3.5	17	19.8
Post-intervention	1	1.2	3	3.5	3	3.5	5	5.8	3	3.5	15	17.4
Got into trouble with the police after drinking												
Pre-intervention	-	-	-	-	4	4.7	1	1.2	1	1.2	6	7.0
Post-intervention	1	1.2	3	3.5	3	3.5	3	3.5	3	3.5	11	12.8
Got grounded by parents for drinking												
Pre-intervention	-	-	n/a	n/a	5	5.8	4	4.7	2	2.3	10	11.6
Post-intervention	2	2.3			4	4.7	7	8.1	1	1.2	10	

In the post-intervention sample, a smaller percentage of alcohol-related problems were reported – 34 pupils (39.5%) reported having experience (or awareness) of one or more of the listed alcohol-related problems (PQ7). Fewer alcohol-related situations affecting family members were reported compared to the pre-intervention survey (suffering memory loss: parent N=18, sibling N=3; fighting or being injured: parent N=3, sibling N=3; getting into trouble with the police: sibling N=3; getting grounded: sibling N=4). However, an increase in personal experience and incidents affecting friends were reported (suffering memory loss: self N=1, friend N=5; fighting or being injured: self N=1, friend N=5; getting into trouble with the police: self N=1, friend N=3; getting grounded: self N=2, friend N=7).

6.2iv Family background indicators

The following variables offer some insight into the home backgrounds of the pupils (*Table 6.5*). Firstly, the type of relationships that pupils have with their parents or guardians in terms of how much they argue and whether they feel able to discuss risks and concerns. Over half the (pre-intervention) sample reported that they hardly ever argued with their parents or guardians (53.1% hardly ever argue with mother/female guardian; 68.6% with father/male guardian). Over a third of pupils (38.6%) stated that they talked most days with their mother or female guardian about things that matter; fewer pupils (27.1%) reported having daily talks with their father or male guardian.

Table 6.5 Relationships with parents/guardians (pre-intervention Q8)

	Most days	More than once a week	Less than once a week	Hardly ever
I argue with my mother/female guardian (N=81)	10 (12.3%)	11 (13.6%)	17 (21.0%)	43 (53.1%)
I argue with my father/male guardian (N=70)	5 (7.1%)	8 (9.3%)	9 (10.5%)	48 (68.6%)
I talk to my mother/female guardian about things that matter (N=83)	32 (38.6%)	14 (16.9%)	19 (22.9%)	18 (21.7%)
I talk to my father/male guardian about things that matter (N=70)	19 (27.1%)	12 (17.1%)	16 (22.9%)	23 (32.9%)
My mother/female guardian talks to me about risky behaviours eg drinking, smoking and their related harms (N=81)	16 (19.8%)	20 (24.7%)	21 (25.9%)	24 (29.6%)
My father/male guardian talks to me about risky behaviours eg drinking, smoking and their related harms (N=70)	14 (20.0%)	11 (15.7%)	13 (18.6%)	32 (45.7%)

Another indicator of home background engagement is the number of times the pupil has eaten an evening meal with their family during the past week (*Table 6.6*). Half of the pre-intervention sample (50.6%) had eaten 6-7 evening meals with their family and just under a fifth (18.8%) had eaten together 3-5 times, however 8.2% had not eaten an evening meal with their family during the last week. In the post-intervention sample, pupils reported eating fewer meals with their family in the past week.

Table 6.6 Meals eaten with the family in the last week pre- and post-intervention (Q9 and PQ9)

	Pre-Intervention		Post-intervention	
	N=85	%	N=83	%
None	7	8.2	10	12.0
1-2 times	19	22.4	17	20.5
3-5 times	16	18.8	22	26.5
6-7 times	43	50.6	34	41.0

6.2v Relationship with school

Pupils were asked to indicate their level of agreement/disagreement regarding their relationship with school (Q10) (*Table 6.7*). The majority of pupils, as reported in the pre-intervention survey, seemed to enjoy going to school (63.5%), they generally agreed that school is a nice place to be (69.5%) and that teachers treat them fairly at school (72.9%). Over a quarter of pupils (28.5%) disagreed that teachers expected too much of them, however 29.8% felt that teacher expectations were too high and 41.7% were not sure.

Table 6.7 Relationship with school pre-intervention (Q10)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I enjoy going to school (N=84)	26 (30.2%)	28 (33.3%)	20 (23.8%)	4 (4.8%)	6 (7.1%)
My teachers treat me fairly at school (N=85)	29 (34.1%)	33 (38.8%)	18 (21.2%)	2 (2.4%)	3 (3.5%)
Our school is a nice place to be (N=85)	36 (42.4%)	23 (27.1%)	21 (24.7%)	3 (3.5%)	2 (2.4%)
Teachers expect too much of me (N=84)	12 (14.3%)	13 (15.5%)	35 (41.7%)	8 (9.5%)	16 (19.0%)

Another aspect of school relationship that pupils reported, was the extent to which they considered having been bullied at school (Q11). Six pupils (8.7%) reported being bullied physically; 10 pupils (15.2%) reported being bullied mentally.

6.2vi Psychological Wellbeing

Pupils were asked questions about how they had been feeling 'over the last week', as an indication of their psychological wellbeing. This question comprises the YP-CORE (Twigg et al., 2009) whereby the total score across ten subdomains is used in health care settings to screen for mental health issues. The descriptive statistics show an approximately normal distribution ranging from 0-32 with a mean of 10.68 (*Figure 6.1*). Less than a quarter had scores in the 'healthy' category, and slightly more than half of the sample (56.6%) were within the low-level category of risk below the clinical cut-off point. Four pupils' scores (5.3%) were within the range of 'severe' according to clinical guidelines (*Table 6.8*) (Appendix VII).

Table 6.8 Wellbeing score according to risk category pre-intervention

Wellbeing level	Score	N (%)
Healthy	0-5	17 (22.4%)
Low level	6-10	26 (34.2%)
Mild	11-15	18 (23.7%)
Moderate	16-20	6 (7.9%)
Moderate Severe	21-25	5 (6.6%)
Severe	26-40	4 (5.3%)

6.2vii Personal Characteristics

The majority of pupils (*Table 6.9*) reported having a happy home life (pre-intervention sample Q13) (89.5%). They were generally positive regarding their self-confidence with almost three quarters of the sample (75.5%) agreeing that they had confidence in themselves (strongly agree 45.3%; agree 30.2%). They were very positive in their ability to state their own views to their friends (78.6% - strongly agree 42.9%; agree 35.7%) but were less certain about their ability to say 'no' with just over half the sample (55.3%) disagreeing that they found this difficult (strongly disagree 41.2%; disagree 14.1%). Three quarters (75.3%) of the sample agreed that they don't feel they have to do what their friends are doing (strongly agree 51.8%; agree 23.5%).

Table 6.9 Personal characteristics pre-intervention (Q13)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I have confidence in myself (N=86)	39 (45.3%)	26 (30.2%)	13 (15.1%)	6 (7.0%)	2 (2.3%)
I can state my own views to my friends (N=84)	36 (42.9%)	30 (35.7%)	15 (17.9%)	2 (2.4%)	1 (1.2%)
I have a happy home life (N=86)	64 (74.4%)	13 (15.1%)	5 (5.8%)	2 (2.3%)	2 (2.3%)
I find it difficult to say 'no' (N=85)	10 (11.8%)	13 (15.3%)	15 (17.6%)	12 (14.1%)	35 (41.2%)
I don't feel I have to do what my friends are doing (N=85)	44 (51.8%)	20 (23.5%)	11 (12.9%)	4 (4.7%)	6 (7.1%)

Item means, standard deviations and corrected item-total correlations were calculated for Q14 (sensation seeking) and the results were compared with descriptive statistics from Hoyle et al (2002) (**Table 6.10**). The mean scores for the *It's My Life* participants ranged from 1.93 to 3.36, indicating a low level of sensation seeking tendency (higher scores indicate a greater sensation seeking tendency). Cronbach's alpha was 0.77 for the eight-item set indicating internal consistency. A low level of sensation seeking is expected in this young age range (11-12 years) compared to the studies conducted by Hoyle et al (2002) which involved older children (study 1, 13-17 years; study 2, 12-18 years). Research indicates that sensation seeking is linked to pubertal maturation and follows a curvilinear pattern, increasing between the ages of 10-15 and either declining or remaining stable thereafter (Steinberg, Albert, Cauffman, Banich, Graham, & Woolard, 2008).

Table 6.10 Items and descriptive statistics for sensation seeking (Q14)

	It's My Life			BSSS (Hoyle et al., 2002)		
	M	**SD**	**r[1]**	**M**	**SD**	**r[1]**
Experience seeking						
I would like to explore strange places	3.09	1.54	0.54	3.98	0.97	0.38
I would like to take off on a trip with no pre-planned routes or timetables	2.52	1.55	0.61	3.94	1.19	0.41
Boredom susceptibility						
I get restless when I spend too much time at home	2.68	1.46	0.32	4.18	1.00	0.31
I prefer friends who are excitingly unpredictable	2.79	1.28	0.49	3.59	0.99	0.54
Thrill and adventure seeking						
I like to do frightening things	2.38	1.41	0.60	3.47	1.16	0.58
I would like to try bungee jumping	3.36	1.62	0.26	3.71	1.45	0.44
Disinhibition						
I like wild parties	2.67	1.28	0.48	3.83	1.15	0.51
I would love to have new and exciting experiences, even if they are illegal	1.93	1.29	0.53	3.17	1.30	0.56
Scale Total[1]	**2.70**	**0.99**	**0.77[2]**	**3.74**	**0.71**	**0.76[2]**

Responses were indicated on five-point scales labelled "strongly agree", "agree", "neither agree nor disagree", "disagree" and "strongly disagree".

5 missing cases excluded (N=81).

1. Corrected item total – r.

2. Coefficient alpha.

6.2viii Attitudes towards alcohol

The final section of the *Attitudes and Experience Survey* captured pupils' attitudes and perceptions towards alcohol. They indicated their level of agreement or disagreement with the seven listed statements (*Table 6.11*). Most pupils in the pre-intervention sample disagreed that teenagers who drink alcohol are more mature (89.2%), they mostly agreed that teenagers who drink alcohol don't think about their health (82.3%) and over two thirds agreed that those who drink usually get poor exam results (68.2%). Three out of five pupils indicated that they don't like being around people who use alcohol (61.5%) and four out of five (81.3%) agreed that their parents disapprove of teenagers using alcohol.

Some of these attitudes remained broadly the same in the post-intervention survey. However, there was a marked decrease of 36% in the percentage of pupils who agreed that their friends look down on alcohol use (54.2% pre-intervention; 34.5%

post-intervention). Other small percentage changes were revealed. There was a 5% decrease in pupils disagreeing that teenagers who drink alcohol are more mature (pre-intervention 89.2%; post-intervention 84.7%), fewer pupils agreed that teenagers who drink alcohol usually get poor exam results (pre-intervention 68.2%; post-intervention 70.6%) and there was a 5.7% decrease in agreement that teenagers who drink alcohol don't think about their health (pre-intervention 82.3%; post-intervention 77.6%).

Table 6.11 Attitudes towards alcohol pre- and post-intervention (Q15 and PQ15)

	Strongly agree		Agree		Neither agree nor disagree		Disagree		Strongly disagree	
	N	%	N	%	N	%	N	%	N	%
Teenagers who drink alcohol are more mature										
Pre-intervention (N=84)	2	2.4	2	2.4	5	6.0	16	19.0	59	70.2
Post-intervention (N=85)	1	1.2	1	1.2	11	12.9	21	24.7	51	60.0
Teenagers who drink alcohol usually get poor exam results										
Pre-intervention (N=85)	28	32.9	30	35.3	17	20.0	6	7.1	4	4.7
Post-intervention (N=85)	37	43.5	23	27.1	23	27.1	0	0.0	2	2.4
Teenagers who drink alcohol don't think about their health										
Pre-intervention (N=85)	37	43.5	33	38.8	9	10.6	3	3.5	3	3.5
Post-intervention (N=85)	41	48.2	25	29.4	15	17.6	2	2.4	2	2.4
My friends look down on alcohol use										
Pre-intervention (N=83)	29	34.9	16	19.3	20	24.1	2	2.4	16	19.3
Post-intervention (N=84)	16	19.0	13	15.5	26	31.0	10	11.9	19	22.6
I don't like being around people who use alcohol										
Pre-intervention (N=83)	35	42.2	16	19.3	21	25.3	5	6.0	6	7.2
Post-intervention	31	36.9	20	23.8	25	29.8	4	4.8	4	4.8
Most people in this school look down on those who use alcohol										
Pre-intervention (N=83)	22	26.5	9	10.8	33	39.8	11	13.3	8	9.6
Post-intervention	18	21.4	13	15.5	26	31.0	13	15.5	14	16.7
My parents disapprove of teenagers using alcohol										
Pre-intervention (N=80)	50	62.5	15	18.8	11	13.8	2	2.5	2	2.5
Post-intervention	56	65.1	14	16.3	14	16.3	0	0.0	1	1.2

6.3 Exploring correlations within the data

Once the individual variables from the pre- and post-intervention surveys had been examined and compared, as reported in Section 6.2, the data were further explored for any statistical associations. This process was conducted to explore the kinds of analysis that might be undertaken in a large-scale effectiveness study.

The main outcome variable from the *Attitudes and Experience Survey*, identified in the theoretical framework (*Figure 2.21*), was pupil alcohol consumption as the key measure of behaviour change. Therefore, demographic variables in the sample were analysed against pupil alcohol consumption (Q2: Have you ever drunk alcohol (a full drink, not just a sip)?) (Section 6.3i). The theoretical framework places motivation as a central construct for effecting behaviour change (*Figure 2.21*). In terms of the intermediate outcomes (indicators of change) identified in the theoretical framework, pupil wellbeing is an important variable for evoking intrinsic motivation. Therefore, pupil wellbeing score (Q12: YP-CORE) was also analysed against demographic variables in the sample (Section 6.3ii).

6.3i Experience of alcohol

As described in Section 4.7i, statistical tests (Chi Square and T-tests) were used to test the data for correlations. Data analysis (*Table 6.11, Table 6.12* and *Table 6.13*) revealed significant associations between having consumed alcohol (Q2) and i) having experience (or awareness) of alcohol-related problems (X^2=11.672, p=.001), ii) having experienced someone suffer from memory loss as a result of drinking (X^2=12.231, p<.000) and iii) number of meals eaten with the family during the last week (X^2=13.661, p=.003) (*Table 6.12*). There was also a significant association between alcohol consumption and pupils who thought their friends looked down on alcohol use (X^2=18.281, p=.001). No other significant correlations were evident.

Table 6.12 Pupils who reported having ever consumed alcohol pre-intervention (Q2) by potential predictive variables (categorical variables)

	Total N	Ever consumed alcohol (N=13)		X²	P-value
		N	%		
Gender				.195	.659
Female	37	5	13.5		
Male	47	8	17.0		
Ethnicity				9.738	.136
White British	63	12	19.0		
White Irish	1	1	100.0		
White European	7	0	0.0		
Black/Black British	2	0	0.0		
Asian/Asian British	5	0	0.0		
Mixed White and Black	3	0	0.0		
Other	3	0	0.0		
Experience of alcohol-related problems[1]					
Any experience - yes	35	11	31.4	11.672	.001**
- no	49	2	4.1		
Got drunk & couldn't remember what happened				12.231	<.001**
- yes	29	10	34.5		
- no	55	3	5.5		
Got into a fight or was injured after drinking				3.759	.053
- yes	16	5	31.3		
- no	68	8	11.8		
Got into trouble with the police after drinking				.007	.933
- yes	6	1	16.7		
- no	78	12	15.4		
Got grounded by parents for drinking - yes	10	1	10.0	.260	.610
- no	74	12	16.2		
Evening meals eaten with family in last week				13.661	.003**
None	7	4	57.1		
1-2	18	0	0.0		
3-5	15	1	6.7		
6-7	43	8	18.6		
Experience of being bullied physically at school				4.616	.032
Never	61	9	14.8		
Some experience	6	3	50.0		
Experience of being bullied mentally at school				.162	.687
Never bullied mentally	54	8	14.8		
Some experience of being bullied mentally	10	1	10.0		
Wellbeing score by category				.333	.997
Healthy (score 0-5)	15	3	20.0		
Low level (score 6-10)	26	4	15.4		
Mild (score 11-15)	18	3	16.7		
Moderate (score 16-20)	6	1	16.7		
Moderate Severe (score 21-25)	5	1	20.0		
Severe (26-40)	4	1	25.0		

1. This question reports on pupils' own experience of alcohol-related problems as well as their awareness of others' experiencing alcohol-related problems.
** significant at the .01 level.

Table 6.13 Attitudes towards alcohol pre-intervention (Q15) by alcohol consumption pre-intervention (Q2)

	Total N	Ever consumed alcohol (N=13)		X^2	P-value
		N	%		
Teenagers who drink alcohol are more mature				1.925	.750
Strongly agree	2	0	0.0		
Agree	2	0	0.0		
Neither agree nor disagree	5	0	0.0		
Disagree	15	3	20.0		
Strongly disagree	58	9	15.5		
Teenagers who drink alcohol usually get poor exam results				2.738	.603
Strongly agree	28	6	21.4		
Agree	29	5	17.2		
Neither agree nor disagree	16	2	12.5		
Disagree	6	0	0.0		
Strongly disagree	4	0	0.0		
Teenagers who drink alcohol don't think about their health				1.694	.792
Strongly agree	37	5	13.5		
Agree	31	5	16.1		
Neither agree nor disagree	9	2	22.2		
Disagree	3	1	33.3		
Strongly disagree	3	0	0.0		
My friends look down on alcohol use				18.281	.001**
Strongly agree	27	1	3.7		
Agree	16	8	50.0		
Neither agree nor disagree	20	3	15.0		
Disagree	2	0	0.0		
Strongly disagree	16	1	6.3		
I don't like being around people who use alcohol				7.477	.113
Strongly agree	34	3	8.8		
Agree	16	1	6.3		
Neither agree nor disagree	20	6	30.0		
Disagree	5	2	40.0		
Strongly disagree	6	1	16.7		
Most people in this school look down on those who use alcohol				1.214	.876
Strongly agree	22	5	22.7		
Agree	8	1	12.5		
Neither agree nor disagree	32	4	12.5		
Disagree	11	2	18.2		
Strongly disagree	8	1	12.5		
My parents disapprove of teenagers using alcohol				8.514	.074
Strongly agree	49	7	14.3		
Agree	14	0	0.0		
Neither agree nor disagree	11	4	36.4		
Disagree	2	1	50.0		
Strongly disagree	2	0	0.0		

** significant to the .01 level.

Table 6.14 Age, wellbeing and sensation seeking of pupils who reported having ever consumed alcohol pre-intervention (Q2) (continuous variables)

	Mean	SD	T	P-value
Age in years			1.776	.080
Drinkers (N=13)	11.82	.291		
Non-drinkers (N=68)	11.97	.255		
Wellbeing score			.118	.906
Drinkers (N=13)	10.69	7.696		
Non-drinkers (N=61)	10.95	7.060		
Sensation seeking score			.242	.810
Drinkers (N=12)	20.92	6.54		
Non-drinkers (N=67)	21.46	7.32		

The same tests were then repeated to explore whether the same variables from the pre-intervention survey were statistically related to pupil alcohol consumption as reported in the post-intervention survey (PQ2). It was not expected that significant differences would be reported in analysis for this feasibility study. However, this analysis would be necessary in a larger-scale study with a one-year follow-up survey to examine whether baseline measures predict future behaviour. The results are presented in Table 6.15, Table 6.16 and Table 6.17. This analysis revealed significant associations (at the .05 level) between alcohol consumption post-intervention (PQ2) and the same three predictive variables collected at baseline: i) having experience of alcohol-related problems (X^2=4.973, p=.026), ii) having experienced someone suffer from memory loss as a result of drinking (X^2=5.984, p=.014) and iii) number of meals eaten with the family during the last week (X^2=10.943, p=.012). There was a significant correlation between alcohol consumption and pupils who thought their friends looked down on alcohol use (X^2=13.444, p=.009) and an association, significant at the .05 level, between alcohol consumption and not liking to be around people who consume alcohol (X^2=10.411, p=.034).

Table 6.15 Pupils who reported having ever consumed alcohol post-intervention (PQ2) by potential predictive variables (categorical variables)

| | Total N | Ever consumed alcohol (N=18) | | X^2 | P-value |
		N	%		
Gender				.966	.326
Female	37	6	16.2		
Male	48	12	25.0		
Ethnicity				7.070	.314
White British	64	15	23.4		
White Irish	1	1	100.0		
White European	7	1	14.3		
Black/Black British	2	0	0.0		
Asian/Asian British	5	0	0.0		
Mixed White and Black	3	0	0.0		
Other	3	1	33.3		
Experience of alcohol-related problems[1]					
Any experience	37	12	32.4	4.973	.026*
Got drunk & couldn't remember what happened	31	11	35.5	5.984	.014*
Got into a fight or was injured after drinking	17	6	35.3	2.537	.111
Got into trouble with the police after drinking	6	2	33.3	.572	.450
Got grounded by parents for drinking	10	2	20.0	.009	.923
Evening meals eaten with family in last week				10.943	.012*
None	7	4	57.1		
1-2	19	0	0.0		
3-5	15	3	20.0		
6-7	43	11	25.6		
Experience of being bullied physically at school				2.563	.109
Never	62	13	21.0		
Some experience	6	3	50.0		
Experience of being bullied mentally at school				.562	.453
Never bullied mentally	55	11	20.0		
Some experience of being bullied mentally	10	1	10.0		
Wellbeing score by category				2.614	.759
Healthy (score 0-5)	17	3	17.6		
Low level (score 6-10)	26	4	15.4		
Mild (score 11-15)	18	6	33.3		
Moderate (score 16-20)	6	2	33.3		
Moderate Severe (score 21-25)	4	1	25.0		
Severe (26-40)	4	1	25.0		

1. This question reports on pupils' own experience of alcohol-related problems as well as their awareness of others' experiencing alcohol-related problems.
* significant to the .05 level.

Table 6.16 Attitudes towards alcohol pre-intervention (Q15) by alcohol consumption post-intervention (PQ2)

	Total N	Ever consumed alcohol (N=18)		X²	P-value
		N	%		
Teenagers who drink alcohol are more mature				2.348	.672
Strongly agree	2	0	0.0		
Agree	2	0	0.0		
Neither agree nor disagree	4	0	0.0		
Disagree	16	4	25.0		
Strongly disagree	59	13	22.0		
Teenagers who drink alcohol usually get poor exam results				1.406	.843
Strongly agree	28	8	28.6		
Agree	29	5	17.2		
Neither agree nor disagree	17	3	17.6		
Disagree	6	1	16.7		
Strongly disagree	4	1	25.0		
Teenagers who drink alcohol don't think about their health				.646	.958
Strongly agree	37	8	21.6		
Agree	32	6	18.8		
Neither agree nor disagree	9	2	22.2		
Disagree	3	1	33.3		
Strongly disagree	3	1	33.3		
My friends look down on alcohol use				13.444	.009**
Strongly agree	29	2	6.9		
Agree	16	8	50.0		
Neither agree nor disagree	20	3	15.0		
Disagree	2	0	0.0		
Strongly disagree	15	5	33.3		
I don't like being around people who use alcohol				10.411	.034*
Strongly agree	34	4	11.8		
Agree	16	2	12.5		
Neither agree nor disagree	21	6	28.6		
Disagree	5	3	60.0		
Strongly disagree	6	3	50.0		
Most people in this school look down on those who use alcohol				1.398	.845
Strongly agree	22	6	27.3		
Agree	9	1	11.1		
Neither agree nor disagree	32	6	18.8		
Disagree	11	3	27.3		
Strongly disagree	8	2	25.0		
My parents disapprove of teenagers using alcohol				6.988	.137
Strongly agree	50	8	16.0		
Agree	14	2	14.3		
Neither agree nor disagree	11	5	45.5		
Disagree	2	1	50.0		
Strongly disagree	2	1	50.0		

** significant at the .01 level. * significant at the .05 level.

Table 6.17 Age, wellbeing and sensation seeking of pupils who reported having ever consumed alcohol post-intervention (PQ2) (continuous variables)

	Mean	SD	T	P-value
Age in years			1.138	.259
Drinkers (N=17)	11.88	.328		
Non-drinkers (N=64)	11.99	.279		
Wellbeing score			-.405	.687
Drinkers (N=17)	11.12	6.790		
Non-drinkers (N=58)	10.33	7.151		
Sensation seeking score			.812	.420
Drinkers (N=16)	20.01	6.638		
Non-drinkers (N=64)	21.69	7.283		

6.3ii Wellbeing

Statistical tests (Spearman rank correlation and Pearson's correlation) were used to test the data for associations between wellbeing score and potential predictive variables, as described in Section 4.7i. Analysis revealed negative associations between wellbeing score (Q12) and the frequency of arguments with mother/female guardian (r=-.325, p=.005) and the frequency of arguments with father/male guardian (r=-.264, p=.035) (*Table 6.18*). The negative correlation suggests that more arguments with the family (perhaps indicating a higher degree of communication) relates to better pupil wellbeing. No statistical relationship was discovered between wellbeing score and any of the other variables relating to home background.

Significant correlations (at the 0.01 level) were found between wellbeing score and; having confidence in oneself (r=.471, p>.001) and; having a happy home life (r=.482, p>.001). A correlation at the 0.05 level was revealed between wellbeing score and being able to state one's own views to one's friends (r=.286, p=.013).

Table 6.18 Spearman's rank correlation coefficients of potential predictive variables against pupil wellbeing score pre-intervention (Q12)

	N	R	P-value
Gender	76	-.069	.556
How often do you …			
Argue with your mother/female guardian	72	-.325	.005**
Argue with your father/male guardian	64	-.264	.035*
Talk to your mother/female guardian about things that matter	73	-.096	.421
Talk to your father/male guardian about things that matter	62	-.145	.260
Talk to your mother/female guardian about risky behaviours	72	.138	.248
Talk to your father/male guardian about risky behaviours	63	.069	.592
Number of evening meals eaten with the family in the past 7 days	76	.024	.838
Personal characteristics			
I have confidence in myself	76	.471	<.001**
I can state my own views to my friends	75	.286	.013*
I have a happy home life	76	.482	<.001**
I find it difficult to say 'no'	76	-.176	.128
I don't feel I have to do what my friends are doing	76	.136	.241
School relationship			
I enjoy going to school	75	.327	.004**
My teachers treat me fairly at school	75	.346	.002**
Our school is a nice place to be	75	.426	<.001**
Teachers expect too much of me	75	-.285	.013*
Experience of being bullied at school			
Physically	62	.274	.031*
In other ways	58	.255	.053*
Sensation seeking	76	.086	.468

** significant at the .01 level. * significant at the .05 level.

Significant correlations were also revealed between pupil wellbeing and all aspects relating to the school environment:

- I enjoy going to school – significant at the 0.01 level (r=.327, p=.004)
- My teachers treat me fairly at school – significant at the 0.01 level (r=.346, p=.002)
- Our school is a nice place to be – significant at the 0.01 level (r=.426, p>.001)
- Teachers expect too much of me – significant at the 0.05 level (r=-.285, p=.013)

Wellbeing score was also tested in relationship to being bullied in school (Q11). There were significant associations at the .05 level between pupil wellbeing and physical bullying (r=.274, p=.031) and other types of bullying (r=.255, p=.053).

6.4 Summary of quantitative results

The purpose of this study was to test the feasibility of the survey measures in terms of capturing the data necessary to answer the research objectives in a larger-scale evaluation. This study was not powered to achieve the main outcomes targeted in the theoretical framework (*Figure 2.21*) - ie onset of drinking, especially with the knowledge that alcohol consumption amongst 11-12 year olds is not prevalent (*Figure 2.13*) – and therefore analysis cannot be expected to identify any risk/protective factors for alcohol consumption. Caution needs to be applied when interpreting a large number of statistical tests, since there may be significant associations due to type 1 errors (ie one in twenty associations would be expected to be significant just by chance (Greasley, 2007)). However, all correlations were in the expected direction between the wellbeing indicators (6 out of 20 associations significant at the 0.01 level (*Table 6.18*)). These findings suggest that the set of measures selected performed well and are likely to produce the required evidence in a large-scale effectiveness study.

Chapter 1
Introduction
Background information:
describing the problem

Chapter 2
Literature Review
Exploring the issues,
- Approaches to addressing the problem
- Theoretical Framework

Chapter 3
Methodology: developing the intervention
- Intervention mechanisms
- Intervention structure

1.2 Hypothesis and Objectives
hypothesis & objectives

Chapter 4
Methodology: testing the intervention
- Study design
- Evaluation measures

3.3 Intervention Structure
- Components
- Structure

4.2 Feasibility Study 1
- Process evaluation
- Spring 2016

Chapter 5
Implementation

4.3 Feasibility Study 2
- Case studies
- Spring 2017

Chapter 6
Results: Quantitative Data

Chapter 8
Discussion & Conclusions
- Implications
- Reflections
- Future directions

Chapter 7
Results: Qualitative Data

162

Chapter 7 Results: Qualitative Data

7.1 Introduction

The *It's My Life* intervention was implemented in four contrasting school settings and qualitative data collected in all cases. This chapter reports on the data analysis of 18 interview transcripts (6 teacher interviews, 9 individual pupil interviews and 3 pupil focus groups). Formal observations captured during the intervention classes and informal observations, discussions and conversations were used to support and further illustrate the emergent themes in this chapter. To ensure the anonymity of all participants in this research, all names quoted in this study are pseudonyms and no individual can be identified from any of the contextual information. The four school contexts are described in Section 7.2.

Once the interview data had been collected, the recordings were transcribed and analysed as described in Section 4.7ii, using thematic analysis (Braun et al., 2014). Separate analysis was conducted initially for each individual school context: to identify common themes relevant across all the schools; and to highlight any context-specific themes. The individual school analyses were then aggregated as summarised in Section 7.3. This was an inductive process which resulted in a set of main themes: context; adaptation; implementation; engagement; and impact, that broadly corresponded to the process evaluation headings (*Table 4.4*). Table 7.1 describes how these themes relate to the research study objectives (Section 1.1) and the checklist of feasibility studies objectives (*Table 4.5*), where applicable.

Table 7.1 Qualitative data analysis related to research objectives

Research Objectives	Themes

FS1: Objective 1
To develop and adapt a school-based intervention that:
  i. provides information and raises awareness about the risks associated with alcohol misuse (to inspire healthier attitudes towards drinking)
  ii. helps adolescents to improve their self-esteem and psychological wellbeing to enable them to be confident in taking responsibility for their own behaviour
  iii. encourages adolescents to have the motivation and self-confidence to consider and moderate their alcohol consumption
  iv. provides strategies to help adolescents carry out their intentions regarding their alcohol consumption
	Engagement
	the extent to which pupils responded to the intervention including the content, topic, mode of delivery and activities
	
	Impact
	the potential impact on pupil learning; attitudes; self-esteem, motivation and self-confidence; and decision making

FS1: Objective 2 To assess the feasibility of delivering the intervention in a mainstream (state-funded) secondary school setting as part of the compulsory school curriculum	***Implementation*** This theme relates to components identified in Van Teijlingen and Hundley's checklist of feasibility study objectives (***Table 4.5***), as follows: *Assessing the feasibility of a full-scale study or survey:* Was it feasible to implement the intervention – did it run as anticipated? Were there any school-related issues with implementation? Ability to minimise disruption to the school. *Identifying logistical problems which might occur using proposed methods:* Could the study be delivered as planned according to the proposed method? What logistics would be most challenging? How might these be overcome? *Determining what resources, such as finance or staff, are needed for a planned study:* What resources were necessary? Printed materials: participant information sheets, consent forms, surveys, classroom materials, instruction sheets. School resources: staff, space and time to deliver the intervention. *Training teachers to deliver the intervention employing the motivational interviewing principles:* was it feasible to deliver training sessions in

Research Objectives	Themes
	school? was enough time available? were all staff available for training? was training adequate? *Convincing stakeholders that the main study is worth supporting:* Schools must be convinced that the intervention is worth implementing for them to agree to participate in the study
**FS2*: Objective 1* To assess whether the revised intervention could be implemented in different school settings with varying contextual factors, such as the delivery model, staff support and class size	**Context** feasibility of delivering the intervention in different school contexts; context specific issues **Engagement** pupil and teacher engagement with the intervention **Adaptation** ways in which the intervention might be adapted for implementation in different contexts
**FS2*: Objective 2* To identify any key 'active' components evident within the intervention	**Engagement** the extent to which pupils responded to different aspects of the intervention including the content, topic, mode of delivery and activities **Impact** the potential impact on pupil learning; attitudes; self-esteem, motivation and self-confidence; and decision making.
**FS2*: Objective 3* To explore how the intervention might be improved for future application to increase its impact and relevance for schools	**Adaptation** potential improvements to the intervention and delivery model

7.2 The Sample: School Contexts

The recruitment process described in Chapter 4.0 resulted in a sample of four contrasting school contexts as described in Section 4.3 (*Table 4.6*). Since specific school environmental factors can influence the effectiveness of an intervention, it was beneficial to explore the feasibility of implementing the *It's My Life* intervention in a range of settings. The individual school contexts are described in further detail in a series of pen portraits (Sections 7.2i-7.2iii) which were compiled using information from interviews, informal conversations and official documentation such as Ofsted reports and national databases.

7.2i School A: "Ganymede Academy" Pen portrait

Ganymede Academy is located an inner-city area of significant socioeconomic deprivation, ranking in the top one percent nationally on the Indices of Multiple Deprivation (IMD, 2015). Interviewees gave examples to illustrate the level of poverty evident amongst the local community;

> *"[the family] were sat on orange boxes and they had really … no carpets, not because they like floorboards, it's probably stone, but a massive telly"* (Drama teacher)

Staff at the school reported that the area had started to change in recent years due in part to a big employment development in the area, jobs have become widely available and people have started working. Alongside the creation of local employment, there has also been significant investment in community regeneration. Consequently, staff reported that house prices had started to rise, and the perception of the area had improved.

> *"it's changing though, the dynamics is changing because you've got really nice apartments and lovely houses and house prices have gone up, I have to say they were very low but they have gone up"* (Drama teacher)

Alongside the changing social landscape in the area, the staff at the school also highlighted that they were committed to addressing the challenges that result from the disadvantaged profile of the cohort and work hard to do so. They kept a database of factors that are known (from official sources such as social services) to be present in a child's home/family background that can impact on them emotionally and affect their progress at school. These factors include alcohol or substance misuse, bereavement, teenage pregnancy, domestic abuse, imprisonment and

mental health disorders. It was evident that 60% of the school population were affected by such issues, 10% being affected by drugs and alcohol.

> *"we gather this CUP data, the Children's Universal Plus data, certainly … across all year groups, drug and alcohol misuse is quite consistent, it's around 10% across all year groups. … and they're the ones that we know about, these are the ones … you know it's not hearsay that, that is from other services who have informed us, who are working with families that there is an issue around drugs and alcohol. And I think the worrying thing for us is that we know there's probably more who are not on peoples' radar, really, and are at that level just underneath"* (Assistant Head)

Staff in the school believe that local aspirations are rising due both to improving conditions in the area (urban regeneration and new business providing work) and to their dedicated work in addressing the social challenges presented in school. According to the Assistant Head, the school has developed an excellent reputation in the area, as demonstrated by their improving subscription rates – the school was oversubscribed with 50 pupils on a waiting list in the academic year 2017-18. As a result, they have seen a greater degree of parental engagement, which is understood to be one of the greatest challenges faced by schools working in the areas of highest deprivation.

> *"We've raised aspirations in the community and just looking at … you know, I was talking about the increased number of students that we're getting and parents, more parents who really want their children to do well"* (Assistant Head)

7.2ii School B: "Europa Academy" Pen portrait

Europa Academy is situated in one of the most deprived locations in England, reported as one of the areas with the poorest quality of life in 2007 (IMD, 2007) according to 37 indicators including the number of children out of school, number of people in higher education, number of children from income support households, number claiming unemployment benefit and years of potential life lost due to health conditions. The IMD reported that 9 per cent of adults living in the area had a university degree, a third of households owned the homes that they lived in and only 56 per cent of the population were classified as being in "good health". Since then, local government have invested significant funding in the area as part of the £125 million Manchester-Salford Housing Renewal Pathfinder (2004), designed to improve the quality and range of homes in the area. Following ten years of urban

regeneration, the locality still ranks in the first decile on the IMD (IMD, 2015). The Assistant Headteacher referred to the poor health of the student population noting particularly an uncommonly high instance of respiratory problems possibly reflecting the poor living conditions in the area.

According to the Assistant Headteacher at Europa Academy, the high level of deprivation evident in the local area impacts on the student population presenting significant challenges for the school in terms of poor health, low well-being, low aspiration, poor attendance and behavioural issues. Ofsted (2016) reported that staff at all levels *"are committed to the pupils in their care"* the *"school's support for pupils' health and well-being is exemplary"* and consequently *"personal development and welfare of pupils is good"*. To address some of the social deprivation issues, the school engages in a range of outreach work with the local community for example involving *"adults and pupils from different social backgrounds in offering employment opportunities"*.

As well as high levels of poverty, the school also caters for a diverse multi-ethnic population of students, with almost a quarter of students (24%) speaking English as an additional language (EAL) according to school records. The school has an inclusive outlook and "*is committed to promoting equality and diversity"*, according to Ofsted (2016) *"the policy and practices of the school are fully reflective of the legislative requirement to protect all people on the grounds of race, religion, sex, disability and marital status"*.

Europa Academy was observed by the researcher to be quite disorganised and chaotic. Initial contact with senior leadership was positive and professional, but when liaison was delegated to a link teacher, communication became more challenging. As described previously (Section 5.2iv) several issues were encountered in obtaining ethical consent and in scheduling the intervention sessions. In the end, nine pupils were recruited to participate the classes (seven boys and two girls) and at the end of the intervention, interviews were conducted with five of the nine pupils (four boys and one girl). Despite several attempts to schedule an interview with the Assistant Headteacher, this was not possible. Interviews with the pupils mainly focused on their engagement with the programme and any impacts they perceived.

7.2iii School C: "Calisto High" Pen portrait

Calisto High is located in an inner-city area of significant socioeconomic deprivation, formerly one of the poorest wards in England. The catchment area comprises one of the largest council estates in the country. The school was ranked in the second decile on the IMD (2015). The majority of the pupil cohort were of white British heritage and the percentage of pupils known to be eligible for free school meals (39%) was above the national average. The percentage of pupils with special educational needs is also above average (12.7%). The school has specialist provision for students with autistic spectrum disorders and students with physical disabilities or moderate to severe learning difficulties. Certain students with significant behavioural difficulties attend work-related training or other alternative provision off-site. The school provides an alternative curriculum, a programme of 'socialisation' for pupils who might otherwise face permanent school exclusion.

The Assistant Headteacher described the local community as being quite 'self-contained' and 'old fashioned' in that everybody knows one another, multiple generations having grown up in the area. Most of the school cohort are understood to live in housing association accommodation. The school are committed to raising the aspirations of their pupils and engage in a range of initiatives to support this work. The Assistant Headteacher referred to the large number of 'difficult' and 'hard to reach families' in the community which, combined with the fact that children typically arrive with low levels of literacy and numeracy, presents the school with significant challenges. The school takes a holistic approach to tackling the needs of their cohort and believe the pastoral support in school is one of their strengths. In recent years, they provided multi-agency services in school, including an on-site social worker, police officer and representative from the Child and Adolescent Mental Health Services (CAMHS). However, due to diminishing budgets, some of these services have been withdrawn.

Despite the work invested in addressing the behavioural, social and educational challenges presented in school, Calisto High school was repeatedly reported as inadequate by Ofsted (2014 and 2018).

> *"Outcomes for disadvantaged pupils are inadequate … the progress that these pupils made in examinations in 2016 and 2017 was significantly less than that*

of others nationally. The current progress of disadvantaged pupils in key stage 4 remains stubbornly low across a wide range of subjects." (Ofsted, 2018)

7.2iv Interviewees

School Ai: Interviews were conducted at Ganymede Academy with two teachers (Miss Kenyon and Mrs Barber), the Assistant Headteacher (Mrs Waite) and four pupils (one girl and three boys).

School B: Interviews at Europa Academy were conducted with five (four boys and one girl) out of the nine pupils who participated in the intervention. The researcher was solely responsible for delivering the intervention in this context. No teachers were available for interview.

School Aii: Interviews at Ganymede Academy were conducted with two teachers - Miss Kent, a newly qualified teacher (NQT) and Mr Whitely, a teacher in his second year of teaching - and a focus group of four pupils (two boys and two girls).

School C: Interviews at Calisto High were conducted with the Assistant Headteacher, Mr Barnes and with two focus groups of pupils – focus group 1, two boys and two girls; focus group 2, two boys and one girl. The researcher was present to support the nominated teacher to deliver the intervention in this school. The teacher was not available for interview at the end of the programme but provided her feedback on the experience through regular informal discussions with the researcher throughout the duration of the classes. On this basis, the researcher gained an understanding of the issues relating to implementation in this context, several key issues which broadly resonated with the themes reported in the previous case studies. The Assistant Headteacher was available for interview but had not been involved in implementing the intervention (although he had discussed the experience with the teacher beforehand), therefore the researcher took the opportunity in this interview to explore the contextual issues and future potential of the programme in greater detail.

7.3 Thematic Analysis

The emergent themes and their sub-themes that resulted from analysis of the interviews from each individual school setting are summarised in Appendix VIII. Diagrams representing the dominance of themes and sub-themes in each context

are also included in Appendix VIII. The themes from this analysis were then re-coded to represent the whole dataset, under the headings: context; engagement; implementation, impact and adaptation (*Figure 7.1*). Table 7.2 illustrates how the sub-themes from the individual analyses were re-coded under the main theme headings. It should be noted, as previously mentioned, that no teachers were available for interview in Europa Academy (School B). Interviews were conducted solely with pupils in this school and their views only contributed to the themes of engagement (including activities) and impact. The themes and sub-themes derived from analysis of the interview transcripts are representative of a hugely rich data source. Supporting evidence, derived from researcher observation notes taken during meetings and conversations as well as during formal and informal classroom observations, also contributes to the findings. In this way, evidence from Europa Academy is included across all themes where relevant. The source of data is indicated throughout this chapter.

Figure 7.1 Themes and sub-themes

Theme A: **Context**	Relevance (worthiness of the programme) Home background, parenting issues Cultural perceptions and social norms Peer influence and social media Pupil vulnerability
Theme B: **Engagement**	Appropriateness of intervention Enjoyment Practical activities/role play Relationships and trust Peer learning
Theme C: **Implementation**	Support Planning Timing Classroom management Resources (including staffing and space) Teacher training
Theme D: **Impact**	Positive experience Information acquisition and risk awareness Bonding/group support Confidence Strategies
Theme E: **Adaptation**	School adaptations Teacher reflections Pupil response

Table 7.2 Amalgamation of individual school coding

Amalgamated Coding		Sub-themes from individual school analysis			
Theme	**Sub-themes**	**School Ai**	**School B**	**School C**	**School Aii**
Context	Relevance (worthiness of the programme)	Relevance/ worthiness of programme		Relevance	Relevance/ worthiness of programme
	Home background, parenting issues	Home context/ family issues	Home background		
			Parental discussion		Parenting Mental health
	Cultural perceptions and social norms			Cultural perceptions	
	Peer influence and social media	Peer influence (social media)		Peer influence	Peer influence
				Social media	
	Pupil vulnerability	Specific pupil needs/needy groups (vulnerabilities)		Vulnerability	
Engagement	Appropriateness of intervention	Appropriateness of intervention		Appropriateness of intervention	Appropriateness of intervention
	Enjoyment			Enjoyment	
	Practical activities/role play	Practical activities		Practical activities	Practical activities/ role play
		Role play	Role play Drawing	Role play	
	Relationships and trust			Establishing trust	Relationships
	Peer learning		Teamwork	Peer learning/group work	

Amalgamated Coding		Sub-themes from individual school analysis			
Implementation	Support	Support			
	Planning	Planning			Planning and resources (including staffing and room space)
	Timing	Timing		Timing	Timing
	Classroom management				Classroom management
	Resources (including staffing and space)			Resources (including staffing and space)	
	Teacher training	Teacher training		Training	
Impact	Positive experience	Positive experience		Positive experience	
	Information acquisition and risk awareness	Awareness raising	Information acquisition Greater awareness Risk awareness	Awareness raising	Awareness raising
	Bonding/group support	Bonding/group support			
	Confidence	Confidence	Confidence building	Confidence	Confidence
	Strategies			Strategies	
		Gender			
					Teaching and learning skills
Adaptation	School adaptations				School adaptations
	Teacher reflections				Teacher reflections
	Alternative models of delivery	Peer mentoring		Alternative models of delivery	
	Pupil response				Pupil response

7.3i Theme A: Context

This theme related to research Objective 1 (FS2) (*Table 7.1*) and offered insight into the importance of the intervention as perceived by stakeholders working in a range of different school contexts. The sub-themes relating to context (*Figure 7.1*) identified in analysis of the interview transcripts are discussed in the following sections. Evidence from observation data is used to support the findings (Section 4.5iv) and the data source will be identified throughout this chapter. Firstly, the relevance of the intervention is described (7.3i-a). The next section presents issues relating to home background and parenting (Section 7.3i-b). Cultural perception (7.3i-c), peer influence and the impact of social media (7.3i-d) are discussed next. The final section (7.3i-e) identifies concerns around pupil vulnerability as a specific issue in the context of social deprivation.

7.3i-a Relevance

All the schools that participated in this research served areas of significant socioeconomic deprivation, as described in Section 7.2. The researcher noted from initial conversations conducted during the recruitment process, that senior leaders in all three schools recognised the importance of the intervention work in their local context. Issues including lack of aspiration, mental health problems, low wellbeing, substance abuse and poor parenting were familiar concerns that presented the schools with significant challenges. The Assistant Head, Mrs Waite, at Ganymede Academy specifically identified drug and alcohol misuse (evident as an issue in at least 10% of households across the school cohort) and low pupil wellbeing as serious concerns evident amongst the local community and of relevance in their school context.

> *"drug and alcohol misuse is quite consistent, it's around 10% across all year groups … amongst parents, and they're the ones that we know about … I think the worrying thing for us is that we know there's probably more who are not on peoples' radar"* (Mrs Waite, Assistant Head, Ganymede)

Analysis of the interview transcripts confirmed that work was already in place at Ganymede Academy and Calisto High School to address some of the significant challenges that such contextual issues presented in school. This work typically took place within PSHE lessons. Mrs Waite discussed the importance of enhancing pupils' wellbeing to be *"strong mentally"* and *"able to cope"* particularly given the

stresses of exams in addition to the everyday pressures that students face. Interviewees in both schools generally believed that the intervention was relevant to their context, fitting well with the existing curriculum in enhancing and extending aspects of their existing work.

> *"I mean it's a very relevant topic … [PSHE classes] cover keeping yourself safe, road safety and safety in the home. It's all about self, it's all about them developing and being aware of things … I would have thought that it did fit in really well."* (Mrs Barber, drama teacher, Ganymede)

> *"it links with our pastoral push around developing our students to have the appropriate skills to deal with life situations"* (Mr Barnes, Assistant Headteacher, Calisto)

7.3i-b Home background

The home context (located in an area of high deprivation) was mentioned as a strong and major influence on children at Ganymede and Calisto High, which presented many challenges in school. Homes were described by staff at Ganymede as *"chaotic"*. In cases where there were known issues at home, such as drug or alcohol misuse, it was felt that young people may not always get adequate or appropriate parental support. There was a sense that the school felt duty-bound to take on this responsibility.

> *"because we're in an area of high deprivation, so the top one percent nationally, we obviously have students who present with lots of challenges. They have quite chaotic backgrounds and we think … we know that we've got to support students to deal with all that chaos that's going on in their lives. So, certainly, around drug and alcohol issues in particular, we know that families don't always access the support they need and we feel that if we could do some preventative work with children, that hopefully will have a positive impact as they grow into young adults."* (Mrs Waite, Assistant Head, Ganymede)

The class teachers from Ganymede Academy all mentioned lack of parental discussion in their interviews as an issue that reflected the home context (poor parenting being one of the characteristics associated with socioeconomic deprivation). They observed that pupils were eager to engage with the *It's my life* topics because these were issues they needed to discuss and they had questions to ask that weren't being answered at home. The implication of this was that the intervention work was necessary in school.

"there is a lack of discussion maybe at home about some of these issues, so children come to school with lots of questions about these kinds of things because they're not necessarily discussed at home." (Miss Kent, class teacher, Ganymede)

Findings from Europa Academy, however, revealed a contrasting perception on home background suggesting that these pupils were not from the most severely disadvantaged homes. Observations made by the researcher, during intervention group discussions, reinforced by comments from the interviews, indicated that pupils had discussed the risks of drinking alcohol, amongst other risks including drug taking and smoking, previously with parents or guardians.

"my parents always tell me … never get that drunk where you don't know what you're doing, where you are … errm just have, like, a few wines or something so that, like … and make sure you eat before you go" (Sarah, year 7 girl, Europa)

This implied a level of stability and functionality was evident in these pupils' homes. Observation notes from the intervention session (at Europa Academy) that explored the pupils' interests and strengths revealed that they were all engaged in a range of hobbies and activities. In the aspirations work (described in Section 3.3ii), when pupils were asked to draw what they would like their futures to look like, they had all considered what sort of career they might pursue and found it easy to describe the trappings of their desired future lifestyle (*Figure 7.2*). These drawings offer insight into the types of homes that the pupils were from, suggesting that the pupils who self-selected to participate in the research at this school may not have been from the most severely disadvantaged or disaffected households that had been described by staff.

Figure 7.2 Future Lifestyle - Europa Academy

To aicheive this I need to take my ephucation seriously and pass my GCSE's.
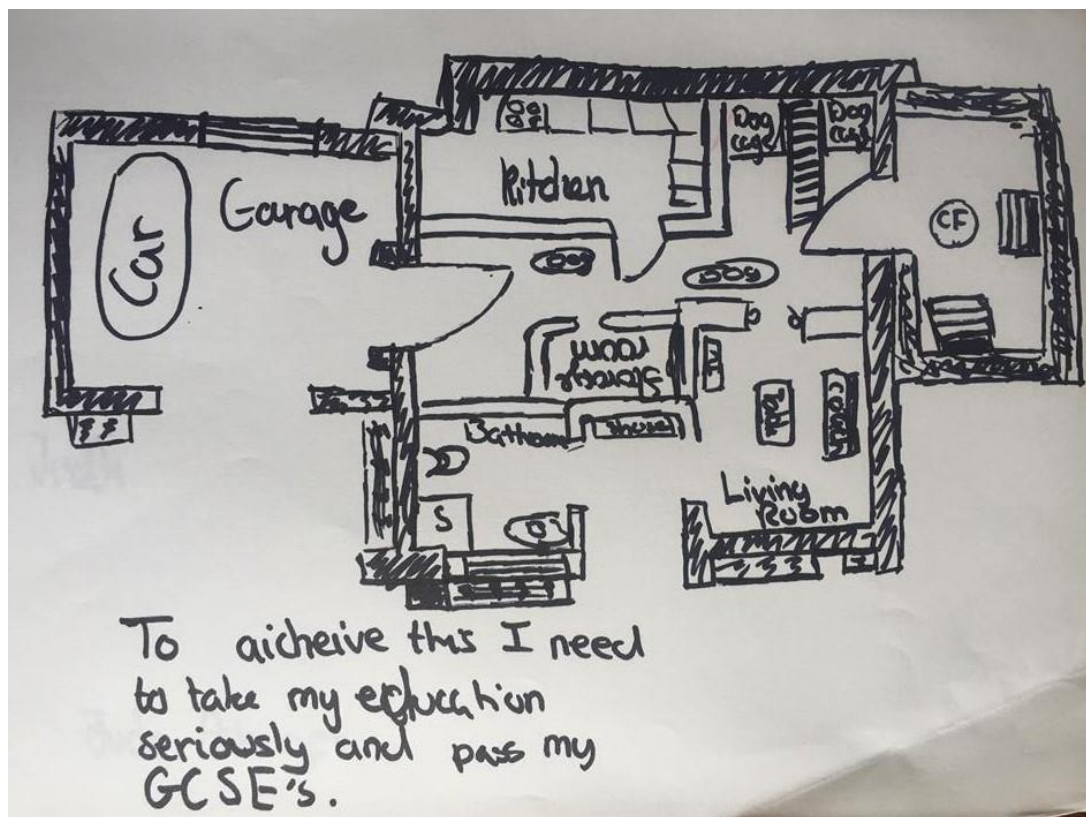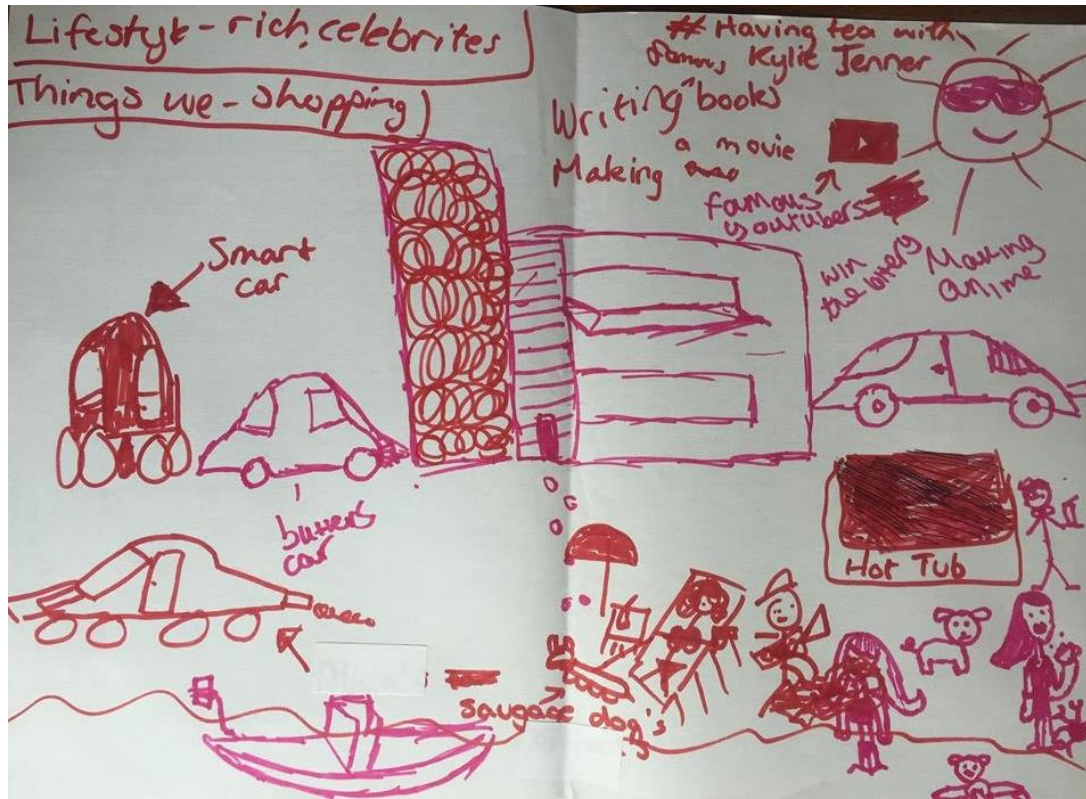
7.3i-c Cultural perception and social norms

Interviewees described how the pupils' home context, characterised by poor parenting and lack of positive role models influenced their views on alcohol. Pupils in focus group discussions at Ganymede Academy demonstrated examples of both positive and negative influences in relation to alcohol consumption. One boy in the group, Adil, was from a Muslim background and clearly expressed that his family do not drink, a contrasting situation from those described by Gemma in which parents allowed or even encouraged their children to try a drink for New Year.

> *"most people at New Year last year, they said that parents like gave them, like, like ..; say that much (indicating) of champagne or something and they did say it's not like a really nice feeling, like, drinking it but like, like most of them said like, like they won't drink it like but some of them said (inaudible) like they were encouraged by their parents to try a bit"* (Gemma, year 7 girl, Ganymede)

> *"I don't drink. My parents told me not to drink … they don't drink"* (Adil, year 7 boy, Ganymede)

> *"maybe if parents give their kids alcohol and they don't like it, it might discourage them from getting it in the future"* (Sam, year 7 boy, Ganymede)

The Assistant Head at Ganymede described how alcohol misuse modelled in the home can impact on pupils' perceptions of what is 'normal' behaviour, she explained that what some children see as drinking *"is going out and getting drunk, it's not having a social drink"* and this becomes their social norm because the parents are not educating them otherwise. Mr Whitely, teacher at Ganymede (Aii), gave examples of the types of misconception held by pupils in his intervention class at the start of the programme:

> *"I think the main thing was, like, all the misconceptions the kids had about drinking about who drinks and who does what and sort of what makes a healthy lifestyle and a healthy approach to alcohol."* (Mr Whitely, class teacher, Ganymede Aii)

Mrs Waite also described how drinking can be *"like a badge of honour"* when stories are circulated round the peer group, the pupils involved in drinking episodes seem to attract attention and others feel like *"they want to be part of that group"*. Mr Barnes at Calisto High commented on the same issue as being problematic within 'any inner-city school', he defined the problem as a mismatch between 'perception' and 'truth'. He explained this in terms of young people's perception of how many of their peers

engage in behaviours such as drinking, drug-taking and sexualised behaviour. Their perception seems to be that many young people behave this way, however, Mr Barnes believes the reality is quite different. Through work conducted in school, he maintains that the numbers are actually very low.

> *"within any inner city school you've got a sub-culture whereby there's perception and there's truth and the two of them don't often marry up … a perception around how many other young people are around undertaking kind of, sexualised behaviour, how many other young people are maybe drinking, how many other young people, in their perception, are taking drugs errm and the reality is actually the numbers can be quite low … when we do one-to-one work, we discover those numbers are actually very low"* (Mr Barnes, Assistant Headteacher, Calisto)

Further to this idea of mismatched perception and reality, Mr Barnes also described concerning cultural misconceptions relating to risk-taking. He believes that certain behaviours are considered by young people to be acceptable or low-risk, such as drinking alcohol or drug-taking, when actually they can present considerable danger.

Analysis of the interview data revealed that the schools understand contextual issues – including, poor parenting, the lack of positive role models evident in pupils' homes and negative peer and social influences that are exacerbated by social media exposure (discussed in the next section) – as significant areas of concern. As a result, staff believed that part of their work with pupils was to educate them to be more risk aware and to question social norms.

7.3i-d Peer influence (and social media)

Another issue identified in the interview analysis that closely relates to the development of social norms was concern over the power of peer influence. Senior leaders at both Ganymede Academy and Calisto High School highlighted peer pressure as a key issue affecting young people. They both also specifically emphasised the fact that peer pressure had become increasingly problematic in recent years due to the pervasive influence of social media. In that sense, these two themes are very closely related and have therefore been grouped together for discussion. Mr Barnes (Calisto) and Mrs Waite (Ganymede) described how in the past, young people could find some respite from their peers when they were at home. However, because social media is relentlessly accessible 24 hours a day,

peer influence can be very difficult to avoid. Mrs Waite described how children are understood to be accessing their accounts late into the night *"they don't want to miss out, they daren't put their phones down"* and the pressure to feel that they are missing out on something, or that they should be engaging in certain behaviours can be relentless.

> *"it's massive, it is, and especially with social media, cos I think, you know, kids will say … something's going round on social media, they want to be part of it because within five minutes you can suddenly be left out of something. It's not like, let's wait and see what's happened the next day at school, it's … you know, all sorts will have gone on at night, during the night even, lots of kids are up on social media really late at night. So, they don't want to miss out, they daren't put their phones down."* (Mrs Waite, Assistant Head, Ganymede)

Mr Barnes explained how social media could also similarly influence parents:

> *"our boundaries, that I think again, can get blurred very easily in home situations because there's so much pressure on home, and actually homes and parents as much as young people are subject to that pressure from their peers and other people, thinking 'well, if other families are doing this, maybe that's the way things are now'"* (Mr Barnes, Assistant Headteacher, Calisto)

Staff therefore considered that the intervention programme was relevant to this area of concern. Mr Barnes described how staff at Calisto High have been working with students to recognise that not all information presented on social media is a true reflection of reality, to understand that there is 'fake news' and 'fake posts' and not to simply assume that something is true because it is posted on-line. He referred to the idea of *"blurred"* edges between perception and reality and explained that he believed the *It's My Life* intervention work was important in helping students to 'unblur those edges'.

> *"it's all about the perception and the reality. And the edges become very blurred and that's where the work you were doing with that classroom-based group has been very important because it's about helping students to unblur those edges, really, when it comes to making choices."* (Mr Barnes, Assistant Headteacher, Calisto)

Other issues also emerged from the data analysis regarding peer influence. Firstly, Miss Kent at Ganymede (Aii) described differences between the two classes that she had delivered the *It's My Life* intervention to; a lower ability group, which she described as being *"very needy"* had very little self-awareness, whereas the higher ability group were more self-conscious in front of their peers. This example illustrates

how increased self-awareness can relate to the importance of the peer group for young people and their susceptibility to peer influence.

"my kids in [class B7] are very needy and aren't really, don't really have self-awareness yet and aren't really embarrassed in front of each other, whereas [class A7] are developing this kind of teenage self-consciousness about how they appear in front of their peers." (Miss Kent, NQT, Ganymede Aii)

The pupils from Miss Kent's higher ability class also discussed peer pressure in their focus group interview. They identified reasons that young people succumb to peer influence - wanting to look cool, mature or grown up, wanting to be with their friends or do what their friends are doing or to feel included or accepted – illustrating an increased self-awareness amongst this group which might explain how young people become more susceptible to peer influence.

"for me, it's like you know peer pressure … it's really hard to say 'no' to my friends. Like because you don't want to look, like, stupid in front of them so you know like let's say someone was like 'try this' and you're like 'no, I don't think it seems right' inside you want to say 'no' like but in front of everyone you don't want to look stupid" (Gemma, year 7 girl)

Miss Kent explained that she believed the different levels of self-awareness she observed in her classes, had an impact on pupils' engagement with the intervention activities. This was particularly evident in the role play sessions.

"one group was a bit better with [the role play] than another group, which was my lower set group that I did it with, responded much better to it" (Miss Kent, NQT, Ganymede Aii)

"there's a lot in [the higher ability] group who won't do something unless they see that one of the cooler kids has done it first in that room because they are kind of trying to suss out, they don't want to do something that's going to make them appear less cool." (Miss Kent, NQT, Ganymede Aii)

She also commented on views expressed by her classes regarding peer pressure. The implication was that she could see a contradiction between them having a *"strong moral sensibility"* and her observations of them as *"followers"*. Pupils declared that they would be confident in holding different opinions to their friends but Miss Kent felt that they were giving her the 'right answer' rather than what they actually felt.

"there was a lot of talk about peer pressure and I think at the time, they were all saying that they wouldn't succumb to peer pressure but I almost felt that they

were saying that because it was the right answer not that they actually would feel like that" (Miss Kent, NQT)

"I think there's a question 'I would feel comfortable having a different opinion to my friends' something like that. A lot of them were very vocal about 'yeah, I'm confident with that' and I don't actually believe that for a second" (Miss Kent, NQT)

This evidence suggests that pupils' susceptibility to the power of peer influence increases as their self-awareness develops. This further explains the concerns expressed by Mr Barnes and Mrs Waite relating to the influence of social media, in that as young people become more focused on their peers, messages that they are constantly exposed to via social media become highly influential but may be misperceptions of reality.

7.3i-e Pupil Vulnerability

As discussed in the previous section, there is a danger that the perceptions presented by the peer group, both via social media and in person, can result in young people feeling that they are somehow 'missing out' and can prompt a desire to want to participate in risky behaviours. Concerns were raised, at both Ganymede and Calisto, that certain pupils may be more susceptible to such influences. Mr Barnes at Calisto High School explained that some vulnerable pupils may be more easily influenced to engage in behaviours modelled by their peers.

> *"the perception is that 'I'm not doing it, but everybody else is' and there's some vulnerable young people then who would take that perception and see that as some sort of motivation to then say 'well, I need to be doing the same as A, B and C, therefore I must be doing X, Y and Z'"* (Mr Barnes, Assistant Headteacher, Calisto)

Interview analysis highlighted reasons why vulnerable pupils may be at greater risk of peer influence. Miss Kenyon, class teacher at Ganymede Academy, identified vulnerable pupils in the cohort as child carers, pupils with special educational needs, looked after children and others affected by family issues. She explained that in cases, for example, where pupils were caring for a sick parent or for younger siblings, they were having to grow up very quickly, they were not going out to make friends and were essentially missing out on childhood experiences. She suggested that such situations had implications for pupils' social development and wellbeing, making them more vulnerable to peer influence and potential risk.

"A lot of [pupils] have a lot of pressure from home to be an adult very early, looking after the youngsters. So, they don't get the time to go out. You speak to them about the holidays, 'what did you do?' nothing, they didn't go anywhere, they didn't do anything, didn't see their friends and particularly with the six-weeks holiday, you think 'you've spent six weeks inside' they haven't even gone to the park to see friends or anything like that." (Miss Kenyon, class teacher, Ganymede Ai)

The Assistant Headteacher at Ganymede identified issues of low self-esteem and anxiety amongst the pupils at the school. Miss Kent, class teacher at the school (Aii) reported a prevalence of pupils in one of her classes presenting with self-confidence and wellbeing issues. Pupils also mentioned their own issues with low self-esteem and anxiety.

"I'm very anxious about everything" (Sam, year 7 boy, Ganymede Aii)

"I was having a hard time in school, so then I got put on part-time, so I come in later than everyone else" (Megan, year 7 girl, Ganymede Aii)

Miss Kenyon, at Ganymede (Ai) provided further insights relating to pupil wellbeing which were again indicative of the socioeconomic context. In her interview, she described gender differences amongst the cohort, explaining that there were 'needy' individuals or groups, both girls and boys, but each presented different issues and characteristics that presented different challenges in the classroom;

"the boys specifically are very boisterous, they're very bright and very on the ball, but they're also very, kind of, needy for attention, not always in a good way to get attention, either. And the girls, on the other side, are quite withdrawn, although they want to be heard, but they don't know how to be heard." (Miss Kenyon, class teacher, Ganymede Ai)

This is another reflection of the home context, again a characteristic associated with socioeconomic deprivation, which can make pupils vulnerable and therefore potentially more susceptible to risk.

7.3ii Theme B: Engagement

This theme relates to Objective 1 (FS1) *to develop and adapt a school-based intervention,* Objective 1 (FS2) *to assess whether the revised intervention could be implemented in different school settings* and Objective 2 (FS2) *to identify any key 'active components evident within the intervention.* Data analysis, from interviews and researcher observation notes, captured information on pupil and teacher

response to the intervention, including how well participants engaged with the content, topic, mode of delivery and activities. The following sub-themes were identified under the theme heading of engagement. Firstly, appropriateness of the intervention is discussed according to specific school contexts and the needs of pupils identified by the schools (7.3ii-a). Enjoyment (7.3ii-b) was identified as an important factor in relation to engagement and links to impressions of the practical activities (7.3ii-c) that were included in the intervention. The next section (7.3ii-d) outlines the importance of developing relationships and trust within this programme of work, which links closely to MI as one of the mechanisms of change identified in the theoretical framework for this research (Figure 2.21). Finally, peer learning, included in the intervention as an important learning strategy (Section 3.2iv) is discussed (7.3ii-e) in relation to engagement.

7.3ii-a Appropriateness of intervention

It was evident from interview data relating to context (Section 7.3i) that schools recognised a need for the *It's My Life* intervention and commented on its relevance in terms of meeting the needs of pupils in their schools. This section looks at the appropriateness of the intervention in targeting those needs.

In general, interview analysis confirmed that teachers considered the intervention appropriate in promoting the type of work that they identified as important in their context, for example, raising awareness about the risks of alcohol, encouraging positive aspirations, establishing healthier social norms. For example, Mr Whitely, class teacher at Ganymede Academy (Aii), explained the importance of giving children in this disadvantaged social context the opportunity to discuss subjects such as alcohol and risky behaviours, owing in part to the lack of parental discussion with pupils, and gave examples of the type of discussion that was needed with his pupils. He felt the intervention fulfilled some of the requirements for their spiritual, moral, social and cultural development (SMSC).

> *"I thought it was needed, even if it was just to get them talking about [alcohol], to get them thinking about it, every kid."* (Mr Whitely, class teacher, Ganymede Aii)

> *"cos some of them didn't even know what alcohol was and that's in the minority, but that lager is alcohol just like wine is alcohol just like spirits, do you know*

what I mean? and what being drunk means and how that feels" (Mr Whitely, class teacher, Ganymede Aii)

The Assistant Headteacher at Calisto High school discussed the suitability of the programme according to target age group. He confirmed that the intervention was appropriate as a core offer for year 7 pupils, *"in terms of giving some of those basic skills and awareness … before they maybe meet those dilemma moments"*. The timing of the intervention is discussed in further detail under the implementation code heading (Section 7.3iii-c).

Mr Whitely, at Ganymede, also considered the style of learning appropriate because it encouraged the involvement and engagement of the whole class. This theme links closely to the mechanisms of change identified in the development of the intervention (Chapter 3.0) which are discussed under the following sub-themes: development of relationships and trust (Section 7.3ii-d), an important component of the MI approach; and peer learning (Section 7.3ii-e) which links to SLT.

> *"it did it in a way that wasn't like 'I'm going to tell you what to do' we're going to talk about everything and we're going to have it out with … and I thought that was a really good way to structure it because it then meant that every student wanted to take part, not just the ones that would be like typically they don't like alcohol or … it was done in a way that got everybody involved."* (Mr Whitely, class teacher, Ganymede Aii)

7.3ii-b Enjoyment

Interview analysis across all the school settings and from all interviewees confirmed that pupils had enjoyed the intervention classes, describing them as *"fun"* and *"interactive"*. Pupils explained that they enjoyed the practical activities (discussed in Section 7.3ii-c) and working together with their peers (discussed in Section 7.3ii-e).

> *"it was really fun and the activities were really good because we can act, we were playing with the group and we were showing each other what we can or what is better and how we can make our lives go forwards, not backwards"* (Hannah, year 7 pupil, Ganymede Ai)

> *"[the classes] were really fun, especially the drama cos obviously you're getting to work with other people who have different skills and you're getting to learn about other people as well and what type of person they are. And we got to see people's hobbies and what their talents are, as well, when we were learning about, like, our strengths"* (Carla, year 7 girl, Calisto)

"I really liked it … I thought it was fun" (Sarah, year 7 girl, Europa)

Several pupils commented on the programme being *"better than my normal lessons"* (Jake, year 7 boy, Europa). When asked whether he enjoyed the programme, Taylor (year 7 boy at Europa) responded *"yes, we get to do, like, fun stuff instead of, like, just writing"*. The data analysis suggests that pupils may have responded positively to the novelty of the intervention, which evidently contrasted to the format of their usual lessons where they would typically work by themselves. This finding was also noted by the researcher, delivering the intervention in Europa Academy.

> *"you didn't just sit down and … work on a piece of paper, you got up and you did some drama"* (Graham, year 7 boy, Calisto)

> *"it was really fun doing the group work as well because in a lot of lessons we have to work by ourselves, but like, when we work as a group it's a lot more entertaining cos, you know, you can stay more focussed on the task because you've got more support as well, so it's easier to make up ideas and support, like, what you're doing."* (Danny, year 7 boy, Calisto)

The researcher observed that the pupils at Europa Academy were particularly eager to attend the session. Each week, one or two of the pupils would see the researcher arriving and promptly excuse themselves from their teacher to go and retrieve the other members of the group from other areas of the learning zone. The researcher observed that the pupils were interested and happy to engage with the intervention topics. They were all confident to contribute in group discussions, asking questions and volunteering ideas. Certain individuals were particularly vociferous and the researcher often had to manage discussions to ensure that all members of the group had the opportunity to express themselves. The teachers at Ganymede also reported that pupils had been keen to engage with the intervention topics, describing their enthusiastic response to having the opportunity to talk about alcohol.

> *"the kids were like instantly interested in 'oh, we're going to talk about this and I've not had much of a chance to speak about it before'. And it wasn't like 'right, here's our lesson on something completely random or out of context' it was real and they wanted to know about it and they wanted to explore it."* (Mr Whitely, class teacher, Ganymede, Aii)

> *"I think the kids were quite excited about the prospect of learning about drugs and alcohol and I think then they were a bit, 'when are we actually ever going to learn about this?'"* (Miss Kent, NQT, Ganymede, Aii)

The pupils' intrigue could be explained by several factors. Firstly, it may due to the lack of opportunity to discuss such topics at home, as suggested in earlier findings (Section 7.3i-b). It may have been due to the 'novelty' of the programme (previously mentioned in this section). Another reason for pupils' enthusiasm for the intervention programme may be that pupils have already started to develop an interest in drinking, as during this early stage of adolescence, young people become increasingly focussed on their peers and they are likely already being influenced via social media (Section 7.3i-d). Finally, in the case of Europa, the intervention group was small (only nine pupils), so the pupils received more individual attention than in a regular lesson which may also have contributed to the appeal.

However, despite pupils' enthusiasm for the intervention classes, there was a sense, observed by the researcher in all schools, that some of the pupils didn't seem to take the intervention work seriously. It was observed in some classes, that some pupils did not fully engage with the activities, perhaps taking advantage of the more informal environment offered in the intervention classes which contrasted to usual classroom practice. For example, during group activities, pupils were overheard talking about unrelated topics and teachers gave frequent reminders to pupils that they needed to concentrate.

> *"I didn't know you had to like put serious stuff down, so I put like this random …*
> *and everyone was putting like, I wanted to live in Narnia and everything"*
> (Helen, year 7 girl, Calisto)

The issue of pupil behaviour was mentioned in informal discussions with staff from all the schools. Ganymede Ai, Mrs Kenyon expelled two boys from the class for disruptive behaviour. This viewpoint was reinforced by some of the pupil comments. At Calisto, a behavioural support teacher was provided, perhaps in anticipation of disruptive behaviour, although she only attended week 2 of the intervention. This observation suggests that the pupils may have engaged with the intervention and learning style better than predicted by the Assistant Headteacher in providing behavioural support, hence she wasn't required to stay for subsequent sessions.

7.3ii-c Practical activities

Analysis of the interview data indicated that the practical activities within the intervention programme were an effective means of engaging pupils' attention. For

example, Mrs Barber from Ganymede Academy (Ai) described how, when the class was selected to participate in the intervention, her colleague Miss Kenyon had expressed reservations about using this group for the research study, as she found their behaviour quite challenging. Mrs Barber had disagreed, believing that this volatile group represented the type of pupils who might benefit the most from the programme. She felt that the active, practical nature of the intervention suited the type of learners in the class, for example, those who typically struggled to concentrate or sit still for any length of time. (Mrs Barber was a drama teacher in her earlier career, so understood the advantages of engaging children in the creative/performance arts). However, as previously mentioned, Miss Kenyon did permanently remove two pupils from the group for disruptive behaviour, but overall, felt that the group engaged very well with the intervention.

> *"if they do active stuff like drama, they always remember things like that cos that kind of learner when they participate rather than just sit there and listen and then maybe write a few notes, I think if they're actually active, they'll talk about it"* (Mrs Barber, drama teacher)

The inclusion of role play as a significant part of the intervention received a mixed response. It was generally well received by the staff and pupils that were interviewed, with pupils reporting; *"I liked doing the acting"* (Taylor, year 7 boy, Europa) and *"[the classes] were really fun, especially the drama"* (Carla, year 7 girl, Calisto). However, the researcher noted that some of the pupils observed in the classes at Calisto High School and at Ganymede Academy were reluctant to participate in the role play performance. The pupils seemed happy to complete the group work to plan their role plays and to practice enacting them, but they didn't want to perform in front of the class. At Calisto High, only one boy volunteered to perform his work (with assistance from the researcher). It was observed that, despite their reluctance to perform their role plays, pupils at Ganymede were persuaded to so under the guidance of the experienced drama teacher, Mrs Barber. The researcher noted that pupils in the class at Calisto might have been persuaded to perform, but because the dominant voices in the class 'voted with their feet', their fellow students did not volunteer either. One girl explained that it was awkward and embarrassing to perform in front of the class. The Assistant Headteacher was aware of the issue and explained that drama was something that he was keen to encourage in school. He was confident that pupils would become more comfortable with the performance

element if they spent more time working on it and became familiar with role play as a 'method of learning'.

> *"I think for them, the reluctance to do role play was very much from that embarrassment of standing up in front of others, which was essentially the reason why we're doing it, really, cos we're wanting them to get over that, to be able to do that. But I think that would come over time, that as they get comfortable with that kind of method of learning"* (Mr Barnes, Assistant Headteacher, Calisto)

There was evidence from the interview analysis that teachers could be reluctant to engage with the role play, as well. One teacher at Ganymede Academy (in the whole cohort implementation, Aii), Miss Kent, admitted in her interview that she had not felt confident enough to allow her higher ability class to engage in the practical role play. She commented that this group were too inhibited to do drama and potentially look foolish in front of their peers. She also described not having established the level of trust with this class to enable her to release the classroom control and allow them to try the practical activity. Hence, she gave them a role play script to write instead, which was completed in pairs.

> *"I often will not do kind of more group activities or more pupil-led activities yet, because they're not ready and I'm not ready for them to do that."* (Miss Kent, NQT, Ganymede Aii)

Mr Whitely (at the same school) conversely, enjoyed experimenting with the role play component and had also used it in other classes beyond the intervention. He reported that the pupils in his class had enjoyed the varied nature of the activities.

The teachers in the first implementation at Ganymede Academy (Ai) also recognised drama as being an effective and memorable learning approach, particularly as a means for some pupils who have poor concentration levels to develop understanding and to engage with the learning. The participative nature of drama was also considered helpful as means of encouraging communication and teamwork and of developing the confidence of the pupils.

> *"I honestly think the drama - they asked to do drama today, I just ... 'we've had enough drama' - but I think for them, it's their way of communicating their understanding and I think it's a really good way for them all to be able to participate and for you to see their level of understanding with it and confidence or lack of … errm, I love doing drama pieces, but I'm not a drama specialist, so I struggle to keep the …"* (Miss Kenyon, class teacher, Ganymede Ai)

Another drama-based component of the intervention, which was also observed as being potentially one of the most effective, was the teacher in role character of 'Lucy, the reformed alcoholic'. In their interviews, the pupils particularly singled out this part of the intervention as being memorable. There were some very positive comments about the interactive experience, teachers at Ganymede (Ai) particularly noted how the pupils, especially the boys had been respectful and had taken the exercise seriously.

> *"she was talking to us and I felt like she had a really bad life and I don't want to have it, too, and I thought that I wouldn't drink as much alcohol, but maybe just parties and stuff"* (Hannah, year 7 pupil, Ganymede Ai)

> *"Cos [the boys] respected it as well, they respected that and they took her very seriously, which is good."* (Miss Kenyon, class teacher, Ganymede Ai)

> *"I thought the role thing, the way they asked the questions, really perceptive questions and they took that really seriously. And I was very worried about that. Even the silly boys took that seriously."* (Mrs Barber, drama teacher, Ganymede Ai)

The researcher observed the 'Lucy' role play interactive session on three occasions (one of which she performed herself – with no drama experience) and in each case the pupils had fully engaged with the experience, as described in the Ganymede example. It was noted in the observations that pupils took this opportunity to ask questions that could potentially be both personal and sensitive. The hypothetical situation allowed issues to be explored in a safe and anonymous way and demonstrated that there was a lot that pupils wanted to know about. The Assistant Headteacher at Calisto commented on the effectiveness of this activity and explained that the experiential learning facilitated by the role play aided pupils' understanding by developing a sense of empathy.

> *"the sense I got from the intervention was very much that its experiential, so it was about the young people actually taking facts and saying 'well, what would the experience of this fact be?' ... They actually were putting themselves into those situations and developing that skill of empathy and thinking right 'what does it feel like to be the person on this side of it?' 'what does it feel like to be the person on that side of it?' And so really it was about that, those thinking skills that the students were developing."* (Mr Barnes, Assistant Headteacher, Calisto)

7.3ii-d Relationships and trust

An important part of the MI approach utilised in the *It's My Life* intervention is to establish a safe and trusting environment in which the pupils can freely discuss topics. Therefore, the first sessions of the programme were devoted to activities designed to encourage a trusting relationship to develop between members of the class including the adults involved in the intervention delivery. This was identified in analysis of the interview transcripts as an important factor in all the schools with both teachers and pupils commenting on the importance of relationship building in the intervention sessions. It was a particularly dominant sub-theme for teachers who took part in the second implementation model (School Aii) at Ganymede. Mr Whitely, for example, described how the programme had helped him to develop a relationship with his class that sustained beyond the scope of the intervention.

> *"they see you as somebody who cares because you're talking to them about them, its them first"* (Mr Whitely, class teacher, Ganymede Aii)

Miss Kent also discussed the importance of establishing a relationship of trust with her class in order to implement the intervention. However, her point was connected to classroom management and maintaining control of the class, as discussed in Section 7.3iv-d. As a newly qualified teacher she did not have the confidence to facilitate some of the pupil-led and group activities.

> *"the kids also really, really need to trust you, to let that happen (pupil-led group activities). And I think I'm still forming relationships with the children. I mean, I have formed a lot of relationships with the kids, but I think you need a lot of different things to come together for that situation to work and I don't think I've been working long enough at this school yet for it to be able to work. I think other members of staff who are really, really senior, who've been here for a while, who the kids really trust, would be able to do that in their classroom, but I'm not really able to do that with my groups yet, at all and that's with any group. In history, I often will not do kind of more group activities or more pupil-led activities yet, because they're not ready and I'm not ready for them to do that."* (Miss Kent, NQT, Ganymede Aii)

Despite Miss Kent's misgivings about relaxing control of the class, the pupils (who were from her class) had felt able to share their experiences in a non-judgemental environment, so in that sense she had achieved the desired relationship of trust to enable meaningful discussions.

> *"she was completely, like, she didn't judge us"* (Sam, year 7 boy, Ganymede Aii)

"and you could explain, like, if you ever drank, you could like … the teacher doesn't mind, like, you saying, like you drank, so you could explain." (Adil, year 7 boy, Ganymede Aii)

The issue of trust was also mentioned by Mr Barnes at Calisto High School. The *It's My Life* intervention covers some potentially sensitive situations that might resonate with pupils' own personal experiences, it was therefore considered different to the usual classroom environment. Mr Barnes suggested that pupils were a little uncertain about how honest they were allowed to be within these classes to begin with. The researcher noted that, as the intervention progressed, pupils did start to share some of their family alcohol experiences with the class, for example after one of the role play sessions one boy explained how his uncle was in prison for an alcohol-related crime.

"young people sometimes, because it's within a school situation, they're not quite sure how honestly to respond … are you going to tell my parents or is there going to be a report to somebody about what I say?' So, I think it took a couple of weeks for the children to build up an understanding" (Mr Barnes, Assistant Head, Calisto)

7.3ii-e Peer learning

The intervention was designed with a pupil peer learning focus, as described in Section 3.2iv. Analysis of the interview data revealed that this was considered a potentially successful strategy in terms of pupil engagement, by both pupils and teachers across all schools. Pupils reported that the programme had made them work together and that they enjoyed working with their friends, partly because it was more enjoyable and engaging, but they also recognised the value in sharing ideas and supporting one another.

"[the intervention] gets us all talking and makes us socialise, like, and work as a team" (Sarah, year 7 girl, Europa)

"it was really fun doing the group work as well because in a lot of lessons we have to work by ourselves, but like, when we work as a group it's a lot more entertaining cos, you know, you can stay more focussed on the task because you've got more support as well, so it's easier to make up ideas and support, like, what you're doing." (Danny, year 7 boy, Calisto)

Teachers at Ganymede Academy (Ai) reported that having a student-centred approach was appealing to the pupils, they liked the focus being on them.

"they like stuff like [the personal characteristics activity], cos they come and tell you 'you know what I am?' – as long as it's positive" (Mrs Barber, drama teacher, Ganymede Ai)

Gender differences were also identified between the maturity of girls and boys, and their corresponding levels of engagement.

"I mean obviously the boys are silly and it just goes with it but boys are much more immature than girls at that age and they are silly, you know they just have to be dealt with in a firm way." (Mrs Barber, drama teacher, Ganymede Ai)

7.3iii Theme C: Implementation

This theme relates to Objective 2 (FS1) *to assess the feasibility of delivering the intervention in a mainstream (state-funded) secondary school setting as part of the compulsory school curriculum.* Data analysis also provides evidence in response to components identified in the checklist of feasibility study objectives (*Table 4.5*), as follows:

Convincing stakeholders that the main study is worth supporting (Support: Section 7.3iii-a)
Identifying logistical problems which might occur using the proposed methods (Planning: Section 7.3iii-b; Timing: Section 7.3iii-c; Classroom management: Section 7.3iii-d)
Determining what resources, such as finance or staff, are needed for a planned study (Resources: Section 7.3iii-e)
Training teachers to deliver the intervention employing the MI principles (Teacher training: Section 7.3iii-f)
Assessing the feasibility of a full-scale study or survey (all sections)

In general terms, implementation of the intervention was considered to have been successful, the Assistant Headteacher at Calisto High School acknowledged that there had been some issues but when asked whether the school would continue to use the programme, his response was *"Yes, definitely, definitely, I think … as I say, it's come from our student council, it's definitely a core topic for next year".* He explained that implementation would likely be more successful in future applications of the programme, as staff and students adapted to the different style of learning.

"I think if you were to re-do what we did the first time round, I think we would be more successful because I think basically staff understand the school and understand the starting points of the students better, the students are aware that this is something that's going on and they're open to it. So, I think it's about establishing that culture as much as from that pilot, it's establishing a culture that says 'actually, this is a normal way that we do these things' really, and I

think once the students get over that discomfort of it being different, actually they're quite open to it" (Mr Barnes, Assistant Headteacher, Calisto)

7.3iii-a Support

Perhaps one of the most important components in intervention implementation is convincing stakeholders that the main study is worth supporting. In a school situation the backing from Senior Leadership is essential in ensuring: that this type of universal intervention can be implemented in school; that the intervention will be delivered as designed; and that the necessary resources are available, including additional staff, sufficient time to plan, deliver and evaluate the programme and appropriate accommodation. The researcher noted that senior staff were responsible for making sure that the intervention could be delivered. In all schools, it was a member of the Senior Leadership Team who met with the researcher and consented to being involved in the intervention research. However, it was observed that differing levels of commitment and support from senior leaders had implications for the research. In Ganymede (Ai), the on-going involvement and commitment from Mrs Waite, the Assistant Headteacher, as well as support from another senior leader (Mrs Stuart) ensured that the intervention implementation was optimised.

> *"Mrs Stuart's the one that gets us the room … and she's bent over backwards"*
> *"Mrs Waite has driven it forward, hasn't she, she's been the one …"*
> (Mrs Barber, drama teacher, Ganymede Ai)

This mode of working was facilitated by the Assistant Head, who firstly gave her support for the intervention ensuring that staff were made available to work on developing and delivering the programme alongside the researcher. She selected staff who she felt would be receptive and confident to engage with the intervention work and selected a class of pupils that would likely benefit from the programme. For the purpose of the study, the class were considered to be 'off timetable' so the teachers were able to deviate from the usual in-house teaching style.

The researcher observations noted contrasting levels of commitment and support from Europa Academy and Calisto High School. For example, the Assistant Headteacher at Europa, having consented to participation in the research assigned staff contacts who the researcher could contact to arrange the intervention delivery. The logistics of making the necessary arrangements proved challenging, particularly in obtaining ethical consent for pupils to participate, as described in Section 5.2ii.

Due to staff absences, including the Assistant Headteacher herself, it was not possible to recruit staff to deliver the intervention, although the school did help to recruit pupils to participate and provided pace to deliver the intervention.

The following sections discuss some of the logistical issues (identified in data analysis of the interview transcripts) encountered in conducting this research including; planning, timing and classroom management.

7.3iii-b Planning

One immediate challenge in delivering the intervention in school, was to ensure that the programme could be implemented in the school classroom. As discussed in Section 4.3, staff at Ganymede worked with the researcher in a series of development meetings prior to the intervention delivery and in regular evaluation meetings throughout the implementation period to plan the sessions. This further demonstrates the level of commitment from staff at Ganymede Academy, which in FS1, helped to optimise the success of the programme.

However, in FS2 when the intervention was implemented to the whole cohort at Ganymede, the researcher noted a tension between the planned delivery model for the *It's My Life* intervention and in-house teaching requirements at the school.

As observed by the researcher, Miss Kenyon and Mrs Barber at Ganymede (Ai) worked hard to accommodate the intervention, breaking with some of the school conventions to create a different classroom environment. The intention was to facilitate a more flexible, pupil-centred approach to the learning in-line with the programme's requirements. Both Mrs Barber, with a background in drama teaching and Miss Kenyon with expertise in teaching physical education were confident to allow a more 'relaxed' approach to learning in the classroom in which pupils were permitted to discuss their work and to move around where necessary. Formal arrangements of desks were discarded in favour of open spaces for group discussions and role play activities. However, in FS2, this freer implementation style was more difficult to achieve due to pressures to conform to in-house teaching and classroom management practice. The Assistant Head's comment reflected that due to the pressure on schools to have to record evidence of pupil progress, planning has to be tightly regulated.

"I think any project that you do in school has got to fit in with that way of working, still, so that we're always evidencing that kids are making progress and doing something of value. So, I think that having time to plan the lessons and make sure the … yeah, planned lessons really." (Mrs Waite, Assistant Headteacher)

Mr Whitely, who implemented the intervention at Ganymede in the second study (Aii) commented, in his interview, that he liked the fact that the intervention was already pre-planned into the weekly sessions, so that it was ready to be implemented with very little preparation time on his part.

"I thought the series of lessons was good and how it progressed and the links between them" (Mr Whitely, class teacher, Ganymede Aii)

He also liked the fact that the intervention programme was flexible enough that he could deliver it in his own way, for example differentiating for lower ability pupils and perhaps allowing more time for certain discussions or activities. The flexibility assumed by the teachers who participated in the second study at Ganymede was not an intended aspect of the programme delivery model. The researcher noted that the adapted version of the *It's My Life* intervention was treated in the same way as other curriculum subjects in the school, in that the specified topics can be planned and delivered in different ways according to the teacher's preference. This treatment of the intervention raises issues relating to fidelity.

7.3iii-c Timing

Closely intertwined with planning the intervention was the matter of timing. One implementation challenge, which the teachers at Ganymede (Ai) were able to advise upon, was how the planned intervention content might best be structured to fit into a 6-week timetabled programme. Despite this advanced planning, timing issues were encountered during the implementation of the intervention in all school settings. Interview analysis indicated that in some instances timing clearly related to implementation, for example, how to fit all the elements of the intervention into the classroom. It was difficult to gauge how long each activity would take, so part of the feasibility study was to test out this issue. As anticipated, it was challenging to plan the timing of the intervention components, but as Miss Kenyon at Ganymede implied, timing also depends on the ability and concentration levels of a particular group of pupils, which can vary from class to class and from day to day.

"I think all of it was fine, it was just us getting … it was us structuring the time frame we needed for each activity, but also knowing actually, these students need a little bit longer and that's what we struggled with a little bit." Errm… but I think, for next time round, it's just a case of just shortening things. Just making them a little bit snappier, if that makes sense. I think five weeks isn't long enough for everything that we wanted to do" (Miss Kenyon, class teacher, Ganymede)

The teachers at Ganymede stressed that *"timing is always crucial in schools"* (Mrs Barber, teaching assistant Ganymede Ai) and that it is necessary to "*spend enough time on everything to get all the points across*" (Miss Kenyon, class teacher, Ganymede Ai). Furthermore, Miss Kenyon also explained that teachers have to be skilled in quickly adapting a lesson plan in response to the class.

"that's the beauty of teaching in some aspects, you need to be able to be so flexible and be able to drop something whenever you need to and pick something else up." (Miss Kenyon, class teacher, Ganymede Ai)

Mr Whitely, at Ganymede Aii, took a more flexible approach to timing, allowing the pupils to lead discussions and devoting more time to certain areas accordingly. He noted that this did cause some delay to the planned programme delivery schedule but seemed to enjoy the freedom of this approach in a contrast to regular classroom practice.

"I spent some lessons on things that got thrown up, so sometimes we got a bit delayed, and we just carried on and we unpicked it and it was very much whatever the responses the students gave, we could go into it in more detail without worrying about 'right, we've got to move through it, we've got to get through it in a certain amount of time'" (Mr Whitely, class teacher, Ganymede Aii)

During delivery of the intervention in Calisto High School, the matter of timing within intervention sessions was discussed with the teacher who noted that there was a lot of content to fit into the six-week programme. The researcher observed that these experienced teachers had an instinct for the amount of content that could realistically be covered in a class session, particularly with consideration for the ability of the pupils they were teaching.

Data analysis revealed other issues relating to the timing of the intervention. For instance, the Assistant Headteacher at Calisto High School acknowledged that timetabling the intervention had been an issue "*timetables and so on was pretty*

much against us". He also commented that it might be advantageous to spread the intervention work over two years in future applications of the programme (suggested adaptations of the intervention are discussed in Section 7.3v-a). The pupils at this school commented that they would have liked the programme to last for longer.

A final issue that related to timing was identified in the interview analysis that questioned whether year 7 (11-12 year olds) was the right target group for the intervention. Miss Kenyon, the class teacher at Ganymede (Ai), felt that year 7 was too early for the intervention on the grounds that pupils hadn't yet formed friendship groups and lacked the social skills to do so. She suggested that perhaps year 8 would be more appropriate group to work with. The Assistant Headteacher, however, did agree with the timing of the intervention in year 7 on the grounds that the pupils would be exposed to many new influences (some of which might be negative) as they started their phase of secondary education. She considered that this was a point in time when young people are still receptive to the positive influence of teachers and it might still be possible to encourage pupils to consider the friendships that they are making.

> *"I think at transition, anyway, just for students, they're exposed to far more students than they have been, mixing with different families, different people and they'll immediately be learning about what's going on in different families' homes. And I think that time when they're … and they're just eager and they're inquisitive and we've still got them, you know, at that point in their school career where they're very open to different ideas and … they will, they'll still go home and say 'my teacher said … therefore it must be'. Yeah, but I think the fact that they do … they do make lots of new friendship groups in year 7 …"* (Mrs Waite, Assistant Headteacher, Ganymede Ai)

The timing of the intervention in targeting year 7 was also considered appropriate by Mr Whitely, at Ganymede (Aii), who recognised the importance of working with pupils at that stage on the "cusp" of adolescence before they start to establish behaviours and ideas regarding alcohol.

> *"I think year 7 are really open to those ideas and to those conversations. And year 10, it might be too late for most of them … they've already got so many different ideas and they've all got such an extreme amount of different experiences that you get muddled with it … the social norms of the class are already established and they're not willing to speak"* (Mr Whitely, class teacher, Ganymede Aii)

These latter viewpoints concur with the research rationale for targeting year 7 with the intervention (Section 2.6). Furthermore, the timing issue is also alluded to in Miss Kent's comments relating to peer influence (Section 7.3i-d). The lower ability group that she referred to had received the intervention earlier in the academic year, during the autumn term, and the higher ability group had taken part in the classes in the spring term. The difference in self-awareness and consequential engagement in the intervention may have been affected by the timing of the intervention rather than the different ability range.

7.3iii-d Classroom management

Data analysis revealed that some teachers experienced classroom management difficulties in delivering the intervention. Miss Kent at Ganymede (Aii) struggled with the teaching approach, especially with her higher ability class in which behaviour management was a big issue. Being a newly qualified teacher with less experience in the classroom, she struggled to manage the flexible approaches such as pupil-focussed activities, open discussions and role play.

> *"… I really struggle with that kind of teaching cos I'm so, so, so new in my career … I think a lot of the classes here really need structure in their lessons otherwise behaviour does, can become an issue. Errm … and so, I struggle with that. I think, the more experienced teachers would probably find that a bit easier, but I am definitely at a stage in my career, I've only been teaching since September …"* (Miss Kent, NQT, Ganymede, Aii)

Miss Kent also commented that in order to facilitate that type of flexible approach in the classroom, the teacher needs to have a high level of control. Mr Whitely, (colleague of Miss Kent at Ganymede Aii) as a more experienced teacher, commented on the necessity of establishing the new *"routine"* in the classroom and having to *"get to grips"* with how the intervention classes would work. His approach was to establish the classroom rules for working in a more pupil-focused way.

> *"it's getting them into that routine isn't it and that kind of, 'if I'm talking you need to be quiet no matter what we're doing but feel free to put your hand up and ask questions'. And I think after one or two lessons of doing it, as you sort of got to grips with how they were going to cope with it and how to adapt it, then it was fine. And the students just kind of got used to going 'right, I'm going to listen now and then we're going to do that and then we're going to have a talk and if I need to talk, I'm going to put my hand up first', that just sort of fitted in with it."*
> (Mr Whitely, class teacher, Ganymede Aii)

7.3iii-e Resources (including staffing)

The main resourcing issue, as observed by the researcher, related to staffing the intervention. As previously mentioned (Section 7.3iii-a), Ganymede offered excellent staff resources for both FS1 and FS2, however, Europa Academy had failed to provide any staff to deliver the programme. Calisto High School provided one teacher to deliver the intervention with support from the researcher, but she was not able (or prepared) to dedicate any time for training. The school also provided a member of behaviour support staff, however, she was only present for two of the sessions. The Assistant Headteacher, in his interview, acknowledged that resourcing the programme had been a challenge:

> *"I think there's a sense as well around having just a bit more staff resource, so for example, and I know we talked about having the drama teacher involved, and timetables and so on was pretty much against us"* (Mr Barnes, Assistant Headteacher, Calisto)

In terms of other resources required to deliver the intervention, the researcher observed that the schools generally managed to provide adequate space to accommodate the role play activities. Mrs Barber acknowledged the importance of having appropriate resources to deliver the intervention, as discussed in Section 7.3iii-a. The exception to this was the whole cohort implementation model in Ganymede Academy (Aii) where the intervention was delivered in the normal classrooms allocated in the timetable. It would be challenging for most schools to accommodate adequate space on this scale for a PSHE lesson, as the larger spaces in school will be required for subjects such as PE, drama and dance.

Interviewee, Mr Whitely from Ganymede (Aii) commented that *"[the programme resources] were good"* and he liked the fact that the intervention came as a pre-planned, resourced pack ready to deliver in the classroom.

> *"I thought it was good that we didn't have to resource it. It just meant that whatever we did was … fine, even if it was 15 minutes before you go and teach it"* (Mr Whitely, class teacher, Ganymede Aii)

He also liked the fact that the intervention programme was flexible enough that he could deliver it in his own way, for example differentiating for lower ability pupils and perhaps allowing more time for certain discussions or activities.

> *"the resources were good, but then we were free to develop it and to teach it in our own way. That definitely helped me teaching weaker students and being*

able to differentiate because it wasn't 'do this, do this, do this' it was this is the
outline of what we suggest to do, here's some learning objectives, here's a
scheme of work but adapt it for your class and roll with it and just see where it
leads to but just cover this content in this way. I thought that was really useful."
(Mr Whitely, class teacher, Ganymede Aii)

7.3iii-f Teacher training

In order to implement the intervention on a larger-scale in the future, it would be
necessary to train teachers to deliver the programme. This feasibility study provided
the opportunity to test whether this would be possible and to identify potential
challenges that would need to be addressed. One obvious challenge relates to
fidelity (*Table 4.4*), as to ensure that an intervention is effective (once evidence of
effectiveness has been captured in a large-scale trial) it must be delivered according
to the theoretical framework specifications to achieve the predicted successful
outcomes. Therefore, all aspects of the intervention must be accurately and
thoroughly explained in the training.

Analysis of the interview data highlighted the necessity for providing clear, concise
instruction in training teachers to deliver the intervention. Despite the researcher
having worked with Miss Kenyon, the teacher delivering the intervention in
Ganymede Academy (Ai), prior to and throughout the programme implementation,
she did not feel that she had fully grasped the purpose of the intervention, ie what
the programme was aiming to achieve. This perhaps partly reflects the embedded
dependence in schools on lesson planning to establish clear learning objectives
which are evidenced by the pupils' work. The intervention was designed to move
away from the established classroom conventions and structures, so that the class
environment would feel different for the pupils, a space that was for them that they
could inhabit or take ownership of.

> *"I personally think I struggled with it because I wasn't the specialist. I mean, I*
> *did as much as I could to support you and do the bits that you wanted me to do.*
> *But for me, I don't think I had the knowledge to understand specifically what*
> *you needed to get from them."* (Miss Kenyon, class teacher, Ganymede Ai)

Having provided training to teachers to deliver the intervention, the researcher
observed that some individuals seemed reluctant to engage with requirements.
Consequently, as observed in the whole cohort implementation of the intervention at
Ganymede (Aii), some of the programme approaches were not adhered to. Also, at

Calisto High School, the teacher had not been prepared to spare the time for the training and, as observed by the researcher, did not seem interested in engaging fully with the intervention.

The intervention approach is quite different to the usual teaching style employed in many mainstream classrooms, therefore posed challenges to the teachers involved in its delivery. However, as observed by the researcher, some of the teachers involved failed to understand the importance of the specified approaches. These findings and observations suggest that training is essential for delivery of the programme and needs to be more thorough. Teachers delivering the intervention need to have a good understanding of the theories and principles that underpin the approaches. The Assistant Headteacher at Calisto High discussed possibilities for training staff to be able to use the MI approach and to incorporate this mode of teaching across other curriculum subjects, suggesting a cascade model.

> *"I think, there's definitely a cascade model of saying, 'actually, let's train staff in this …' the value in that would be more around saying 'well, actually how is this transferable to other topic areas' so actually in terms of motivational interviewing as a mode of teaching, what does that look like as a training programme for teachers?"* (Mr Barnes, Assistant Headteacher, Calisto)

7.3iv Theme D: Impact

This theme relates to Objective 1 (FS1*) to develop and adapt a school-based intervention* and Objective 2 (FS2) *to identify any key 'active' components evident within the intervention* (**Figure 7.1**). Whist this research study was not designed to evidence the effectiveness of the intervention, analysis of the interview data provided insight into whether the programme has the potential to impact on pupils as intended. The analysis highlighted whether there was any indication that the programme design - according to Objective 1 (FS1) and the theoretical framework (**Figure 2.21**) - was likely to achieve the intended outcomes in a future large-scale study. The sub-themes that emerged from this inductive analysis reflected some of the components proposed as intermediate outcomes in the theoretical framework. The findings are discussed under the following headings: Positive experience (Section 7.3iv-a); Information acquisition and risk awareness (Section 7.3iv-b); Bonding and group support (Section 7.3iv-c); Confidence (Section 7.3iv-d); and Strategies (Section 7.3iv-e).

7.3iv-a Positive experience

There were a range of comments relating to impact. These were generally very positive across all interviewees, in all the schools. Some participants commented generally on the overall impact of the intervention, or the potential future impact it could have, and some referred to specific aspects of the intervention.

> *"I think they responded quite well, like I said, I think it's raised a lot of questions for them. I don't think they've walked away knowing the right answer to everything as and when these scenarios happen to them, but I think it's made them think, 'oh, do I follow everything that my friends are telling me to do or what?' and I think it's made them more aware of there are choices when they happen and you have to think about the choice that you take."* (Miss Kenyon, class teacher, Ganymede Ai)

The Assistant Headteacher at Calisto High commented that the intervention *"was of real value to the school"*. He described ways in which the work addressed key topics on the school agenda, specifically alcohol and peer pressure but stressed that it was also important in developing the skills to equip pupils to negotiate their decision making regarding risky behaviours. Pupils involved in the intervention classes had taken similar messages to their school council, that they wanted school to do more work on these areas.

> *"it has been a really good input, the young people have talked about it and moved it forward. It's become an agenda item on our student council"* (Mr Barnes, Assistant Headteacher, Calisto)

Analysis of the interview transcripts revealed comments from teachers that suggested the intervention had impacted more broadly than expected. Miss Kenyon, at Ganymede, described how she had made reference to some of the aspirations work in a different lesson and had called on the pupils to remember the choices they have to make in order to reach their goals.

> *"We spoke about [having a goal] today, because we were looking at apprenticeships and university courses and they were like 'well, it's too far away' and I'm like 'but you've got a lot of choice in your life now, and if you take the wrong path you're going to end up, you know, doing nothing with your life' and they're like 'oh, yeah, yeah'. So, they again, they referred back to the choices and the pathways that they can take. But again, I just think it needs to be year 8, in my opinion."* (Miss Kenyon, class teacher, Ganymede Ai)

Mr Whitely, Ganymede (Aii), also reported having used approaches from the *It's My Life* intervention in some of his other subject classes as a means of improving pupil

engagement, especially when working with lower ability pupils. He described his use of role play in his history class.

> *"it's just made me use drama more, not as much as I would've in [the intervention]. So, in year 7 history for instance, I've kind of incorporated small amounts and more discussion, but structured in the way that we did it there. So, yeah, it definitely helped me develop that"* (Mr Whitely, class teacher)

> *"I just think it's more varied, the kids are enjoying it more, so that today they wrote an essay, next lesson they're going to do a bit of role play on the essay and it helps them to develop the key skills in history"* (Mr Whitely, class teacher)

Interview data indicated that pupils from all the schools reported that participation in the intervention had been a positive learning experience. Four out of the five pupils interviewed at Europa Academy confirmed this to be the case. In support of this finding, the researcher also observed during the intervention sessions that the pupils did enjoy the experience and engaged with the activities. One boy from Calisto High school explained that *"it wasn't like your everyday lesson"* (Danny, year 7 boy, Calisto).

7.3iv-b Information acquisition and risk awareness

One construct identified in the theoretical framework (*Figure 2.21*) is knowledge. The framework proposes *improved knowledge and awareness of alcohol and associated risks and consequences* as an intermediate outcome (or indicator of change) that will contribute to the desired behavioural outcome. It was therefore expected that this theme might emerge from the interview analysis.

As discussed previously (Section 7.3ii-b) pupils had been eager to learn about alcohol and it was evident from interview analysis across all the schools, that pupils had learnt from the programme. All pupils interviewed at Europa Academy indicated that they had learnt from the programme. Most commented generally that they had learnt new things. One pupil specifically mentioned learning about the units in alcohol. The researcher observed that the pupils at this school all engaged particularly well with the practical activity in which they were asked to pour out alcohol measures (of coloured water) for a single unit of wine, beer and vodka. It was interesting to note that some pupils were quite knowledgeable about alcohol, whereas others had little idea, and it was positive to observe them working together

to solve the problem. This activity embodies the spirit of the intervention – a collaborative, pupil focused and memorable experience.

There was evidence from both teachers and pupils, across all schools, that the intervention had raised pupil awareness regarding alcohol. Teachers at Ganymede commented that pupils had become more aware of the impact that drinking alcohol can have on peoples' behaviour. They suggested that pupils might be more likely to question social drinking behaviours and perhaps having greater awareness of drinking 'norms', might consider their own future relationship with alcohol. Pupil comments reinforced this finding.

> *"it's made them think about other people and their families who do drink. So, I think it's raised more questions for them, to be considered, rather than them just be reflective on themselves"* (Miss Kenyon, class teacher, Ganymede Ai)

> *"I think if they've got a family member who drinks heavily, even though they're fine, it might be that they might look at them and sort of think about things a bit more"* (Mrs Barber, drama teacher, Ganymede Ai)

> *"I think it's made me a little bit more aware of what's going, of what might happen in the future"* (Gemma, year 7 girl, Ganymede Aii)

> *"I learned that if you take alcohol it can have a big effect on your life and your education"* (Peter, year 7 pupil, Ganymede Ai)

Similarly, at Europa Academy, interview analysis indicated that the intervention work may have impacted on pupils' attitudes towards alcohol. The researcher, as facilitator of the sessions in this school, observed that during the role play tasks, pupils had been 'excitable' but had engaged with the activity, ie enacting 'good day' and 'bad day' drinking scenarios. All the interviewed pupils reported that they had become more aware of the risks of alcohol misuse. They also demonstrated some awareness that drinking alcohol excessively might have repercussions for them, potentially impacting on aspects of their future lives such as their jobs or their personal lives.

> *"it's changed me because at first I wanted to drink beer … because I wanted to be like other men, but now I know that it will affect my jobs if I drink"* (Robbie, year 7 boy, Europa)

"I think it's quite silly that teenagers and, like, people who, like drink quite a bit of alcohol, they think they're more mature, but they're actually not" (Sarah, year 7 girl, Europa)

"I think it helped to … think about risky behaviours that we might come across in our lives … so it just helped with that and, like, if we do a certain thing, it could lead to other things" (Sarah, year 7 girl, Europa)

They seemed to understand the implications of excessive drinking, particularly in more extreme cases. The researcher observed that, across all the schools, the pupils' perspectives were very 'black and white' and further exploration of drinking in different contexts and to different degrees could be beneficial.

There was the implication, from the interview analysis, that some of the pupils already knew about alcohol, Sam (year 7 boy, Ganymede Aii) commented *"I would never drink, I would never smoke, I would never take drugs. I already knew that …"* but then demonstrated his lack of knowledge when talking about having tried Apple Sourz which he described as *"this low alcohol stuff"* – which is 15% alcohol. This finding confirms a need for the intervention work in correcting misinformation which contributes to the development of misconceptions, as discussed in Section 7.3i-c.

7.3iv-c Bonding/group support

The focus during the early weeks of the intervention programme was to develop an environment of trust, to establish the classroom as a safe place in which the topics could be openly discussed. This intention aligns with the positive psychology of the motivational interviewing approach which seeks to establish a spirit of collaboration with the participant(s) and requires the counsellor or researcher (in this case) to be non-judgemental and to express empathy. In the case of group motivational interviewing, the facilitator (researcher) strives to encourage connections between the members of the group, common themes which others might relate to or empathise with. In all of the school contexts (with the exception of the whole cohort roll out at Ganymede Aii) the pupils participating in the *It's My Life intervention* had not previously been grouped together in school, this presented an opportunity to explore the extent to which the intervention programme was able to encourage cohesion amongst the group. The researcher not only observed this process but was actively involved as facilitator.

There was some evidence from analysis of the interview data that the programme had successfully encouraged group cohesion. Mrs Barber, drama teacher at Ganymede (Ai) reported that the class had bonded well as a result of their involvement in the programme. The class had not previously been timetabled together, so they didn't really know each other and the fact that they didn't 'fragment' seemed to surprise the teacher *"as a group, they haven't fragmented at all."*

> *"when we grouped them today I thought I'd have lots of complaining but we didn't. So, I just think that… That's so important, that they gel as a group and they are supportive of each other, which they were, really supportive of each other. And when I was critical, didn't like it, not themselves but for their peers. So, that for me is a break-through I think, it's fantastic."* (Mrs Barber, drama teacher, Ganymede Ai)

There was also some indication from the data that the group cohesion had helped to consolidate the learning process, one example by Hannah (year 7 pupil, Ganymede Ai) describes the type of class interaction that resulted:

> *"the activities were really good because we can act, we were playing with the group and we were showing each other what we can or what is better and how we can make our lives go forwards, not backwards"* (Hannah, year 7 pupil)

In addition to encouraging class cohesion, as discussed, by creating a safe environment in which to discuss the topic, the various activities in the programme were designed to encourage a pupil-focused, collaborative approach in which the pupils worked together to find their own viewpoints or solutions. In Europa Academy, the researcher observed, throughout the six-week programme, a developing closeness within the group as the pupils worked together and got to know each other. Some of the pupils also commented in their interviews about the collaborative nature of the programme.

> (what was good about the programme) *"the people that did it with you"* (Jake, year 7 boy. Europa)

> *"it gets us all talking and makes us socialise, like, and work as a team"* (Sarah, year 7 girl, Europa)

> *"I would like to do some more of the acting stuff … together"* (Taylor, year 7 boy, Europa)

7.3iv-d Confidence

Confidence is also identified as an intermediate outcome *improved confidence, self-esteem and wellbeing* in the theoretical framework (*Figure 2.21*), that alongside the other intermediate outcomes will support the desired behavioural outcome. One principle of the MI approach, is to create an environment of trust in which the individual can speak openly without fear of being judged. It is proposed in this research that facilitating group cohesion, as mentioned in the previous section (7.3iv-c) will result in improved pupil confidence.

In his interview, the Assistant Headteacher at Calisto High School identified confidence as an important factor in enabling pupils to stand by their values. He explained that pupils know what behaviours are right or wrong but need the confidence to act according to their beliefs and to resist peer influence.

> *"they need to have the confidence to apply the same values that they know are their values"* (Mr Barnes, Assistant Headteacher, Calisto)

Pupils interviewed in all the school settings reported that their confidence had improved as a result of participating in the intervention classes. For example, Peter (year 7 pupil, Ganymede Ai) felt able to contribute to class discussions, where previously he hadn't liked to; Hannah (year 7 pupil, Ganymede) felt greater confidence because she felt clearer about her future, particularly having identified her personal strengths; and Sarah (year 7 pupil, Europa) felt better equipped to socialise.

> *"well, when I was in learning, I didn't, like, really answer much of the questions. So, then it gave me the confidence to like, errm, answer questions and stuff"* (Peter, year 7 pupil, Ganymede Ai)

> *"I known that I have strengths, but I didn't know what they are and I was really happy that I know it and its really good for me now."* (Hannah, year 7 pupil, Ganymede Ai)

> *"I think it's helped me socialise a bit more"* (Sarah, year 7 girl, Europa)

Several examples were given of ways in which the intervention work had developed the confidence of pupils. Mr Whitely, class teacher at Ganymede (Aii) gave the specific example of a boy, who had previously been mute in class, but who had been inspired to speak out and become involved in the discussions.

209

*"There's one student who like doesn't speak really, he's working with …
educational psychologists … he doesn't really speak in lessons and in his
second session, he had to rank which teachers he feels comfortable talking to
and he put the teacher that he has every day and then he put [me] next and it
was because we'd been having conversations like that, where he wanted to talk
and he doesn't really communicate, he'll just nod or prompt with his hands, and
he spoke quite a lot and I think he said to the Ed Psych in his report that it was
because I didn't shout at anybody but the reason why I didn't was there wasn't
anything to get stressed about"* (Mr Whitely, class teacher, Ganymede Aii)

*"he felt that he could talk and he could have an input and he said that it was a
nice lesson and I think he liked the style of the lesson and how it was kind of
free"* (Mr Whitely, class teacher, Ganymede Aii)

*"I've noticed that he doesn't speak as much now we've stopped doing [the
intervention classes], but he does still, he's definitely come out of his shell"* (Mr
Whitely, class teacher, Ganymede Aii)

This example suggests that the MI approach used in the intervention - in creating a
cohesive and safe environment to explore and discuss the topic - in contrast to the
usual classroom environment may be impacting on the pupils as proposed in the
theoretical framework (*Figure 2.21*).

7.3iv-e Strategies

Skills (cognitive and interpersonal skills and physical skills) are identified as
components within the theoretical framework (*Figure 2.21*) and relate to the
intermediate outcome *developed skills to communicate with peers and enact
resistance strategies.*

The development of strategies to help pupils to negotiate social situations,
particularly relating to risky behaviours, was an area of importance identified by Mr
Barnes, the Assistant Headteacher at Calisto High. Interview analysis revealed that
both the Assistant Headteacher and pupils at the school recognised that situations
were likely to arise in which peer pressure to engage in a specific activity, for
example drinking alcohol, would be challenging to resist. Such scenarios and peer
related issues were explored during the intervention classes. All parties felt that the
development of strategies would be beneficial so that pupils could avoid putting
themselves into a risky situation without 'losing face' with their peers or subjecting
themselves to potential bullying.

> *"It's actually about equipping students with the skills to reason out the situations that they may well be in, because the reality is understanding the dangers perhaps around alcohol, drug use or different risk-taking behaviours is one thing for our students. Actually having the skill set to then say 'I can deal with these behaviours' or 'I can deal with these situations when confronted with them in different social settings' is really where we need to develop their skill base."* (Mr Barnes, Assistant Headteacher, Calisto)

According to Mr Barnes, pupils also seemed to recognise the importance of developing a global understanding amongst the peer group. It seems that the strategy of working with the whole cohort to develop their own 'social norms' relating to alcohol and to establish a common understanding amongst them that they can say 'no' with confidence might have the potential for success. The pupils at Calisto High School were able to demonstrate ideas for strategies to avoid excessive alcohol consumption but were also keen to develop strategies to say 'no' in more intimidating situations.

> *"[the students] wanted to do more work around how they can get their peers to understand what it is to say 'no'. Cos they were saying very strongly that, it's all well and good that when you've got good friends who are accepting us saying 'no', what about when it's people that you're not friends with, but you're scared of or you're intimidated by, how do you say 'no' to those people? So, it's about that safety and that vulnerability, really."* (Mr Barnes, Assistant Headteacher, Calisto)

> *"we are looking into doing a whole piece of work around what it is to feel vulnerable in different situations and what your safety mechanisms might be in those situations"* (Mr Barnes, Assistant Headteacher, Calisto)

7.3v Theme E: Adaptation

An important part of testing the feasibility of an intervention is to assess how the programme might be adapted in different contexts and what implications adaptation might have on the potential effectiveness of the intervention. The different school contexts represented in this research allowed some exploration of such issues in response to research Objective 1 (FS2) *to assess whether the revised intervention could be implemented in different school settings with varying contextual factors* and Objective 3 (FS2) *to explore how the intervention might be improved for future application to increase its impact and relevance for schools*. In FS2, Ganymede Academy elected to roll out the *It's My Life* intervention to the whole of their year 7 cohort. This involved the school embedding the intervention into their PSHE

planning, the various implications of this process are presented in Section 7.3v-a. In the interviews, teachers and pupils were asked how the intervention might be improved for future application, to increase impact and relevance for schools. Each school identified different ideas which are presented in the following sections: teacher reflections (Section 7.3v-b) and pupil responses (Section 7.3v-c).

7.3v-a School adaptations

This sub-theme relates solely to the FS2 study in Ganymede Academy, as it presents implications for the future testing and evaluation of the *It's My Life* intervention. Ganymede, as previously discussed (Section 4.3v), chose to embed the *It's My Life* intervention into their year 7 PSHE programme. The researcher was not invited to be involved in the planning process but was able to deliver training to the teachers who would deliver the programme as part of their PSHE timetable. It was evident from analysis of the interviews and from the classroom observations, that the school had adapted the *It's My Life* intervention. Teachers and pupils both described activities that differed to the versions written into the original programme, for example, class teacher Mr Whitely described liking the flexibility to *"develop [the intervention] and to teach it in our own way"* and Miss Kent commented *"we all adapted the lessons slightly"*. Such adaptations had not been intended in the original design. It is necessary to try to maintain fidelity (adherence to the intervention specifications) in delivering intervention programmes, otherwise any impacts that have been evidenced in effectiveness trials cannot be guaranteed. Some of the school's adaptations may not have changed the potential outcomes of the intervention, for example creating a comic strip rather than planning and enacting a role play. Role play was planned as an active mechanism of change in the theoretical framework (Figure 2.21) but the importance of this component cannot be tested in the context of this feasibility study. Another adaptation made by the school, however, did raise concern, both for the researcher and for one of the teachers involved in the intervention delivery. Miss Kent, a newly qualified teacher at Ganymede, described an activity, in which pupils had been asked to identify their strengths and weaknesses, indicating that it had resulted in a number of safeguarding issues.

> *"one lesson in particular which is 'what am I anxious about? What makes me feel worried?' there was a question on that and that actually rose a lot of*

safeguarding issues for me ... I then had to go and report five different safeguarding issues" (Miss Kent, NQT, Ganymede, Aii)

7.3v-b Teacher reflections

Analysis of the interview transcripts identified various ideas, suggested by teachers, of ways in which the programme might be improved. One idea was to involve pupils in the programme to a greater extent in order to maximise impact. Miss Kenyon (Ganymede Ai) suggested that students could take the programme into the local feeder primary schools and deliver some of the intervention messages to their younger peers.

> *"you could get them going into other schools locally to do their little drama piece about the choices and how it's going to affect their life and the good day/bad day – that could almost be a little promotion for it, including their surveys that they've done and they could deliver part of the intervention themselves in other schools"* (Miss Kenyon, class teacher, Ganymede Ai)

Miss Kent (Ganymede Aii) expressed a need to spend more time discussing peer pressure as part of the intervention. Peer influence, as discussed previously (Section 7.3i-d) was identified by the schools as an area of concern that the intervention might target. Miss Kenyon's idea might provide a way to use peer influence in a positive way before pupils make the transition to secondary school whilst also increasing the older students' engagement in the programme.

The Assistant Headteacher discussed a range of ways in which the intervention might be delivered to suit a broader range of schools without compromising the key components. He suggested that different options could be offered including 'drop-down' days and booster sessions.

> *"if you're only looking at year 7 and 8, then I think [schools] would be quite open to the drop-down days. Errm, most schools would house that in school then and so on but I do think there's some value in terms of taking young people out of that school situation, out into a community situation and running it as a day"* (Mr Barnes, Assistant Headteacher, Calisto)

7.3v-c Pupil response

As discussed previously (Section 7.3i-b) in relation to parenting, it was suggested that due to lack of parental discussion about subjects such as alcohol, that pupils were eager to engage with the topic. This eagerness was reinforced by the pupils who, as discussed previously (Section 7.3ii-b), described how they enjoyed the

intervention. Individual pupils at Ganymede Academy (Aii) suggested improvements to the programme. Adil (year 7 boy, Ganymede) expressed a desire to learn more practical information about alcohol. Megan (year 7 girl, Ganymede) suggested that some topics should be discussed in more detail, such as their future aspirations.

> *"you could've said, like, why, like more explained why drinking is bad and then asked some people, like, who drink to say what it's like and what's your opinion about it"* (Adil, year 7 boy, Ganymede)

> *"I think we should learn more about ambition and the future, cos like earlier on in the year, I asked my friends, like, were they going to college, like my friends said errm … she said, like, she isn't going to college or university, she'll just get, like a job that's easy to get where she like she doesn't have to do anything. For me, going to university or college is really important cos, like, you get more opportunities in life"* (Megan, year 7 girl, Ganymede)

Pupils from Europa and Ganymede indicated that they would like to do more role play:

> *"I would like to do some more of the acting stuff … together"* (Taylor, year 7 boy, Europa)

> *"to do a bit more role play, so we understand the bit about the role play a bit more"* (Steve, year 7 boy, Ganymede)

In relation to this suggestion, the researcher had observed that the amount of time devoted to the role play activities had been less than intended in the intervention schedule. This resulted from other activities taking longer than anticipated, for example the survey completion, which is discussed alongside other timing issues in Section 7.3iii-c.

7.4 Summary of themes

Analysis of the interview transcripts and observation notes confirmed that context was a major issue for all the schools participating in this research. Interviewees identified how home background and parenting issues presented their schools with significant challenges. Key concerns were identified in relation to peer influence and the formation of cultural and social misperceptions which were magnified by social media. Analysis revealed that schools considered the intervention relevant in helping to address these concerns.

Analysis also revealed implementation issues which would answer some of the objectives specified for this feasibility study. The main issues identified from the interview data related to the timing and resourcing of the intervention. The support for the research, demonstrated by senior leadership, was noted by the researcher as an essential factor in enabling the intervention work to be delivered in school and resourced appropriately.

Engagement was also identified as an important theme in this analysis. Interviewees across all the participating schools reported positive feedback on the intervention - pupils had enjoyed the programme and had engaged well with the activities. Specific aspects of the intervention were highlighted as potentially effective in relation to pupil engagement, including; the use of role play, the development of relationships and the peer learning focus.

In Chapter 8.0, the issues raised from this analysis are discussed in further detail, alongside the other data sources from this research, in answer to the research objectives. The implications and limitations of this research, followed by conclusions and recommendations, are also presented.

7.5 Strengths and limitations

As discussed previously, in Sections 4.2ii and 4.2iii, the researcher position and their relationship with the research participants shapes and influences the research outcomes. A different researcher, for example, might construct a different 'story' or find different outcomes from the same research context. However, the researcher position can be viewed as both a weakness and a strength. For example, the researcher may be actively searching for positive research outcomes and may tend to overlook potentially negative findings. Conversely, the researcher may gain more revealing insights from the development of a well-embedded relationship with research participants.

In terms of the qualitative data analysis presented in this chapter, the researcher attempted to present an honest interpretation of the data, employing double and triple coding to guard against misinterpretation. The purpose of the study was to assess the feasibility of developing and implementing the intervention according to the objectives described in Section 1.1. Therefore, the process evaluation criteria

and the intermediate outcomes identified in the theoretical framework (*Figure 2.21*) were used to inform the interview questions and are hence reflected in the analysis. The themes presented could be criticised as being biased towards a positive interpretation and more dissenting voices may appear to be lacking from the analysis. However, the limitations of qualitative research of this type must be acknowledged. It should be noted that the schools involved in this research, as described in the methodology chapter (see Section 4.3) were those who were keen to take part. It is likely that the intervention complemented issues that resonated with their school priorities, for example to improve pupil wellbeing and to help pupils to develop the skills to navigate the powerful influences of the peer group and social media. Therefore, the themes arising from the interview analysis were likely to reflect more positive views. However, negative views are also reflected in this chapter, for example, teachers raised issues involving the timing of the intervention programme; and the researcher observed tensions around delivery of the intervention within the restrictions of school systems. In general, school leaders were keen to engage with the research, but the staff who were nominated to implement the intervention did not necessarily share this enthusiasm. There were members of staff who were not prepared to be interviewed, and the teacher at Calisto High School was not prepared to receive the intervention training or to be interviewed, there is therefore a risk that their viewpoints are not represented in the data analysis. This illustrates the potential weakness in qualitative research, that such voices could be excluded from research analysis and this matter must be considered in the development of future research methodology and in the interpretation of research findings.
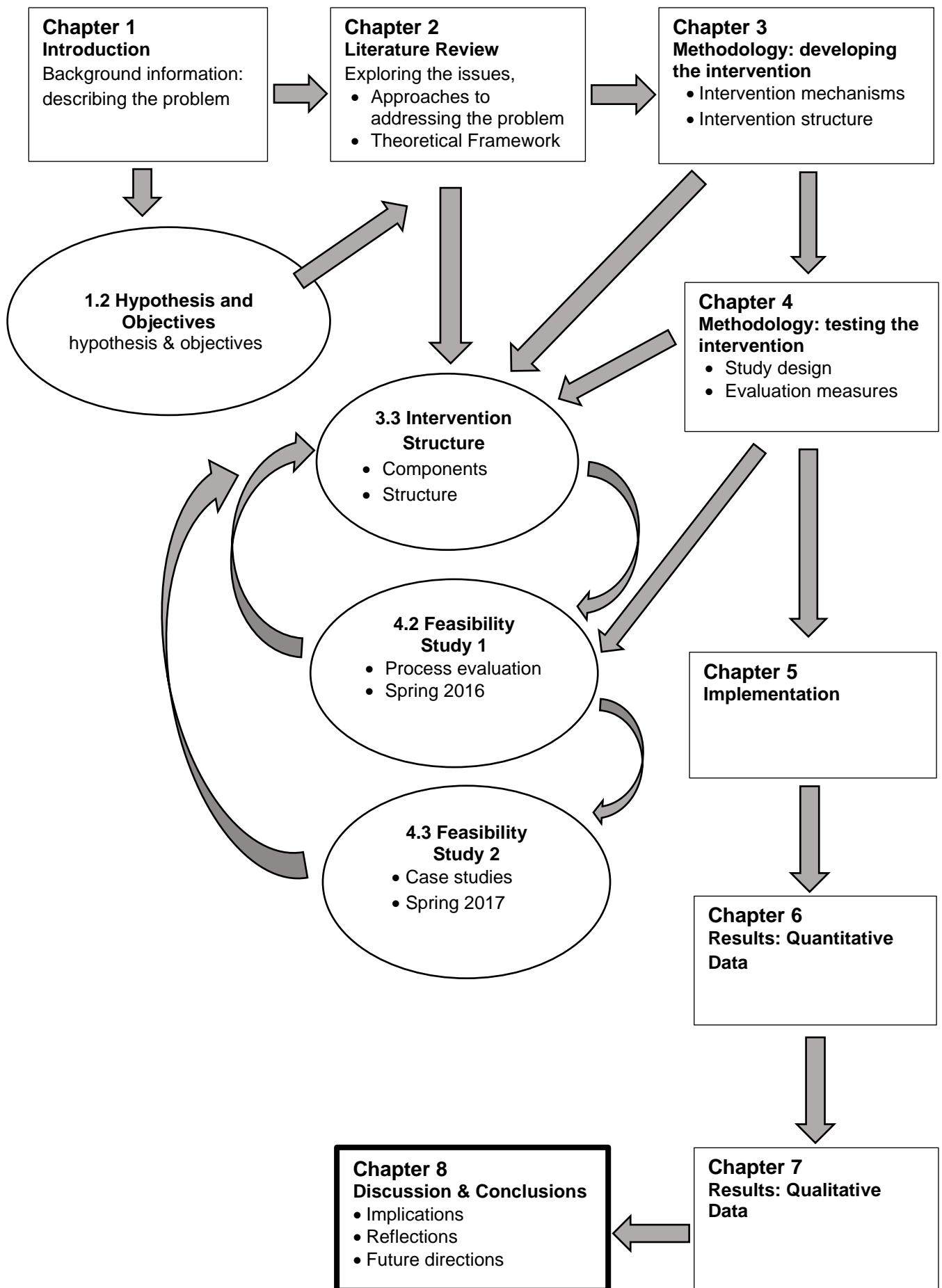
Chapter 8 Discussion and conclusions

8.1 Introduction

This study describes the development of a school-based intervention designed to upskill, motivate and empower young people to make healthier lifestyle choices with respect to alcohol consumption. The programme sought to target some of the social determinants of alcohol misuse, such as poor parenting, lack of positive role models and low self-esteem, alongside other known predictors of problematic alcohol use identified in the research literature (Chapter 2.0). A theoretical framework (*Figure 2.21*) was devised which: outlined the constructs that the intervention should target; and proposed mechanisms for change that could be employed to achieve the desired behavioural outcome (delayed, reduced or lack of future alcohol consumption or the intention to consume alcohol). The *It's My Life* intervention was accordingly developed incorporating the behaviour change techniques and mechanisms of change identified in the theoretical framework (Chapter 3.0). A methodology was then constructed to test the feasibility of implementing and trialling the intervention in a future large-scale study (Chapter 4.0). A mixed methods approach was employed comprising the collection of researcher observation notes, quantitative and qualitative data, the results of which are presented in Chapters 5.0, 6.0 and 7.0 respectively. In this chapter, firstly, the aggregated results are summarised and discussed according to the research objectives (Section 8.2-8.4). The contribution to knowledge made by this research is then presented in Section 8.5. Section 8.6 outlines the implications and Section 8.7 the limitations of the study. The conclusions are discussed in Section 8.8 and recommendations for further research, policy and practice are presented in Section 8.9.

In this chapter, data analysis of both strands of enquiry (quantitative and qualitative) in this mixed methods research study are corroborated and discussed collectively in response to the research objectives (Section 1.1). The data sources, comprising combinations of quantitative and qualitative data (researcher observation notes and transcribed interviews), that inform the different objectives are described in Table 8.1.

Table 8.1 Data sources to inform research objectives

Research Objectives	Data sources
FS1: Objective 1 To develop and adapt a school-based intervention that: i. provides information and raises awareness about the risks associated with alcohol misuse (to inspire healthier attitudes towards drinking) ii. helps adolescents to improve their self-esteem and psychological wellbeing to enable them to be confident in taking responsibility for their own behaviour iii. encourages adolescents to have the motivation and self-confidence to consider and moderate their alcohol consumption iv. provides strategies to help adolescents carry out their intentions regarding their alcohol consumption	• Qualitative interview data themes: Engagement and Impact • Quantitative survey data
FS1: Objective 2 To assess the feasibility of delivering the intervention in a mainstream (state-funded) secondary school setting as part of the compulsory school curriculum	• Researcher observation data • Qualitative interview data theme: Implementation • Feasibility study objectives (Table 4.5)
FS2: Objective 1 To assess whether the revised intervention could be implemented in different school settings with varying contextual factors, such as the delivery model, staff support and class size	• Researcher observation data • Qualitative interview data themes: Context and Engagement
FS2: Objective 2 To identify any key 'active' components evident within the intervention	• Researcher observation data • Qualitative interview data themes: Engagement and Impact
FS2: Objective 3 To explore how the intervention might be improved for future application to increase its impact and relevance for schools	• Researcher observation data • Qualitative interview data theme: Adaptation

The research objectives (Section 1.1) were designed in relation to the two stages of feasibility testing, FS1 and FS2. However, because the FS2 is a development of FS1, there is considerable overlap between the studies and their outcomes. Also, due to the small sample size, data from both FS1 and FS2 have been analysed as one and findings relate to both sets of objectives. Therefore, to avoid unnecessary repetition, the objectives have been grouped together for discussion, as follows:

FS1: Objective 1 and FS2: Objective 2 (Section 8.3) – could the proposed intervention be developed and could the "active" components be identified?

FS1: Objective 2 and FS2: Objective 1 (Section 8.4) – was it feasible to deliver and evaluate the intervention in different school contexts?

FS2: Objective 3 (Section 8.5) – how might the intervention be improved for future application?

The relevance of the findings is discussed according to the assumptions specified in the theoretical framework (*Figure 2.21*) for this research.

8.2 FS1: Objective 1 and FS2: Objective 2

could the proposed intervention be developed and according to the specifications and could the "active" components be identified?

The intervention was developed, according to the requirements specified in FS1 Objective 1 (Section 1.1), in order to achieve the intermediate outcomes proposed in the theoretical framework (*Figure 2.21*). In answer to this objective, the study sought to find out whether the proposed intervention could be developed. The evaluation for FS2 sought to identify "active" components within the intervention. Qualitative data analysis (from interviews and researcher observation notes) revealed information about participant engagement with the intervention and the potential impact that the intervention might have. Quantitative data analysis showed that the mechanisms for change could be measured and indicated that predicted correlations in the dataset were likely to be evidenced in a future effectiveness study (discussed in Section 8.3).

8.2i Engagement

Student engagement is a significant predictor of academic achievement (Dotterer & Lowe, 2011; Wang & Holcombe, 2010). It is therefore important to examine how well pupils engaged with the *It's My Life* intervention programme. Analysis of the interview data revealed that staff in all schools were positive about the intervention, reporting on the appropriateness of both the content and the approach. Several issues were raised in the analysis that related to pupil engagement. In general, there was evidence that pupils enjoyed the classes and were eager to engage with the topic. Pupils reported liking the practical activities and the interactive way of working.

8.2i-a Background

This practical approach to collaborative learning was influenced by a range of active and social learning theories, as described in Section 2.5vii. The theory suggested

that: engaging pupils in practical activities can enhance learning (Bonwell & Eison, 1991); engaging pupils in the creative process (including drama) can influence cognitive development by linking emotion with thought (Smagorinsky, 2011); and social interaction plays a fundamental role in the development of cognition (Ginsburg & Opper, 1988; Vygotsky, 1978; Wertsch, 1985). Drama has also been evidenced as a 'pro-social ensemble-based process' that can facilitate a sense of community and a common understanding between individuals (Neelands, 2009; Neelands, Belfiore, Firth, Hart, Perrin, Brock et al., 2015). Role play was therefore included as a core component in a programme of practical activities (Section 3.3) to help raise awareness and encourage participants to develop a sense of empathy. This accords with the MI approach used in the intervention, as evoking empathy is one of the MI *Principles* (Table 3.2). The theory underpinning this research proposes that in enacting drinking scenarios the pupils would learn to empathise and become aware of how their behaviour might affect others. Therefore, it was important that pupils engaged with this element of the programme.

8.2i-b Practical Activities

Interview analysis indicated that the practical activities were generally well received by both teachers and pupils. Pupils and teachers in all the schools mentioned the role play element of the intervention, which as a core component of the intervention prompted a range of reactions. It was reported that certain pupils were more willing to engage with the performance element than others. The researcher observed that pupils seemed to really enjoy the role play element of the programme, perhaps due to the creative, imaginative element of the work (noting how the role plays were effective in revealing the pupils' preconceptions about drinking alcohol) however, also noticed a reluctance to perform in front of the class. This is an interesting finding in the current school context in which creativity has been reported as diminishing in recent years (Neelands et al., 2015).

8.2i-c Adolescent development and peer focused learning

The data suggested that the extent to which pupils were prepared to engage in the role play could relate to their stage of adolescent development. Research evidence suggests that during adolescence, young people become increasingly self-obsessed, typically experiencing an emotional separation from their parents and stronger

identification with peers (Curtis, 2015; Stang & Story, 2005; Viner & Booy, 2005), hence the powerful influence of the peer group at this stage. As young people develop into adolescence, they tend to become more self-aware and potentially more inhibited in front of their peers which may explain the reluctance of some pupils to engage in the performance of the role plays. In keeping with adolescent development, the *It's My Life* intervention is very much focussed on the self (as reflected in the title) therefore the general high level of engagement with the programme may be due to the intervention focus being on the pupils themselves. The teachers at Ganymede confirmed this to be the case. It was noted by the researcher that in classes where the teacher was more confident in facilitating the role play activities, the pupils responded more positively. Alongside or perhaps due to the amplified interest in the self and the peer group, young people seem to start developing an awareness of alcohol at this age. Teachers in two school contexts indicated that pupils were eager to learn about alcohol. This may be due to a greater interest in what older teenagers are doing but also (as discussed in Section 8.2ii), it may be because parents aren't discussing these issues with their children.

8.2i-d Novelty

The pupils may also have found the intervention appealing because the practical interactive approach was different from the usual style of teaching and learning in school and therefore had a novelty factor (particularly noted by the researcher in School B). A systematic review of implementing school health promotion programmes recommended using the simple "hook" of something novel to engage pupil attention (Pearson, Chilton, Wyatt, Abraham, Ford, Woods et al., 2015). The teachers reported that the practical activities within the programme were effective in engaging the pupils' attention. Interview data also indicated that pupils enjoyed working with their friends. The evidence also suggested that the active, practical nature of the intervention may have suited the type of learners targeted in this research, for example, those with behavioural issues. This finding has implications for learning (Bandura, 1971; Bonwell & Eison, 1991; Cherry, 2012).

8.2i-e Group work

The intervention was designed to be interactive, as mentioned previously, taking a peer-focused approach (Section 3.2iv) which, informed by social learning theory,

was designed to encourage pupils to work and learn together. Interview data and researcher observations confirmed that pupils enjoyed the group work, although as already mentioned, this may have been due to the approach being different to usual classroom practice. Using MI principles, pupils were encouraged to explore the issues together and to establish their own collective views regarding alcohol, which it was proposed would promote autonomous motivation. An MI approach was included as an important mechanism of change in the intervention in terms of encouraging autonomous motivation (a central component of the theoretical framework (*Figure 2.21*) as explained in Section 2.5vi). Collaboration is a fundamental element of the MI approach (identified in the *Spirit of MI* (*Table 3.1*)) as a means of engaging in a partnership with the client - the individual/group must feel they are in a safe, confidential environment in which they can openly discuss the topic (Atkinson, 2013). Accordingly, the *It's My Life* intervention was designed to develop a relationship of trust between all members of the class (including the teacher), to create a cohesive classroom environment. It was important that pupils believed that the teacher/facilitator and their peers could understand and empathise with them, and that they were experiencing the intervention process and learning together. Interview comments from teachers and pupils across all schools indicated that the intervention had facilitated good relationships in the classroom and that this contrasted to the regular school classroom setting.

8.2ii Impact

The purpose of this study was not to capture evidence of the effectiveness of the intervention but to test whether a future larger scale study would be feasible. However, analysis of the interview data identified ways in which the intervention might impact on pupils, which broadly corresponded to the components itemised in FS1 Objective 1 and highlighted the potentially "active" components that might ensure its future success (FS2 Objective 2).

One construct identified in the theoretical framework (*Figure 2.21*) is knowledge. The framework proposes *improved knowledge and awareness of alcohol and associated risks and consequences* as an intermediate outcome (or indicator of change) that will contribute to the desired behavioural outcome. It was therefore expected that this theme might emerge from the interview analysis. Interview data from all the schools

confirmed that the intervention had improved pupils' knowledge of alcohol and developed their awareness of the associated risks.

The interviewees also identified that pupil confidence had improved following their involvement in the intervention classes. This outcome relates to another intermediate outcome proposed by the theoretical framework *to improve confidence, self-esteem and wellbeing (self-efficacy)*. The theory suggests that this outcome, improved self-efficacy, is an important enabling factor for motivation which is a central component of the theoretical framework (Bandura, 1971; Nutbeam et al., 2010).

The focus during the early weeks of the intervention programme was to develop an environment of trust, to establish the classroom as a safe place in which the topics could be openly discussed. This intention aligns with the positive psychology of the motivational interviewing approach, identified as a key mechanism of change in the theoretical framework, which seeks to establish a spirit of collaboration with the participant(s) and requires the counsellor or researcher (in this case) to be non-judgemental and to express empathy. In the case of group motivational interviewing, the facilitator (researcher) strives to encourage connections between the members of the group, common themes which others might relate to or empathise with. The importance of group work in terms of pupil engagement has already been discussed in Section 8.2i-e but was also identified by interviewees as an area of impact. It is also considered an enabling factor for motivation, therefore along with the improvement in confidence works to facilitate the third item in this objective: *to encourage adolescents to have the motivation and self-confidence to consider and moderate their alcohol consumption.*

The final area identified in FS1 Objective 1, links to the intermediate outcome proposed in the theoretical framework: *to develop skills to communicate with peers and enact resistance strategies (skills)*. Evidence for impact in this area did not emerge as a strong theme from the interview analysis. However, the Assistant Headteachers in Ganymede and Calisto High School both mentioned the necessity to equip pupils with skills and strategies to help them to negotiate social situations and avoid peer influence.

These findings confirm that the intervention was developed according to the theoretical framework specifications. There is evidence from this study to suggest that the mechanisms of change, designed into the intervention are likely to result in the intermediate outcomes as proposed.

8.2ii Active components

In testing the feasibility of delivering and evaluating the *It's My Life* intervention, one of the main issues identified related to fidelity (discussed in Section 8.3). With any intervention it is important to ensure that in future implementation of the intervention that the essential 'active' components are adhered to, otherwise the effectiveness of the programme might be diluted and fail to have the desired impact. Inevitably once an intervention has been tested (and ideally proven to be effective) in the optimum or ideal circumstances it would then be available for practitioners to deliver in 'real world' conditions. Therefore, in order to increase the chances of on-going effectiveness of the intervention, it was necessary to more precisely identify the 'active' ingredients within the programme.

The constructs in the theoretical framework (*Figure 2.21*): knowledge, social and cognitive skills, physical skills, beliefs about capability, beliefs about consequences, optimism, goals, emotion, reinforcement, social influences and environmental context & resources relate to an extensive list of 38 behaviour change techniques (BCTs) (*Table 2.5*) identified as potential ways in which the intervention might influence pupil behaviour. Section 3.3 (including *Table 3.6*) explains how the BCTs were used to construct the intervention. Qualitative data analysis and researcher observation notes identified the following potentially 'active' components that may be necessary for the future success of the intervention.

Comments from teachers and pupils indicated that pupils had learnt about alcohol and were more aware of the associated risks. It was evident that they had also become more aware of the implications of peer influence. This learning was designed to shape pupils' attitudes (as measured by the *Attitudes and Experiences* survey – Section 8.3ii) and impact on their social norms.

Data analysis identified class cohesion, the development of relationships and trust between all members of the class (teachers and pupils), as an area of impact. As

discussed previously in Section 8.2i and in Section 7.3iv-c, this is an important component of the MI approach. Group cohesion, according to the theory, should facilitate improved pupil confidence. Evidence from interviews across all the schools suggests that this might be the case, teachers and pupils both reported improvements in pupil confidence. It is proposed in the intervention theory that improved confidence relates to improved wellbeing and is an important mechanism in influencing behaviour change, as it relates closely to motivation. This finding indicates that the intervention is potentially working as expected.

These were the main areas of potential impact identified in the analysis that suggest that the intervention might be working as proposed. Most of the intervention constructs (*knowledge, beliefs about capability, beliefs about consequences, optimism, emotion, social influences and environmental context* and *resources*) are included within these three key areas. Two key areas that did not emerge from the analysis, although they were mentioned, are *skills* and *goals*. These were considered important components in the design of the intervention, as firstly, goal setting helps to create discrepancy – ie between current and future situations (generated in the aspirations work covered in week 2 of the intervention (Section 3.3ii and **Table 3.6**)). This is another key component of MI, identified as one of the *Principles of MI* (**Table 3.2**) (Atkinson, 2013) used to influence behaviour change. The second area, skills development, was mentioned by the school leaders in their interviews. Both Assistant Headteachers described concerns relating to peer influence (exacerbated by the use of social media) and the development of cultural misconceptions, expressing the need for pupils to develop skills and strategies to resist their peers. However, evidence of this impacting on pupils did not feature strongly enough in the analysis to constitute a sub-theme within the *impact* theme. However, the theory supports the inclusion of *skills* and *goals* as intervention components. The fact that no substantial evidence was reported in the findings of this feasibility study to suggest their importance, is not a concern. Evidence of impact was not expected from this feasibility study and is more likely to occur in a larger study. However, these are findings will be used to consider whether more work can be done to facilitate these components.

In answer to FS1 Objective 1, survey data were analysed to assess whether the intermediate outcomes of the intervention proposed in the theoretical framework (*Figure 2.21*) could be measured using the *Attitudes and Experience Survey* (Section 4.5). Analysis confirmed that the survey could capture the necessary information for future evaluation of the intervention. The variables performed as expected according to validated outcomes from previous reliability studies. The findings are discussed in further detail in answer to FS1 Objective 2 (Section 8.3ii).

8.3 FS1: Objective 2 and FS2: Objective 1

was it feasible to deliver and evaluate the intervention in different school contexts?

A process evaluation was conducted to answer this objective (Section 4.2iv) and criteria from van Teijlingen and Hundley's checklist of feasibility study objectives (van Teijlingen & Hundley, 2002) was used to guide this process. Evidence from the *Attitudes and Experiences Survey* and from the qualitative data analysis (from interviews and researcher observations) informed the findings which are discussed in relation to the feasibility study objectives (Table 4.5) under the following headings as used in Chapter 5.0:

Recruitment and engagement

- Assessing the likely success of proposed recruitment approaches
- Convincing stakeholders that the main study is worth supporting
- Establishing whether the sampling frame and technique are effective

Data collection

- Developing and testing adequacy of research instruments
- Collecting preliminary data
- Assessing the proposed data analysis techniques to uncover potential problems

Implementation

- Developing a research question and research plan
- Assessing whether the research protocol is realistic and workable
- Identifying logistical problems which might occur using proposed methods
- Determining what resources, such as finance or staff, are needed for a planned study
- Training teachers to deliver the intervention
- Assessing the feasibility of a full-scale study or survey

8.3i Recruitment and engagement

The recruitment of schools to participate in this research was considered challenging (based on researcher observations), as discussed in Section 4.4ii, Section 4.4iv and Section 5.2i, despite calling on the help of professional contacts to aid recruitment. Evidence from the qualitative analysis of the interview transcripts indicated that socioeconomic context was an important issue for two of the participating schools. Researcher observation notes confirmed, from conversations with staff at the third school, that context was also an issue there. Home context exerts a powerful influence on the individual, hence poor parenting and lack of positive role models are identified as determinants of health and education (Marmot et al., 2010; Marmot, 2013). Such issues targeted by the intervention, were identified as important by the interviewed staff. Analysis of the qualitative data suggests that it is likely that the schools participated in the research because the intervention addressed areas that were already keen to address.

Evidence from the qualitative data analysis indicated that the case study schools valued the intervention. Teachers commented on the relevance of the programme for their specific contexts and demonstrated their support in terms of commitment to the research study in supporting its implementation with generous staffing and resources.

Further evidence of the intervention's potential relevance for schools was demonstrated in the actions of the schools after the end of the evaluation. Following FS1, Ganymede voluntarily elected to embed the intervention into their compulsory PSHE curriculum for the whole of their new year 7 cohort. Calisto, following FS2 stated that they would continue to use elements of the intervention work in school.

In order to test the effectiveness of the intervention, it will be necessary to conduct further large-scale experimental studies which will require a large sample of schools to be recruited. Perhaps one of the most important components in the recruitment process is convincing stakeholders that the main study is worth supporting. In a school situation the backing from Senior Leadership is essential in ensuring: that this type of universal intervention can be implemented in school; that the intervention will be delivered as designed; and that the necessary resources are available, including additional staff, sufficient time to plan, deliver and evaluate the programme and

appropriate accommodation. As discussed in Section 4.3 and Section 5.2iii this process can involve a considerable investment of time.

8.3ii Data collection

The process of data collection was generally considered to be successful, as samples of survey and interview data were achieved. However, areas for improvement were identified. The research plan had proposed the collection of pre- and post-intervention survey data. One initial problem that was encountered was in obtaining ethical approval for pupils to participate in the evaluation of the intervention (as described in Section 4.4 and Section 5.2iv) which was most challenging in FS1. The requirement to collect parental 'opt in' consent had a negative impact on recruitment. The researcher also noted that it was challenging to persuade schools of the necessity to collect the parental responses (as schools tended to collect a general consent form from parents to cover all in-house activities, however, this was not considered sufficient for this research study, given the sensitivity of the topic). Staff at Europa Academy failed to send the letters out at all. Quantitative data on the collection of survey responses confirms that recruitment was more successful in FS2 having gained approval to collect parental 'opt out' consent (*Table 5.1*). Further issue to impact on attrition rates were firstly, that one teacher misplaced the post-intervention surveys from her classes; and secondly, that pupils elected to opt out of the survey by leaving it blank.

The research plan also proposed the collection of interview data from teachers, pupils and parents. The study successfully recorded interviews representing 18 teachers and pupils. However, parental engagement proved more challenging. Attempts to recruit parents for interview were not successful.

In terms of the suitability of the survey instruments, for example its appropriateness for the age of the pupils, a small number of issues were identified. The researcher observed that the suggested time for completion was substantially under-estimated, this was due to pupils' low levels of literacy. Some of the language on the survey needed to be modified and additional instructions were added to aid navigation.

Quantitative data analysis (Chapter 6.0) concluded that the questionnaire was successful in capturing data that would answer the research question and potentially

evidence the success of the intervention in a future large-scale study. The components of the survey are discussed in the following sections.

8.3ii-a Experiences of alcohol

It was important to capture pupils' experiences of alcohol prior to the intervention so that any changes to their behaviour, due to involvement in the intervention, could be assessed following the programme. Follow-up, in a large-scale study, would be after a much longer period to measure any lasting effects from the intervention (especially as the desired outcome would be delayed alcohol initiation).

The proportion of pupils who indicated they *had ever* had a full drink of alcohol was half a percent higher than the national survey data which reported 15% of 11-year olds having consumed a full drink of alcohol in 2016 (NHS Digital, 2017, 2018c), despite decreasing trends in adolescent alcohol consumption. This result was interesting because the sample selected was not nationally representative (as described in Chapter 4.0) and was weighted in favour of the more socially deprived locations, as it was anticipated that the intervention was most needed in these schools and would be more likely to yield positive results in the context of a small-scale study. In addition, the pupils in School Ai and School C were purposefully selected by the schools to participate because it was felt that they were most likely to benefit from the intervention work, ie they presented the types of needs that the intervention was designed to address. Alcohol prevalence is lower in more disadvantaged locations (Erskine et al., 2010; ONS, 2017a) yet the reported consumption of 11-year olds in this sample closely reflected the national average.

National statistics show that adolescent alcohol consumption increases as young people progress through their teenage years (*Figure 2.13*). The post-intervention data revealed a percentage increase of 37% to 21.2% of pupils who reported having had a full drink of alcohol after the six-week duration of the programme. The increase seemed quite dramatic after only six weeks (in comparison with the national trends data which indicates a 67% increase (over one year) to 25% of 12-year olds having ever drunk a full drink of alcohol) and raised the question of whether this increase was related to participation in the intervention. This finding suggests that participation in the intervention may have encouraged a greater interest in alcohol beyond the natural anticipated increase according to age. There is a risk, identified in

previous intervention research, that the intervention can cause an increased interest and curiosity to engage with alcohol (Nakashian, 2010; Sloboda, Stephens, Stephens, Grey, Teasdale, Hawthorne et al., 2009). The increase comprised five additional young people reporting *having ever had* a full drink of alcohol. Further inspection of the data revealed that four of the five reported having consumed alcohol more than six months ago, indicating that they were not in fact 'new' drinkers. Rather, they had not given a positive response in the pre-intervention survey. It is not clear why participants were more likely to disclose historical drinking in the post-intervention survey. This finding may indicate a validity issue with the survey measure, however, as this is a widely used question within the field of alcohol intervention research, this is an unlikely explanation. Another possibility is that some individuals at the start of the intervention may not have felt comfortable in revealing their alcohol experience but due to the developing class cohesion (discussed previously in findings from the interview data) had felt confident to provide more honest responses in the survey. If true, this would be an interesting finding which links to the spirit (*Table 3.1*) and principles (*Table 3.2*) of motivational interviewing – to bring about the spirit of collaboration and to express empathy it is first necessary to establish an environment of trust (Tahan & Sminkey, 2012).

Pupils who *had ever* consumed alcohol, were infrequent drinkers, with the majority reporting that they consumed alcohol *only a few times a year* or that they don't drink now. Drinking experience was mostly reported to have been in the company of parents or other family members and that it had taken place at home or at another family member's house. These factors suggest that drinking experience amongst this group was likely to be on an occasional 'ad hoc' basis, possibly coinciding with celebrations such as birthdays, Christmas and New Year. It is difficult to interpret these results due to the very small number of cases involved, however, that was not the purpose of this research study. A smaller percentage of pupils, post-intervention, revealed that they no longer drink alcohol (56.3%) compared 69.2% pre-intervention. A larger proportion of pupils, post-intervention revealed that they sometimes drink alcohol at home (pre-intervention 58.3%; post-intervention 73.3%). These changes may indicate behaviour change towards increased alcohol consumption, as predicted in the national trends data, that corresponds to increased independence as young people progress into their adolescent years. Conversely, the changes could

also indicate a higher level of confidence developed through participation in the intervention resulting in the ability to be honest and to reveal their actual experiences.

8.3ii-b Experience of alcohol-related problems

Social influences and beliefs about consequences are identified as constructs in the theoretical framework (*Figure 2.21*). The normative beliefs of young adolescents about their peers' drinking habits has been reported as a consistent predictor of current use, lifetime alcohol initiation and intentions to initiate drinking. Poorer parent-child relationships also increased adolescents' odds of lifetime initiation and current alcohol use (Nargiso, Friend, & Florin, 2013). Hence, it was expected that young people's experiences of alcohol-related problems might relate to their own behaviour regarding alcohol. In the pre-intervention sample, 43% of pupils reported having witnessed one or more alcohol-related problem occurring to someone else. The most commonly witnessed problem was of someone losing their memory due to drinking alcohol (36%). None of the alcohol-related problems were reported as affecting the pupil themselves, most often this was reported as affecting a parent or other family member. Whilst this study was not powered to capture statistical associations within the data, analysis did reveal a significant correlation between pupils having witnessed any alcohol-related problems and their own reported alcohol consumption (p=.001), a significant correlation was also revealed between experiencing someone losing their memory due to drinking and alcohol consumption (p>.001). In a study of this size, these outcomes were likely due to type 1 error and should be interpreted with caution (Greasley, 2007). When the analysis was repeated for the post-intervention sample, using the pre-intervention sample variables as predictors, no significant relationship was found.

In the post-intervention, two pupils reported having experienced some of the alcohol-related problems themselves and more incidents relating to friends were also reported (*Table 6.4*). It is not possible to interpret these changes meaningfully in this feasibility study, however, this analysis that will be interesting in a large-scale study. If these are newly acquired experiences, they may be an indication of an increased inclination towards alcohol consumption. This may indicate the development of peer relationships and a shift in attention away from the family and towards the peer

group, as the literature suggests. However, the experiences may not be new and could possibly reveal a greater confidence developed through participation in the intervention to reveal an honest response.

8.3ii-c Family background indicators

Strong family relationships make the biggest difference to young people's wellbeing according to the Children's Society who state that children who feel closer and argue less often with their parents report being happier (The Children's Society, 2018). The family background variables from the *Attitudes and Experiences Survey* give an indication of communication levels between a young person and their family. A significant correlation was discovered between wellbeing and the frequency with which the young person argued with their mother/female guardian (p=.005). (Again, this outcome cannot be interpreted as meaningful in this under-powered study). The outcome, however, was a negative correlation indicating that more arguments with the young person's mother corresponded to better wellbeing. In a large-scale effectiveness study, this result would suggest that although the parent and child are arguing, this can be interpreted as positive because it indicates a higher degree of communication, evidenced by the correlation to wellbeing.

Meal times can also be used to indicate the degree of family communication as they provide an opportunity to talk when members of a family gather together to eat. The pre-intervention survey data revealed that half the sample shared an evening meal with their family 6-7 times a week but this figure dropped to 41% post-intervention. Overall, fewer meals were eaten with the family in the post-intervention survey. There are plausible reasons to explain why a child might rarely eat an evening meal with their family - perhaps the parents are working, or the child spends the evening engaged in extra-curricular activities – however, this variable has been evidenced as an important influence in a child's development (Fiese & Jones, 2012). The research evidence suggests that parental alcohol use disorders significantly predict offspring alcohol use disorders as well as other psychiatric disorders (Sørensen, Manzardo, Knop, Penick, Madarasz, Nickel et al., 2011). This influence is a combination of genetic and environmental factors (PHE, 2016a). Sharing family meals has been evidenced as a protective factor in reducing likelihood of alcohol use (Eisenberg et al., 2008). There are many possible mechanisms whereby parental behaviour might

link to child behaviour; one example is simple family structures such as sharing an evening meal together might be less likely to occur in the families of alcoholics. The data analysis for this study revealed a significant correlation between number of evening meals shared with the family and whether the young person *had ever* consumed alcohol (pre-intervention p=.003; post-intervention p=.036). This outcome suggests that this variable, in a larger, powered study, may be a protective factor in terms of future alcohol consumption.

8.3ii-d Relationship with school

A further variable that relates to home or social background, is the relationship that a child has with school. Research evidences links between socioeconomic deprivation and disengagement with school (Castellanos-Ryan & Conrod, 2012). School disengagement is also evidenced as a predictor of alcohol pervasiveness (O'Neil et al, 2015). The majority of pupils in the sample seemed to enjoy going to school (*Table 6.7*) and analysis revealed that all the categories relating to school relationship were positively associated with higher wellbeing (I enjoy going to school p=.004; my teachers treat me fairly at school p=.002; our school is a nice place to be r=.426, p>.001; and teachers expect too much of me p=.013). However, none of the categories predicted alcohol consumption in this feasibility study.

8.3ii-e Attitudes towards alcohol

This study was not designed to capture statistical evidence but to test out the analysis techniques for a future large-scale study. However, a significant correlation was discovered between pupils who agreed that their friends looked down on alcohol use (Q15iv) and their own alcohol consumption (Q2), this was evident both in the pre-intervention survey (p=.001) and also between the post-intervention alcohol consumption variable (PQ2) with predictive variables from the pre-intervention survey (p=.009). There was also a significant association between (Q15v) the pre-intervention survey variable not liking to be around people who consume alcohol and their own alcohol consumption post-intervention (PQ2). It is interesting to note that 69.2% (pre-intervention, Q2) and 55.6% (post-intervention, PQ2) of pupils who *had ever* consumed alcohol agreed that their friends look down on alcohol use. It is possible that this outcome reflects the attitudes of those pupils who reported that they no longer drink alcohol. It also suggests a growing acceptance of alcohol

amongst the peer group. This suggestion is also corroborated by the 19.7% decrease in pupils agreeing that their friends look down on alcohol use from pre-intervention (54.2%) to post-intervention (34.5%). The fact that there is a statistical relationship between not liking to be around people who use alcohol and reported alcohol consumption (PQ2) could also be evidence of a growing awareness of peer influence. Again, these findings should be interpreted cautiously, as they may be the result of type 1 errors (ie one in twenty associations would be expected to be significant just by chance).

8.3ii-f Psychological Wellbeing

Pupil wellbeing is an important variable in this research study. As evidenced by the research literature, psychological wellbeing has been increasingly recognized for its impact on physical and mental health outcomes (Bellis et al., 2014a). Mental disorders have been identified as the largest cause of the burden of disease in the world (Carta et al 2015) and over 50% of the burden affecting adults has its onset during childhood and adolescence. There is also an association between wellbeing and socioeconomic status (Campion et al 2012; Bartels, 2015) and, of particular relevance to this study, an association between child wellbeing and socioeconomic status (Bradley and Corwen, 2002; Wilkinson and Pickett, 2007; Carta et al 2015). Low wellbeing during adolescence can impact on school engagement, affecting attendance rates and attainment outcomes as well as increasing the likelihood of involvement in risky behaviours (including alcohol misuse) and the consequences are more significant for those with lower socioeconomic status (Campion et al, 2013). It was therefore anticipated that wellbeing would relate to several aspects that were captured on the *Attitudes and Experiences survey*, including personal characteristics, such as self-confidence and contentment; sensation seeking tendency; home background; school relationship; and attitudes towards and experiences of alcohol. It was also expected that many of the survey variables would be inter-related, for example, home background is likely to impact on personal characteristics, sensation seeking tendency, school relationships, attitudes and experiences of alcohol and ultimately wellbeing.

The data analysis revealed that wellbeing did not predict alcohol consumption and neither was there a positive relationships between wellbeing and sensation seeking

tendency. So, two key relationships predicted by the research literature that were anticipated in the data were not discovered. However, they were not really expected to correlate in this small sample. Other positive predictors of wellbeing score were revealed. Personal characteristics; having self-confidence (p>.001); having a happy home life (p>.001); and being able to state one's own views to friends (p=.013) related to better wellbeing and so did school relationship variables (as previously discussed in Section 8.1iv).

8.3iii Implementation

Feasibility studies, such as this, are generally used as preparation for larger scale effectiveness trials (Humphrey et al., 2016; Prestwich et al., 2017). Progression to a full-scale randomised control trial designed to scientifically test the effectiveness of the intervention would be the future aim. This research consisted of two feasibility studies designed to test the delivery and evaluation of the intervention in FS1, allowing the opportunity to adapt and address any issues that were identified before repeating the study in FS2. Researcher observation data and analysis of the interview data suggest that a full-scale study, to deliver and evaluate the intervention as proposed would be feasible. Several issues were identified that would need to be addressed to ensure the future success of a larger study, including; recruitment, support, timing, training, engagement and fidelity.

8.3iii-a Support

Support was identified, from the qualitative analysis and from observation notes, as an important factor in the success of this research. The senior leadership represent the access into schools, so they need to be convinced that the intervention is worthwhile (as discussed in 8.3i). Support from senior leadership was also identified as necessary in ensuring the intervention is delivered according to the research requirements, for example, obtaining ethical consent, accessing staff and resources to deliver the intervention. If the senior leadership show their commitment to the intervention work, this passes important messages to their staff (who also need to be convinced of the value of the intervention). The researcher observed that it was more challenging to deliver the intervention without this support (as in the Europa Academy example). The commitment and support of staff involved in the intervention delivery can also impact on other issues, such as fidelity – if teachers don't

understand the expectations of the intervention, they may change or adapt aspects, or fail to deliver important components without realising that this can impact on the outcomes.

8.3iii-b Timing

There were several timing issues that were revealed from the qualitative data analysis (interviews and observation notes) that related to implementation. Firstly, analysis identified a difficulty in delivering the planned elements of the intervention within the proposed timescale, suggesting there may be too much content. Teachers at Ganymede helped to schedule the intervention programme for delivery in six weekly classes. However, despite their planning expertise there were several factors that impacted on the timing, for example, behavioural issues meant that activities took longer to explain and implement, low literacy levels impacted on the survey completion time. In a future study, it might be better to gather survey data outside the six-week timescale, allowing more time for the planned activities. Another timing issue revealed from the analysis was in relation to scheduling the intervention into the school curriculum.

8.3iii-c Resources

The findings from this research identified that successful delivery of the intervention and collection of data required particular resources, which included: committed staff to facilitate the data collection and deliver the intervention; adequate large space was needed to conduct the role play group activities; and sufficient time (as discussed in Section 8.3iii-b). Senior leadership support, as previously mentioned (Section 8.3iii-c), is also required to ensure that the necessary resources are provided. Without this support, the intervention delivery becomes more challenging and may impact on the quality of implementation and in turn affect the outcomes. It is important to ensure the best conditions for the research to ensure the best chances of success.

8.3iii-d Teacher training

The researcher identified a potential issue with the teacher training. There were two schools in the recruitment phase that received the training but failed to participate in the research (Section 5.2i). Staff need to be persuaded that the intervention is of value, to understand the theory and the MI approach. It was noted that the teachers

involved in this feasibility demonstrated varying levels of engagement with and commitment to the programme delivery. In order to enhance the success of future research of the *It's My Life* intervention, training may need to be more convincing.

8.4 FS2: Objective 3

To explore how the intervention might be improved for future application to increase its impact and relevance for schools

As demonstrated in this research, circumstances can vary considerably between schools, therefore one single intervention model will not necessarily suit all. In each school context, challenges were encountered in implementing the programme. One common issue related to the timing of the programme, in several instances the planned sessions were compromised in some way and needed to be adapted. For example, in delivery of the intervention in the first school, completion of the survey took longer to complete than anticipated, leaving insufficient time for the remaining planned activities, which resulted in changes to the remaining programme schedule. This issue can be resolved with more careful planning, and having conducted FS1, improvements were made for FS2.

Another issue that can compromise the effects of an intervention is adaptation (as discussed in Section 7.3v-a). The *It's My Life* intervention was designed to take a positive psychology approach, topics are planned to focus on enabling factors, such as pupil strengths (not weaknesses) and in the spirit of the MI approach evoke change talk and inspire autonomous motivation leading to positive behaviour. The adaptation to discuss weaknesses, in this example, contradicted the theoretical framework and in a future effectiveness trial might inhibit the success of the programme. Inevitably, with the roll-out of any school-based intervention, fidelity will be an issue as schools will use the components that they deem appropriate or feasible to deliver. This is a more challenging issue to tackle. More detailed teacher training may be the solution, to better inform those who will deliver the intervention about the important components. Further engagement with the schools and teachers involved would also facilitate this process but might not always be feasible in a larger study and beyond.

Findings from this research indicated that the intervention was highly relevant to those schools involved (as discussed in Section 7.3i) located in the most socially

disadvantaged locations. However, this study did not reveal any insight regarding the relevance for schools in other circumstances. The theory suggests that the intervention might be most beneficial for pupils from more disadvantaged home backgrounds, however, issues targeted by the intervention are more universal, for example, peer influence, sensation-seeking tendency, low wellbeing. Therefore, there is a rationale for using this intervention across the whole range of school contexts.

8.5 Contribution to knowledge

Firstly, development of the *It's My Life* intervention had a thorough theoretical underpinning (which evidence from the literature review (Section 2.4) identified as an essential component but was often found to be lacking in previous intervention studies). Secondly, motivation featured as a central component of the theoretical framework (*Figure 2.21*) in influencing behaviour change. To evoke autonomous motivation, evidence from the literature suggested motivational interviewing as a highly effective behaviour change mechanism. It was therefore proposed that a theory-based intervention that incorporated an MI approach would result in the desired behaviour change.

The outcomes from this research suggest that the incorporation of the MI approach into a universal school-based intervention has the potential for success. MI has been evidenced as effective when applied on a one-to-one level or in small groups with both adults and adolescents (as discussed Section 3.2iii). There have been a few studies that have successfully used MI-style brief interventions with university students, for example to motivate them to study for exams (Reich et al, 2015). However, MI has not previously been applied in situations with young adolescents in this type of whole class intervention work.

This study demonstrates that MI is an effective approach to include in universal school-based alcohol intervention. The findings suggest that the spirit and principles of MI can be transferred for use by school practitioners in the classroom and that the approach has the potential to influence positive behaviour change.

8.6 Methodological and Conceptual Contributions

The research has also illustrated some important methodological and conceptual contributions, as discussed in the following paragraphs.

The literature on universal school-based alcohol interventions targeting alcohol consumption is vast and complex, yet, limited successful outcomes have been reported. It was therefore challenging to navigate this literature and analyse where improvements might be targeted to improve the chances of success. This research highlights the importance of using a comprehensive and systematic approach to developing a theoretical framework as the foundation for preventative intervention work.

This thesis clearly articulates how the theoretical framework is constructed and how it is used to inform each stage of the research process. The intermediate outcomes identified in the theoretical framework are referenced at each stage alongside the behaviour change techniques and key components from the motivational interviewing (MI) and the role play approaches. However, the central component within the theoretical framework which resonates throughout this study is motivation. Motivational Interviewing is a person-centred, individualised approach but within this intervention study is applied within a classroom context. Conceptually, the individual is situated within a broad context of influences (as illustrated in the Social Ecological Model – Figure 2.17), including the school environment, over which the intervention has no control, and yet those real and powerful influences must be acknowledged. It was evident that some pupils in the participating schools were exposed to significant issues such as alcohol and drug misuse, domestic violence, neglect and mental health problems in their home lives. These contextual factors create a huge challenge, however, in employing a group MI approach the intervention sought to use the power of the peer group working together as a means of influencing change.

Another important conceptual contribution of this research is the application of the MI as a preventative approach to intervention. This research sought to intervene in behaviour change before the behaviour has occurred. It was evident that many of the participants were already intrigued by alcohol, displaying influences perhaps from older siblings or social media, perceiving drinking as fun, dangerous and exciting but had not yet engaged in the behaviour itself. This study highlights the importance of

identifying where and how to intervene, for example, indicating the importance of goal setting and establishing a discrepancy in-line with the MI approach between achieving a life-time aspiration and engaging in risky behaviours (ie alcohol misuse).

There were significant methodological challenges in conducting this research, as outlined in Chapter 4, specifically relating to ethics, school recruitment and reflexivity. This study describes the ways in which these challenges have been overcome but which also present implications for future iterations of this and other similar research studies. For example, as previously mentioned, the school environment was an important factor in the success of the intervention. Relationship building, as an essential component of MI, was identified as important to the future success of the intervention. In addition, the researcher's ability to engage with schools and teachers to communicate this and other essential components of the MI approach was also crucial to the success of the programme. Those responsible for delivering the intervention must be invested in the potential for influencing change and must understand how that change happens. The researcher's role is to convey this information to the stakeholders involved in delivering the programme.

A major methodological challenge presented in this study related to ethics, as described in Section 4.4. It was important for the researcher to obtain ethical approval for the parental 'opt-out' method of consent. The original approval for signed 'opt-in' consent was considered a significant barrier to the research in resulting in the more 'hard to reach' participants (who were also the most likely to benefit from the intervention) being excluded from the evaluation. The researcher therefore persisted with the further application which resulted in a university-level policy change (see Appendix V).

8.7 Implications

This research study has identified/confirmed some key issues and raised further questions, which are summarised as follows:

- There is a need for this type of intervention in some schools, especially those working with the more socially disadvantaged cohorts.
- Pupils engaged with the programme, they enjoyed the practical activities, (especially the role play) and working with peers in a more informal way.

- Adequate resources need to be provided, including time, space and staffing, ideally involving drama expertise.
- Teachers lack confidence in employing different approaches in class – how might this be overcome? (modelling, coaching, mentoring)
- Comprehensive training needs to be provided for teachers, perhaps including video examples. The core components of the intervention need to be clearly explained.
- It is challenging to get schools/teachers to engage with the intervention – how might this be achieved?
- There is potential value in the intervention as it is affordable and has the potential to raise awareness and up-skill young people towards healthier alcohol consumption and may also have broader outcomes.
- The approach can easily be shared across staff and across subjects, in a cascade model.

8.8 Limitations

Due to practicalities that arise in the implementation of research studies, there are often limitations that must be considered when viewing the outcomes. The limitations pertinent to this research study are outlined below.

Firstly, the sample recruited for this research was achieved through purposeful recruitment via professional links and contacts. This study was not an experimental design so scientific randomisation was not adhered to in either the selection of schools or in the allocation of pupils to the participating classes. Schools located in the more socially deprived areas were targeted for involvement in the study to optimise the likelihood of achieving positive outcomes, in this case successful delivery of the intervention and collection of data. The first school to engage with the research was not only keen to be involved but was prepared to provide the support of school staff for the purpose of the study – this was Ganymede (School A). It is evident from the findings from this research, that this school, being located in an area of significant socioeconomic disadvantage, participated in the intervention study because the intervention complemented work that they were already conducting in school. Therefore, any positive outcomes from this context may be due to environmental factors that are specific to that context. Testing in two further schools

attempted to confirm that any positive outcomes were not specific to that school, but rather as a result of the intervention. However, the other schools who volunteered to participate were similarly located in disadvantaged neighbourhoods and also had a specific agenda to address pupil wellbeing and factors such as raising self-esteem, promoting positive aspirations and developing strategies to negotiate life 'situations' integrated with their developing PSHE curricula. The aims of the *It's My Life* intervention happened to support the work that these schools were looking to implement and provided a ready-made package of resources to try out. In future testing of the intervention, randomisation across a broader range of contexts would be necessary in order to prove efficacy.

It is widely accepted that parental influence strongly correlates with adolescent behaviour and affect their relationship with alcohol (Bremner et al., 2011). For example, parental expectation and positive aspirations can be a protective factor against peer influence resulting in a higher degree of school engagement and less involvement with risky behaviours. However, parental influence can also lead the young person in a negative direction, such as towards risky drinking. A recent study conducted by the Institute of Alcohol Studies evidences that even low-level parental drinking, that is within the recommended daily drinking guidelines, can prove damaging to children and can influence their drinking behaviour. Research evidence suggests that preventative interventions, such as in this study, would be strengthened by the inclusion of work with parents (EU, 2006; Foxcroft DR, 2011; NICE, 2010). Indeed, two recent UK studies, both funded by the NIHR, have included parental engagement as an integral part of their research design (Segrott, Rothwell, Hewitt, Playle, Huang, Murphy et al., 2015; Sumnall et al., 2017). Although, desirable to include parents, it was not possible within the scope of this study to include a fully integrated parental element in the intervention. Schools were invited and did express an interest in hosting parental engagement meetings but were doubtful about the level of response that could be achieved from their parents. Schools recognise the strength in engaging parents with their children's learning, however, parental engagement proves challenging for many schools, particularly those in the more deprived locations. There are several reasons for the disengagement of parents (Marmot, 2015), one of which relates to the parent's own negative school experience. In this study, due to tight timescales, it was not possible

to host any such events. In an attempt to encourage parents and community partners to engage with this research, the researcher applied for and was awarded a grant from the Economic and Social Research Council to host a workshop as part of their Manchester Festival of Social Science (twitter: #McrESRCfest #ESRC) in November 2016. The purpose of the workshop was to promote the merits of academic research to an external audience with a view to generating interest in potential future research collaborations.

Teacher effect may also have impacted on the study outcomes, as there was variation in levels of their commitment, competence and motivation to deliver the intervention according to the proposed principles. In some schools teachers responded positively to the intervention training and worked hard to understand and to translate the motivational interviewing (MI) approach into the classroom context. In other cases teachers lacked the confidence to deliver some elements of the programme, for example using the role play or implementing the MI approach. In one context, time was not allocated for training the teacher, despite the enthusiasm of senior leadership towards the intervention and the teacher failed to engage with the fundamental principles of the programme. Research evidence indicates that teacher 'connectedness' impacts on the subjective wellbeing of adolescent students and on school engagement therefore the level of engagement displayed by the teacher will likely impact on the pupils' level of engagement and the success of the intervention work. Nevertheless, this intervention is intended to embed within the everyday school curriculum where it will hopefully be effective despite environmental constraints – fidelity issues, such as the adaptation of the programme and varying degrees of enthusiasm for or knowledge of the intended approach will inevitably occur beyond the scope of the initial stages of development and testing.

8.9 Conclusions

The *It's My Life* intervention was designed around a comprehensive theoretical framework (*Figure 2.21*) derived from a synthesis of behaviour change theories using Michie et al's Behaviour Change Wheel (Michie et al., 2014; Michie et al., 2012). The theoretical framework proposed 11 constructs that the intervention should target to influence the desired behaviour (or future behaviour in this case) – to prevent, halt or reduce future alcohol consumption. Six intermediate outcomes were proposed in the

theoretical framework as indicators of change to signify that the intervention was working according to the theoretical assumptions. The intervention incorporated a combination of behaviour change techniques (BCTs) (Michie et al., 2014) with a Motivational Interviewing approach and employed learning strategies informed by active and social learning theories (Bandura, 1971; Revans, 1981) as the mechanisms of change. The hypothesis of this research was that combining a systematic method of intervention design with the therapeutic MI approach could be an effective solution to alcohol prevention amongst young adolescents.

The theory underpinning the intervention proposed that providing pupils with accurate information about alcohol and its associated risks would help them to understand the facts about alcohol and to be aware of issues relating to alcohol consumption, including social pressures and peer influence. It was proposed that this would help pupils to develop healthy attitudes towards drinking, and to establish healthy social drinking norms. This would serve to correct any misperceptions that they might have acquired from other influences, such as family or peers. The theory also proposed that improving the confidence, self-esteem and psychological wellbeing of pupils, would empower pupils to take responsibility for their own behaviour. The theoretical framework placed motivation as a central component in influencing behaviour, it was therefore proposed that the development of self-confidence would help to facilitate the intrinsic motivation within pupils to behave according to their (healthy) intentions. Finally, the intervention would work to equip pupils with the skills and strategies to negotiate social situations and to behave according to their intentions in relation to alcohol consumption.

An important outcome from this research was the understanding that the intervention had facilitated pupil bonding and contributed to the cohesion of the classes involved. It is likely that this is a key active component of the intervention – the intention was to encourage pupils to work together to formulate their own group perception of acceptable "social norms" regarding drinking behaviour. It was anticipated that the impact of facilitating a cohesive social environment in which to learn as a group (Bandura, 1971; Simons-Morton, Crump, Haynie, & Saylor, 1999) would be greater than an approach that targeted individuals identified as being most 'at risk' of engaging in harmful alcohol consumption who would then be expected to behave

differently amongst the same 'untreated' social group. Learning together in a cohesive social environment towards a group understanding could be protective in terms of future decision-making; emotionally, they may feel happier and more confident within the peer group and; socially, feeling more connected to their peers and having a collective understanding of their attitudes towards or their "social norm" regarding alcohol they may be less likely to have to deviate from the behaviour of the peer group.

The development of a group relationship of trust was an essential component in facilitating the MI approach (Miller & Rollnick, 2012). The young people needed to feel that they were in a safe, confidential environment in which they could explore the potentially sensitive topics in the programme. The group relationship was also important in pupils feeling confident to perform the role play activities in front of one another. Control or empowerment were important themes that featured in the research literature. The intervention sought to improve the self-esteem and psychological wellbeing of the pupils, to develop the self-confidence to adhere to their own beliefs with regard to alcohol consumption. This need was recognised by the teachers involved with the study and evidence from qualitative data analysis suggested that the intervention had improved pupil confidence.

To conclude, the study was successful in answering all the objectives specified in Section 1.1. The feasibility of delivering the intervention and survey measures as proposed in the research design was tested and considered successful. The survey was judged to be appropriate in collecting the necessary data to evaluate the intervention in a future study. It was also considered, with some slight adjustments, to be appropriate for the target age group (11-12 years). Delivery and evaluation of the intervention was tested in a range of different contexts which was judged to be feasible logistically, however raised issues relating to adaptation and fidelity that would need to be considered in future studies. It was also confirmed that the intervention work is relevant to schools in more socially disadvantaged locations.

8.10 Recommendations

This research has identified the potential benefits of using MI in a universal approach to alcohol reduction. In combination with the practical techniques employed in the intervention, this approach is highly transferrable into the educational context offering

an alternative approach to regular classroom practice. The outcomes from this research suggest that the intervention can be easily resourced for teachers to deliver with training or mentoring.

It is therefore recommended that further studies be conducted to test the effectiveness of the intervention.

References

Adams, R. (2015). GCSE gap between rich and poor widens. *The Guardian*. Retrieved from https://www.theguardian.com/education/2015/jan/29/gcse-gap-rich-poor-widens

Agabio, R., Trincas, G., Floris, F., Mura, G., Sancassiani, F., & Angermeyer, M. C. (2015). A systematic review of school-based alcohol and other drug prevention programs. *Clinical practice and epidemiology in mental health: CP & EMH, 11*(Suppl 1 M6), 102.

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes, 50*(2), 179-211.

Amialchuk, A., Ajilore, O., & Egan, K. (2019). The influence of misperceptions about social norms on substance use among school‐aged adolescents. *Health economics, 28*(6), 736-747.

Apodaca, T. R., Borsari, B., Jackson, K. M., Magill, M., Longabaugh, R., Mastroleo, N. R., & Barnett, N. P. (2014). Sustain talk predicts poorer outcomes among mandated college student drinkers receiving a brief motivational intervention. *Psychology of Addictive Behaviors, 28*(3), 631.

Armitage, C., Rowe, R., Arden, M., & Harris, P. (2014). A brief psychological intervention that reduces adolescent alcohol consumption. *Journal of Consulting and Clinical Psychology, 82*(3), 546-550.

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta‐analytic review. *British Journal of Social Psychology, 40*(4), 471-499.

Atkins, L., Francis, J., Islam, R., O'Connor, D., Patey, A., Ivers, N., . . . Grimshaw, J. M. (2017). A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems. *Implementation science, 12*(1), 77.

Atkinson, C. (2005). Facilitating Change. *Motivational Interviewing*.

Atkinson, C. (2013). Facilitating Change 2: Motivational Interviewing using the menu of strategies: Bath: Sodapop. Retrieved from http://www. facilitatingchange. org. uk.

Atkinson, C. (2014). Motivational Interviewing and the Transtheoretical Model. In E. MCNamara (Ed.), *Motivational Interviewing: Children and Young People II: Issues and Further Applications*.

Atkinson, C., & Amesu, M. (2007). Using solution-focused approaches in motivational interviewing with young people. *Pastoral Care in Education, 25*(2), 31-37.

Atkinson, C., & Woods, K. (2003). Motivational interviewing strategies for disaffected secondary school students: a case example. *Education Psychology in Practice, 19*(1), 15. doi:10.1080/0266736032000061206

Bailey, K. A., Baker, A. L., Webster, R. A., & Lewin, T. J. (2004). Pilot randomized controlled trial of a brief alcohol intervention group for adolescents. *Drug and alcohol review, 23*(2), 157-166.

Bajac, H., Feliu-Soler, A., Meerhoff, D., Latorre, L., & Elices, M. (2016). Iudicium: An Educational Intervention for addressing Risk Perception of Alcohol Abuse in Adolescents. *Adicciones, 28*(1), 41-47. doi:10.20882/adicciones.789

Bandura, A. (1971). Social learning theory. Morristown: NJ: General Learning Press.

Bandura, A. (1973). *Aggression: A social learning analysis*: prentice-hall.

Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1): Prentice-hall Englewood Cliffs, NJ.

Banister, P., Burman, E., Parker, I., Taylor, M., & Tindall, C. (1994). Qualitative methods in psychology. *Qualitative methods in psychology: A research guide*, 1-16.

Barkham, M., Mellor-Clark, J., Connell, J., & Cahill, J. (2006). A core approach to practice-based evidence: A brief history of the origins and applications of the CORE-OM and CORE System. *Counselling and Psychotherapy Research, 6*(1), 3-15.

Barnett, E., Spruijt-Metz, D., Unger, J. B., Sun, P., Rohrbach, L. A., & Sussman, S. (2012). Boosting a teen substance use prevention program with motivational interviewing. *Subst Use Misuse, 47*(4), 418-428.

Barrington-Leigh, C. P., & Helliwell, J. F. (2008). *Empathy and emulation: Life satisfaction and the urban geography of comparison groups*. Retrieved from

Bava, S., & Tapert, S. F. (2010). Adolescent brain development and the risk for alcohol and other drug problems. *Neuropsychology review, 20*(4), 398-413.

Beckman, L., Svensson, M., Geidne, S., & Eriksson, C. (2017). Effects on alcohol use of a Swedish school-based prevention program for early adolescents: a longitudinal study. *BMC Public Health, 17*(1), 2. doi:10.1186/s12889-016-3947-3

Behnken, M. P., Le, Y.-C. L., Temple, J. R., & Berenson, A. B. (2010). Forced sexual intercourse, suicidality, and binge drinking among adolescent girls. *Addictive Behaviors, 35*(5), 507-509.

Bellis, M., Hughes, K., Leckenby, N., Hardcastle, K., Perkins, C., & Lowey, H. (2014b). Measuring mortality and the burden of adult disease associated with adverse childhood experiences in England: a national survey. *Journal of public health*, fdu065.

Bellis, M., Hughes, K., Nicholls, J., Sheron, N., Gilmore, I., & Jones, L. (2016). The alcohol harm paradox: using a national survey to explore how alcohol may disproportionately impact health in deprived individuals. *BMC Public Health, 16*(1), 1.

Bellis, M., Lowey, H., Leckenby, N., Hughes, K., & Harrison, D. (2014a). Adverse childhood experiences: retrospective study to determine their impact on adult health behaviours and health outcomes in a UK population. *Journal of public health, 36*(1), 81-91.

Bellis, M., Morelo, M., Tocque, K., Dedman, D., Phillips-Howard, P., Perkins, C., & Jones, L. (2009b). Contributions of Alcohol Use to Teenage Pregnancy.

Bellis, M. A., Hughes, K., Morleo, M., Tocque, K., Hughes, S., Allen, T., . . . Fe-Rodriguez, E. (2007). Predictors of risky alcohol consumption in schoolchildren and their implications for preventing alcohol-related harm. *Substance abuse treatment, prevention, and policy, 2*(1), 15.

Bellis, M. A., Morleo, M., Hughes, K., Downing, J., Wood, S., Smallthwaite, L., & Cook, P. A. (2010). A cross-sectional survey of compliance with national guidance for alcohol consumption by children: measuring risk factors, protective factors and social norms for excessive and unsupervised drinking. *BMC Public Health, 10*(1), 547.

Bellis, M. A., Phillips-Howard, P. A., Hughes, K., Hughes, S., Cook, P. A., Morleo, M., . . . Jones, L. (2009). Teenage drinking, alcohol availability and pricing: a cross-sectional study of risk and protective factors for alcohol-related harms in school children. *BMC public health, 9*. doi:10.1186/1471-2458-9-380

Bellis, M. A., Phillips-Howard, P. A., Hughes, K., Hughes, S., Cook, P. A., Morleo, M., . . . Jones, L. (2009a). Teenage drinking, alcohol availability and pricing: a cross-sectional study of risk and protective factors for alcohol-related harms in school children. *BMC Public Health, 9*. doi:10.1186/1471-2458-9-380

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative research, 15*(2), 219-234.

Best, D., Beckwith, M., Haslam, C., Alexander Haslam, S., Jetten, J., Mawson, E., & Lubman, D. I. (2016). Overcoming alcohol and other drug addiction as a process of social identity transition: The social identity model of recovery (SIMOR). *Addiction Research & Theory, 24*(2), 111-123.

Blaakman, S. W., Cohen, A., Fagnano, M., & Halterman, J. S. (2014). Asthma medication adherence among urban teens: A qualitative analysis of barriers, facilitators and experiences with school-based care. *Journal of Asthma, 51*(5), 522-529.

Blakemore, S. J., & Choudhury, S. (2006). Development of the adolescent brain: implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry, 47*(3-4), 296-312. doi:10.1111/j.1469-7610.2006.01611.x

Blas, E., & Kurup, A. S. (2010). *Equity, social determinants and public health programmes*: World Health Organization.

Bonde, A. H., Bentsen, P., & Hindhede, A. L. (2014). School nurses' experiences with motivational interviewing for preventing childhood obesity. *The Journal of School Nursing, 30*(6), 448-455.

Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom. 1991 ASHE-ERIC Higher Education Reports*: ERIC.

Botvin, G. J., & Griffin, K. W. (2015). Life Skills Training: A competence enhancement approach to tobacco, alcohol, and drug abuse prevention *Handbook of adolescent drug use prevention: Research, intervention strategies, and practice* (pp. 177-196). Washington, DC: American Psychological Association; US.

Bradbury‐Jones, C. (2007). Enhancing rigour in qualitative health research: exploring subjectivity through Peshkin's I's. *Journal of advanced nursing, 59*(3), 290-298.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.

Braun, V., Clarke, V., & Terry, G. (2014). Thematic analysis. *Qual Res Clin Health Psychol*, 95-114.

Bremner, P., Burnett, J., Nunney, F., Ravat, M., & Mistral, W. (2011). Young people, alcohol and influences: A study of young people and their relationship with alcohol. *York: Joseph Rowntree Foundation*.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American psychologist, 32*(7), 513.

Bronfenbrenner, U. (1979). *The ecology of human development*: Harvard university press.

Burdzovic Andreas, J., & Jackson, K. M. (2015). Adolescent alcohol use before and after the high school transition. *Alcohol Clin Exp Res, 39*(6), 1034-1041. doi:10.1111/acer.12730

Burton, R., Henn, C., Lavoie, D., O'Connor, R., Perkins, C., Sweeney, K., . . . Belloni, A. (2016). The public health burden of alcohol and the effectiveness and cost-effectiveness of alcohol control policies: an evidence review. *The public health*

burden of alcohol and the effectiveness and cost-effectiveness of alcohol control policies: an evidence review.

Busch, V., De Leeuw, R. J., & Schrijvers, A. J. (2013). Results of a multibehavioral health-promoting school pilot intervention in a Dutch secondary school. *Journal of Adolescent Health, 52*(4), 400-406.

Cahill, H. (2002). Teaching for Community: Empowerment through Drama. *Melbourne Studies in Education, 43*(2), 14. doi:10.1080/17508480209556399

Cane, J., O'Connor, D., & Michie, S. (2012). Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implementation science, 7*(1), 37.

Cane, J., Richardson, M., Johnston, M., Ladha, R., & Michie, S. (2015). From lists of behaviour change techniques (BCT s) to structured hierarchies: Comparison of two methods of developing a hierarchy of BCT s. *British journal of health psychology, 20*(1), 130-150.

Caria, M. P., Faggiano, F., Bellocco, R., Galanti, M. R., & Grp, E. U. D. S. (2011). Effects of a School-Based Prevention Program on European Adolescents' Patterns of Alcohol Use. *Journal of Adolescent Health, 48*(2), 182-188. doi:10.1016/j.jadohealth.2010.06.003

Carta, M. G., Fiandra, T. D., Rampazzo, L., Contu, P., & Preti, A. (2015). An Overview of International Literature on School Interventions to Promote Mental Health and Well-being in Children and Adolescents. *Clinical practice and epidemiology in mental health : CP & EMH, 11*(Suppl 1 M1), 16-20. doi:10.2174/1745017901511010016

Carver, H., Elliott, L., Kennedy, C., & Hanley, J. (2017). Parent–child connectedness and communication in relation to alcohol, tobacco and drug use in adolescence: An integrative review of the literature. *Drugs: Education, Prevention & Policy, 24*(2), 119-133. doi:10.1080/09687637.2016.1221060

Castellanos-Ryan, N., & Conrod, P. (2012). Personality and substance misuse: evidence for a four-factor model of vulnerability *Drug Abuse and Addiction in Medical Illness* (pp. 47-62): Springer.

Caudwell, K. M., Mullan, B. A., & Hagger, M. S. (2016). Combining motivational and volitional approaches to reducing excessive alcohol consumption in pre-drinkers: a theory-based intervention protocol. *BMC Public Health, 16*, 45. doi:10.1186/s12889-015-2648-7

Chein, J., Albert, D., O'Brien, L., Uckert, K., & Steinberg, L. (2011). Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. *Developmental Science, 14*(2).

Cherry, K. (2012). Social learning theory. *Retrieved July, 2*, 2012.

CMO. (2013). *Annual Report of the Chief Medical Officer 2012. Our Children Deserve Better: Prevention Pays.* Retrieved from Department of Health, London: https://www.gov.uk/government/organisations/department-of-health

Conrod, P. J., O'Leary-Barrett, M., Newton, N., Topper, L., Castellanos-Ryan, N., Mackie, C., & Girard, A. (2013). Effectiveness of a Selective, Personality-Targeted Prevention Program for Adolescent Alcohol Use and Misuse A Cluster Randomized Controlled Trial. *Jama Psychiatry, 70*(3), 334-342. doi:10.1001/jamapsychiatry.2013.651

Cooke, R., Dahdah, M., Norman, P., & French, D. P. (2016). How well does the theory of planned behaviour predict alcohol consumption? A systematic review and meta-analysis. *Health psychology review, 10*(2), 148-167.

Cooper, M., Pybis, J., Hill, A., Jones, S., & Cromarty, K. (2012). Therapeutic outcomes in the Welsh Government's school-based counselling strategy: An evaluation. *Counselling and Psychotherapy Research, 13*(2), 86-97. doi:10.1080/14733145.2012.713372

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: the new Medical Research Council guidance. *bmj, 337*, a1655.

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2011). Developing and evaluating complex interventions. *Medical Research Council, UK.*

Crawford, M. J., Robotham, D., Thana, L., Patterson, S., Weaver, T., Barber, R., . . . Rose, D. (2011). Selecting outcome measures in mental health: the views of service users. *Journal of Mental Health, 20*(4), 336-346.

Creswell, J. W. (2013). Steps in conducting a scholarly mixed methods study.

Creswell, J. W., & Clark, V. L. P. (2011). Designing and conducting mixed research methods: Thousand Oaks, California: SAGE.

Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health, 2013*, 541-545.

Crosnoe, R., Benner, A. D., & Schneider, B. (2012). Drinking, socioemotional functioning, and academic progress in secondary school. *Journal of health and social behavior, 53*(2), 150-164.

Cross, R. (2004). Exploring attitudes: the case for Q methodology. *Health Education Research. Theory and Practice., 20*(2), 8.

Cryer, S., & Atkinson, C. (2015). Exploring the use of Motivational Interviewing with a disengaged primary-aged child. *Educational Psychology in Practice, 31*(1), 56-72.

Currie, C., Davies, A., Blunt, I., Ariti, C., & Bardsley, M. (2015). Alcohol-specific activity in hospitals in England.

Curtis, A. C. (2015). Defining adolescence. *Journal of Adolescent and Family Health, 7*(2), 2.

Cutcliffe, J. R. (2003). Reconsidering reflexivity: Introducing the case for intellectual entrepreneurship. *Qualitative health research, 13*(1), 136-148.

Das, J. K., Salam, R. A., Lassi, Z. S., Khan, M. N., Mahmood, W., Patel, V., & Bhutta, Z. A. (2016). Interventions for adolescent mental health: an overview of systematic reviews. *Journal of Adolescent Health, 59*(4), S49-S60.

Davies, P., Walker, A. E., & Grimshaw, J. M. (2010). A systematic review of the use of theory in the design of guideline dissemination and implementation strategies and interpretation of the results of rigorous evaluations. *Implementation science, 5*(1), 14.

Davis, R., Campbell, R., Hildon, Z., Hobbs, L., & Michie, S. (2015). Theories of behaviour and behaviour change across the social and behavioural sciences: a scoping review. *Health psychology review, 9*(3), 323-344.

DCLG. (2015). *English Indices of Deprivation, 2015. Statistical Release 3.* London.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*: Plenum Press, New York.

Deci, E. L., & Ryan, R. M. (2012). Self-determination theory in health care and its relations to motivational interviewing: a few comments. *International Journal of Behavioral Nutrition and Physical Activity, 9*(1), 24.

Demant, J., & Schierff, L. M. (2019). Five typologies of alcohol and drug prevention programmes. A qualitative review of the content of alcohol and drug prevention programmes targeting adolescents. *Drugs: Education, Prevention and Policy, 26*(1), 32-39.

Department for Education. (2015). *Measuring disadvantaged pupils' attainment gaps over time (updated). Statistical Working Paper.*

Deutsch, A. R., Chernyavskiy, P., Steinley, D., & Slutske, W. S. (2015). Measuring peer socialization for adolescent substance use: A comparison of perceived and actual friends' substance use effects. *J Stud Alcohol Drugs, 76*(2), 267-277.

Dietrich, T., Rundle-Thiele, S., Schuster, L., & Connor, J. P. (2016). A Systematic Literature Review of Alcohol Education Programmes in Middle and High School Settings (2000-2014). *Health Education, 116*(1), 50-68. doi:http://dx.doi.org/10.1108/HE-03-2014-0042

Domitrovich, C. E., Bradshaw, C. P., Poduska, J. M., Hoagwood, K., Buckley, J. A., Olin, S., . . . Ialongo, N. S. (2008). Maximizing the implementation quality of evidence-based preventive interventions in schools: A conceptual framework. *Advances in School Mental Health Promotion, 1*(3), 6-28.

Dotterer, A. M., & Lowe, K. (2011). Classroom context, school engagement, and academic achievement in early adolescence. *Journal of Youth and Adolescence, 40*(12), 1649-1660.

Dube, S. R., Miller, J. W., Brown, D. W., Giles, W. H., Felitti, V. J., Dong, M., & Anda, R. F. (2006). Adverse childhood experiences and the association with ever using alcohol and initiating alcohol use during adolescence. *Journal of Adolescent Health, 38*(4), 10. doi:10.1016/j.jadohealth.2005.06.006

Dumontheil, I. (2013). *Brain Development in Adolescence.* Paper presented at the Scottish Health Action on Alcohol Problems (SHAAP), Edinburgh.

Dyson, A., Hertzman, C., Roberts, H., Tunstill, J., & Vaghri, Z. (2009). Childhood development, education and health inequalities. *Report of task group. Submission to the Marmot Review.*

Eisenberg, M. E., Neumark-Sztainer, D., Fulkerson, J. A., & Story, M. (2008). Family meals and substance use: is there a long-term protective association? *Journal of Adolescent Health, 43*(2), 151-156.

Emmers, E., Bekkering, G. E., & Hannes, K. (2015). Prevention of alcohol and drug misuse in adolescents: An overview of systematic reviews. *Nordic Studies on Alcohol and Drugs, 32*(2), 183-198. doi:10.1515/nsad-2015-0019

Erskine, S., Maheswaran, R., Pearson, T., & Gleeson, D. (2010). Socioeconomic deprivation, urban-rural location and alcohol-related mortality in England and Wales. *BMC Public Health, 10*(1), 99.

ESRC. (2015). *ESRC Framework for Research Ethics.* Retrieved from Economic and Social Research Council: http://www.esrc.ac.uk/files/funding/guidance-for-applicants/esrc-framework-for-research-ethics-2015/

EU. (2006). *An EU strategy to support Member States in reducing alcohol related harm.* Brussels.

Evangelou, M. (2008). What makes a successful transition from primary to secondary school?

Evans, C., Connell, J., Barkham, M., Margison, F., McGrath, G., Mellor-Clark, J., & Audin, K. (2002). Towards a standardised brief outcome measure: Psychometric properties and utility of the CORE–OM. *The British Journal of Psychiatry, 180*(1), 51-60.

Evans, R., Scourfield, J., & Murphy, S. (2015). Pragmatic, formative process evaluations of complex interventions and why we need more of them. *Journal of Epidemiology and Community Health, 69*(10), 925-926.

Ewing, S. W. F., Sakhardande, A., & Blakemore, S.-J. (2014). The effect of alcohol consumption on the adolescent brain: A systematic review of MRI and fMRI studies of alcohol-using youth. *NeuroImage: Clinical, 5*, 420-437.

Faggiano, F., Allara, E., Giannotta, F., Molinar, R., Sumnall, H., Wiers, R., . . . Conrod, P. (2014). Europe Needs a Central, Transparent, and Evidence-Based Approval Process for Behavioural Prevention Interventions. *Plos Medicine, 11*(10), 6. doi:10.1371/journal.pmed.1001740

Faggiano, F., Vigna-Taglianti, F., Burkhart, G., Bohrn, K., Cuomo, L., Gregori, D., . . . Galanti, M. R. (2010). The effectiveness of a school-based substance abuse prevention program: 18-Month follow-up of the EU-Dap cluster randomized controlled trial. *Drug and Alcohol Dependence, 108*(1), 56-64. doi:https://doi.org/10.1016/j.drugalcdep.2009.11.018

Faggiano, F., Vigna-Taglianti, F., Versino, E., Zambon, A., Borraccino, A., & Lemma, P. (2005). School-based prevention for illicit drugs use. doi:10.1002/14651858.CD003020.pub2

Felitti, V. J., & Anda, R. F. (2010). The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders and sexual behavior: Implications for healthcare. *The impact of early life trauma on health and disease: The hidden epidemic*, 77-87.

Ferreira, M., Valente, G., Duarte, J., Cabral, L., & Andrade, J. (2016). INVOLVEMENT WITH ALCOHOL, ACADEMIC ACHIEVEMENT AND SELF-ESTEEM OF ADOLESCENTS ATTENDING HIGH SCHOOL. In L. G. Chova, A. L. Martinez, & I. C. Torres (Eds.), *Inted2016: 10th International Technology, Education and Development Conference* (pp. 1079-1086).

Fiese, B. H., & Jones, B. L. (2012). Food and family: A socio-ecological perspective for child development *Advances in child development and behavior* (Vol. 42, pp. 307-337): Elsevier.

Finlay, L. (2003). The reflexive journey: mapping multiple routes. *Reflexivity: A practical guide for researchers in health and social sciences*, 3-20.

Fishbein, M., & Ajzen, I. (1976). Misconceptions about the Fishbein model: Reflections on a study by Songer-Nocks. *Journal of Experimental Social Psychology, 12*(6), 579-584.

Fishbein, M., Triandis, H. C., Kanfer, F. H., Becker, M., & Middlestadt, S. E. (2000). Factors influencing behavior and behavior change.

Fisher, J. D., & Fisher, W. A. (1992). Changing AIDS-risk behavior. *Psychological bulletin, 111*(3), 455.

Fisher, J. D., & Fisher, W. A. (2002). The information-motivation-behavioral skills model. *Emerging theories in health promotion practice and research: Strategies for improving public health, 1*, 40-70.

Flynn, A., Falco, M., & Hocini, S. (2015). Independent evaluation of middle school–based drug prevention curricula: a systematic review. *JAMA Pediatrics, 169*(11), 1046-1052.

Fox, C. L., Corr, M.-L., Gadd, D., & Butler, I. (2014). Young teenagers' experiences of domestic abuse. *Journal of Youth Studies, 17*(4), 510-526.

Foxcroft DR, T. A. (2011). Universal multi-component prevention programs for alcohol

misuse in young people (Review). *Cochrane Database of Systematic Reviews*(9). doi:10.1002/14651858.CD009307

Foxcroft, D. R., & Tsertsvadze, A. (2011a). Universal family‐based prevention programs for alcohol misuse in young people. *Cochrane Database of Systematic Reviews*(9).

Foxcroft, D. R., & Tsertsvadze, A. (2011b). Universal multi‐component prevention programs for alcohol misuse in young people. *Cochrane Database of Systematic Reviews*(9).

Foxcroft, D. R., & Tsertsvadze, A. (2012). Cochrane Review: Universal school‐based prevention programs for alcohol misuse in young people. *Evidence‐Based Child Health: A Cochrane Review Journal, 7*(2), 450-575.

Foxcroft, D. R., & Tsertsvadze, A. (2012b). Universal alcohol misuse prevention programmes for children and adolescents: Cochrane systematic reviews. *Perspectives in Public Health, 132*(3), 128-134.

François, A., Lindstrom Johnson, S., Waasdorp, T. E., Parker, E. M., & Bradshaw, C. P. (2017). Associations between adolescents' perceptions of alcohol norms and alcohol behaviors: incorporating within-school variability. *American Journal of Health Education, 48*(2), 80-89.

Freire, P. (1972). Pedagogy of the Oppressed. 1968. *Trans. Myra Bergman Ramos. New York: Herder*.

French, S. D., Green, S. E., O'Connor, D. A., McKenzie, J. E., Francis, J. J., Michie, S., . . . Grimshaw, J. M. (2012). Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework. *Implementation science, 7*(1), 38.

Freshwater, D. (2005). Writing, rigour and reflexivity in nursing research. *Journal of Research in Nursing, 10*(3), 311-315.

Gadd, D., Corr, M., Fox, C., & Butler, I. (2013). From boys to men: Phase three key findings. *University of Manchester School of Law: Manchester*.

Gardner, M., & Steinberg, L. (2012). Peer Influence on Risk Taking, Risk Preference, and Risky Decision Making in Adolescence and Adulthood: An Experimental Study (vol 41, pg 625, 2005). *Developmental Psychology, 48*(2), 589-589. doi:10.1037/a0026993

Gaume, J., Bertholet, N., & Daeppen, J.-B. (2016). Readiness to change predicts drinking: findings from 12-month follow-up of alcohol use disorder outpatients. *Alcohol and alcoholism, 52*(1), 65-71.

GBD 2016 Alcohol Collaborators. (2018). Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet*. doi:10.1016/S0140-6736(18)31310-2

Gell, L., Ally, A., Buykx, P., Hope, A., & Meier, P. (2015). Alcohol's harm to others. *Institute of Alcohol Studies: London, UK*.

Giannotta, F., Vigna-Taglianti, F., Rosaria Galanti, M., Scatigna, M., & Faggiano, F. (2014). Short-term mediating factors of a school-based intervention to prevent youth substance use in Europe. *Journal of Adolescent Health, 54*(5), 565‐573. doi:10.1016/j.jadohealth.2013.10.009

Giannotta, F., & Weichold, K. (2016). *Evaluation of a life skills program to prevent adolescent alcohol use in two European countries: one-year follow-up.* Paper presented at the Child & Youth Care Forum.

Ginsburg, H. P., & Opper, S. (1988). *Piaget's theory of intellectual development*: Prentice-Hall, Inc.

Glanz, K. (2016). Social and Behavioral TheoriesBehavioral and Social Sciences Research. Retrieved from https://obssr.od.nih.gov/wp-content/uploads/2016/05/Social-and-Behavioral-Theories.pdf.

Glanz, K., Rimer, B. K., & Viswanath, K. (2015). *Health behavior: Theory, research, and practice*: John Wiley & Sons.

Golden, S. D., & Earp, J. A. L. (2012). Social ecological approaches to individuals and their contexts: twenty years of health education & behavior health promotion interventions. *Health Education & Behavior, 39*(3), 364-372.

Gottfredson, D. C., Cross, A., Wilson, D., Rorie, M., & Connell, N. (2010). An experimental evaluation of the All Stars prevention curriculum in a community after school setting. *Prevention Science, 11*(2), 142-154.

Gottfredson, N. C., & Hussong, A. M. (2011). Parental involvement protects against self-medication behaviors during the high school transition. *Addict Behav, 36*(12), 1246-1252. doi:10.1016/j.addbeh.2011.07.035

Gough, B. (2003). Deconstructing reflexivity. *Reflexivity: A practical guide for researchers in health and social sciences*, 21-35.

Greasley, P. (2007). *Quantitative data analysis using SPSS: an introduction for health & social science*: McGraw-Hill Education (UK).

Gruenewald, P. J., Remer, L. G., & LaScala, E. A. (2014). Testing a social ecological model of alcohol use: the C alifornia 50‐city study. *Addiction, 109*(5), 736-745.

Gwon, S. H., & Jeong, S. (2018). Concept analysis of impressionability among adolescents and young adults. *Nursing open, 5*(4), 601-610.

Hagger, M. S., & Chatzisarantis, N. L. (2009). Integrating the theory of planned behaviour and self‐determination theory in health behaviour: A meta‐analysis. *British journal of health psychology, 14*(2), 275-302.

Hale, D. R., Fitzgerald-Yau, N., & Viner, R. M. (2014). A systematic review of effective interventions for reducing multiple health risk behaviors in adolescence. *American journal of public health, 104*(5), e19-e41.

Hanewinkel, R., Tomczyk, S., Goecke, M., & Isensee, B. (2017). Preventing Binge Drinking in Adolescents. *Dtsch Arztebl Int, 114*(16), 280-287. doi:10.3238/arztebl.2017.0280

Hansen, W., Johnson, C., Flay, B., Graham, J., & Sobel, J. (1988). Affective and Social Influences Approaches to the Prevention of Multiple Substance Abuse among Seventh Grade Students: Results from Project SMART. *Preventative Medicine, 17*, 20.

Hansen, W. B., & Dusenbury, L. (2004). All Stars Plus: A competence and motivation enhancement approach to prevention. *Health Education, 104*(6), 371-381.

Harbec, M.-J., & Pagani, L. S. (2018). Associations between early family meal environment quality and later well-being in school-age children. *Journal of Developmental & Behavioral Pediatrics, 39*(2), 136-143.

Hardcastle, S. J., Fortier, M., Blake, N., & Hagger, M. S. (2017). Identifying content-based and relational techniques to change behaviour in motivational interviewing. *Health psychology review, 11*(1), 1-16.

Hart, C. (2018). *Doing a literature review: Releasing the research imagination*: Sage.

Harvey, S. A., & McKay, M. T. (2017). Perspectives on Adolescent Alcohol Use and Consideration of Future Consequences: Results from a Qualitative Study.

Child Care in Practice, 23(1), 104-120. doi:http://dx.doi.org/10.1080/13575279.2015.1126230

Harvey, S. A., McKay, M. T., & Sumnall, H. R. (2016). Adolescents' reflections on school-based alcohol education in the United Kingdom: education as usual compared with a structured harm reduction intervention. *Journal of Substance Use, 21*(6), 640-645. doi:10.3109/14659891.2015.1130182

Hasking, P., & Schofield, L. (2015). Examining alcohol consumption with the theory of planned behaviour: Do health and alcohol knowledge play a role? *Psychol Health Med, 20*(7), 838-845.

Hecht, M. L., Marsiglia, F. F., Elek, E., Wagstaff, D. A., Kulis, S., Dustman, P., & Miller-Day, M. (2003). Culturally grounded substance use prevention: An evaluation of the keepin'it REAL curriculum. *Prevention Science, 4*(4), 233-248.

Hecht, M. L., Shin, Y., Pettigrew, J., Miller-Day, M., & Krieger, J. L. (2018). Designed cultural adaptation and delivery quality in rural substance use prevention: An effectiveness trial for the keepin' it real curriculum. *Prevention Science*, No Pagination Specified.

Henderson, H., Nass, L., Payne, C., Phelps, A., & Ryley, A. (2012). *Smoking, drinking and drug use among young people in England in 2012*. Health and Social Care Information Centre Retrieved from https://www.hscic.gov.uk/pubs/sdd12fullreport.

HM Government. (2012). The Government's Alcohol Strategy.

Hodder, R. K., Daly, J., Freund, M., Bowman, J., Hazell, T., & Wiggers, J. (2011). A school-based resilience intervention to decrease tobacco, alcohol and marijuana use in high school students. *BMC Public Health, 11*, 722. doi:10.1186/1471-2458-11-722

Hodder, R. K., Freund, M., Bowman, J., Wolfenden, L., Campbell, E., Dray, J., . . . Wiggers, J. (2017a). Effectiveness of a pragmatic school-based universal resilience intervention in reducing tobacco, alcohol and illicit substance use in a population of adolescents: cluster-randomised controlled trial. *BMJ Open, 7*(8), e016060. doi:10.1136/bmjopen-2017-016060

Hodder, R. K., Freund, M., Bowman, J., Wolfenden, L., Campbell, E., Wye, P., . . . Wiggers, J. (2012). A cluster randomised trial of a school-based resilience intervention to decrease tobacco, alcohol and illicit drug use in secondary school students: study protocol. *BMC Public Health, 12*, 1009. doi:10.1186/1471-2458-12-1009

Hodder, R. K., Freund, M., Bowman, J., Wolfenden, L., Gillham, K., Dray, J., & Wiggers, J. (2016). Association between adolescent tobacco, alcohol and illicit drug use and individual and environmental resilience protective factors. *BMJ Open, 6*(11), e012688. doi:10.1136/bmjopen-2016-012688

Hodder, R. K., Freund, M., Wolfenden, L., Bowman, J., Nepal, S., Dray, J., . . . Wiggers, J. (2017b). Systematic review of universal school-based 'resilience'interventions targeting adolescent tobacco, alcohol or illicit substance use: a meta-analysis. *Preventive medicine, 100*, 248-268.

Holmes, J., Guo, Y., Maheswaran, R., Nicholls, J., Meier, P. S., & Brennan, A. (2014). The impact of spatial and temporal availability of alcohol on its consumption and related harms: a critical review in the context of UK licensing policies. *Drug and Alcohol Review, 33*(5), 515-525.

Howe, A. (2011). *Bridging the Transition from Primary to Secondary School*. Hoboken: Hoboken : Taylor and Francis.

Hoyle, R. H., Stephenson, M. T., Palmgreen, P., Lorch, E. P., & Donohew, R. L. (2002). Reliability and validity of a brief measure of sensation seeking. *Personality and Individual Differences, 32*(3), 401-414. doi:http://dx.doi.org/10.1016/S0191-8869(01)00032-0

HSCIC. (2016). *Statistics on Alcohol England, 2016*. London.: Health & Social Care Information Centre.

Huang, S.-F., Zheng, W.-L., Liao, J.-Y., Huang, C.-M., Lin, T.-Y., & Guo, J.-L. (2018). The effectiveness of a theory-based drama intervention in preventing illegal drug use among students aged 14–15 years in Taiwan. *Health Education Journal*, 0017896918768647.

Huber, M. J., Workman, J., Ford, J. A., Moore, D., & Mayer, T. (2009). Evaluating the prevention through alternative learning styles program. *J Drug Educ, 39*(3), 239-259.

Hughes, B., & Wilkins, C. (2019). Greater Manchester Drug and Alcohol Strategy.

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., . . . Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet Public Health, 2*(8), e356-e366.

Humphrey, N., Lendrum, A., Ashworth, E., Frearson, K., Buck, R., & Kerr, K. (2016). Implementation and process evaluation (IPE) for interventions in education settings: A synthesis of the literature.

IMD. (2007). Indices of Multiple Deprivation. . https://www.gov.uk/government/collections/english-indices-of-deprivation

IMD. (2015). Indices of Multiple Deprivation.

Ingersoll, G. (1992). Psychological and social development. *Textbook of adolescent medicine*, 91-98.

Jensen, C. D., Cushing, C. C., Aylward, B. S., Craig, J. T., Sorell, D. M., & Steele, R. G. (2011). Effectiveness of motivational interviewing interventions for adolescent substance use behavior change: a meta-analytic review. *Journal of Consulting and Clinical Psychology, 79*(4), 433.

Jiloha, R. (2017). Prevention, early intervention, and harm reduction of substance use in adolescents. *Indian journal of psychiatry, 59*(1), 111.

Johnson, M. B. (2012). Experimental test of social norms theory in a real-world drinking environment. *J Stud Alcohol Drugs, 73*(5), 851-859.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher, 33*(7), 14-26.

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of mixed methods research, 1*(2), 112-133.

Jones, L., Bates, G., McCoy, E., & Bellis, M. A. (2015). Relationship between alcohol-attributable disease and socioeconomic status, and the role of alcohol consumption in this relationship: a systematic review and meta-analysis. *BMC Public Health, 15*(1), 1.

Jones, L., & Sumnall, H. (2016). Understanding the relationship between poverty and alcohol misuse. *Liverpool: Liverpool John Moores University*, 9-17.

Kaplan, S. (2014). Motivational Interviewing with children and young people: an overview. *Motivational Interviewing: Further applications with children and young people*, 49-58.

Karki, S., Pietilä, A.-M., Länsimies-Antikainen, H., Varjoranta, P., Pirskanen, M., & Laukkanen, E. (2012). The effects of interventions to prevent substance use

among adolescents: A systematic review. *Journal of Child & Adolescent Substance Abuse, 21*(5), 383-413.

Katikireddi, S. V., Whitley, E., Lewsey, J., Gray, L., & Leyland, A. H. (2017). Socioeconomic status as an effect modifier of alcohol consumption and harm: analysis of linked cohort data. *The Lancet Public Health, 2*(6), e267-e276.

Kendall, J. (2003). Designing a research project: randomised controlled trials and their principles. *Emergency medicine journal: EMJ, 20*(2), 164.

Kindle, S. J. (2013). *School-Based Drug Prevention Program: Quantitative Assessment of Life Skills Training Elementary School Program.* Retrieved from https://manchester.idm.oclc.org/login?url=https://search.proquest.com/docview/1697494394?accountid=12253

http://man-fe.hosted.exlibrisgroup.com/openurl/44MAN/44MAN_services_page?genre=dissertations+%26+theses&atitle=&author=Kindle%2C+Silverlene+J.&volume=&issue=&spage=&date=2013&rft.btitle=&rft.jtitle=&issn=&isbn=9781303657788&sid=ERIC_ED556543 ERIC database.

Kittles, M., & Atkinson, C. (2009). The usefulness of motivational interviewing as a consultation and assessment tool for working with young people. *Pastoral Care in Education, 27*(3), 241-254.

Klimas, J., Anderson, R., Bourke, M., Bury, G., Field, C. A., Kaner, E., . . . Murphy, B. (2013). Psychosocial interventions for alcohol use among problem drug users: protocol for a feasibility study in primary care. *JMIR research protocols, 2*(2).

Kok, G., Gottlieb, N. H., Peters, G.-J. Y., Mullen, P. D., Parcel, G. S., Ruiter, R. A., . . . Bartholomew, L. K. (2016). A taxonomy of behaviour change methods: an Intervention Mapping approach. *Health psychology review, 10*(3), 297-312.

Kovach Clark, H., Ringwalt, C. L., Hanley, S., & Shamblen, S. R. (2010). Project ALERT's effects on adolescents' prodrug beliefs: a replication and extension study. *Health Educ Behav, 37*(3), 357-376. doi:10.1177/1090198109353283

Kriegbaum, K., Villarreal, B., Wu, V. C., & Heckhausen, J. (2016). Parents still matter: Patterns of shared agency with parents predict college students' academic motivation and achievement. *Motivation Science, 2*(2), 97.

Laing, K., & Todd, L. (2015). *Theory-based Methodology: Using theories of change in educational development, research and evaluation.*: Research Centre for Learning and Teaching, Newcastle University.

Lanza, S. T., & Rhoades, B. L. (2013). Latent class analysis: an alternative perspective on subgroup analysis in prevention and treatment. *Prevention Science, 14*(2), 157-168.

LAPE. (2016). *Local Alcohol Profiles for England.*

LAPE. (2018). Local Alcohol Profiles for England. https://fingertips.phe.org.uk/profile/local-alcohol-profiles

Larson, R. (2008). Family mealtimes as a developmental context. *Social Policy Report, 22*(4), 12.

Lee, B. K., Patall, E. A., Cawthon, S. W., & Steingut, R. R. (2015). The effect of drama-based pedagogy on preK–16 outcomes: A meta-analysis of research from 1985 to 2012. *Review of Educational Research, 85*(1), 3-49.

Lee, N. K., Cameron, J., Battams, S., & Roche, A. (2016). What works in school-based alcohol education: a systematic review. *Health Education Journal, 75*(7), 780-798.

Lemstra, M., Bennett, N., Nannapaneni, U., Neudorf, C., Warren, L., Kershaw, T., & Scott, C. (2010). A systematic review of school-based marijuana and alcohol prevention programs targeting adolescents aged 10-15. *Addiction Research & Theory, 18*(1), 84-96. doi:10.3109/16066350802673224

Lo, J. C. (2017). Adolescents Developing Civic Identities: Sociocultural Perspectives on Simulations and Role-Play in a Civic Classroom. *Theory & Research in Social Education, 45*(2), 189-217. doi:10.1080/00933104.2016.1220877

MacArthur, G. J., Harrison, S., Caldwell, D. M., Hickman, M., & Campbell, R. (2016). Peer‐led interventions to prevent tobacco, alcohol and/or drug use among young people aged 11–21 years: a systematic review and meta‐analysis. *Addiction, 111*(3), 391-407.

Mackenzie, E., McMaugh, A., & O'Sullivan, K. (2012). Perceptions of primary to secondary school transitions: Challenge or threat? *Issues in Educational Research, 22*(3), 298-314.

Magill, M., Janssen, T., Mastroleo, N., Hoadley, A., Walthers, J., Barnett, N., & Colby, S. (2019). Motivational interviewing technical process and moderated relational process with underage young adult heavy drinkers. *Psychology of Addictive Behaviors, 33*(2), 128.

Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *AISHE-J: The All Ireland Journal of Teaching and Learning in Higher Education, 9*(3).

Maimaris, W., & McCambridge, J. (2014). Age of first drinking and adult alcohol problems: systematic review of prospective cohort studies. *Journal of Epidemiol Community Health, 68*, 268-274. doi:10.1136/jech-2013-203402

Marmot, M. (2015). *The health gap: the challenge of an unequal world*: Bloomsbury Publishing.

Marmot, M., Allen, J., Goldblatt, P., Boyce, T., McNeish, D., Grady, M., & Geddes, I. (2010). Fair society, healthy lives: strategic review of health inequalities in England post 2010.

Marmot, M. G. (2013). Review of social determinants and the health divide in the WHO European Region: final report.

Martínez, E. K. H., Olalde, M. G. C., & Aguirre, A. Á. (2018). Interventions to reduce alcohol consumption in adolescents: a systematic review. *Enfermería Global*(49), 540.

Mason, M., Mennis, J., Russell, M., Moore, M., & Brown, A. (2019). Adolescent depression and substance use: the protective role of prosocial peer behavior. *Journal of Abnormal Child Psychology, 47*(6), 1065-1074.

Maughan, B., Collishaw, S., & Stringaris, A. (2013). Depression in childhood and adolescence. *Journal of the Canadian Academy of Child and Adolescent Psychiatry = Journal de l'Academie canadienne de psychiatrie de l'enfant et de l'adolescent, 22*(1), 35-40.

McBride, N., Farringdon, F., & Midford, R. (2002). Implementing a school drug education programme: reflections on fidelity. *International Journal of Health Promotion and Education, 40*(2), 40-50.

McBride, N., McKay, M., & Sumnall, H. (2013). SHAHRP: School Health and Alcohol Harm Reduction Project - Developments in Australia and the UK. *Education & Health, 31*(4), 79-83.

McBride, N., Midford, R., Farringdon, F., & Phillips, M. (2000). Early results from a school alcohol harm minimization study: the School Health and Alcohol Harm Reduction Project. *Addiction, 95*(7), 1021-1042.

McDonald, R. M., & Towberman, D. B. (1993). Psychological correlates of adolescent drug involvement. *Adolescence, 28*(112), 925.

McKay, M., Agus, A., Cole, J., Doherty, P., Foxcroft, D., Harvey, S., . . . Sumnall, H. (2018). Steps Towards Alcohol Misuse Prevention Programme (STAMPP): a school-based and community-based cluster randomised controlled trial. *BMJ Open, 8*(3), e019722. doi:10.1136/bmjopen-2017-019722

McKay, M., Sumnall, H., McBride, N., & Harvey, S. (2014). The differential impact of a classroom-based, alcohol harm reduction intervention, on adolescents with different alcohol use experiences: a multi-level growth modelling analysis. *J Adolesc, 37*(7), 1057-1067. doi:10.1016/j.adolescence.2014.07.014

McKay, M. T., Cole, J. C., & Sumnall, H. (2011). Teenage thinking on teenage drinking: 15- to 16-year olds' experiences of alcohol in Northern Ireland. *Drugs-Education Prevention and Policy, 18*(5), 323-332. doi:10.3109/09687637.2010.507559

McKay, M. T., Konowalczyk, S., Andretta, J. R., & Cole, J. C. (2017). The direct and indirect effect of loneliness on the development of adolescent alcohol use in the United Kingdom. *Addictive behaviors reports, 6*, 65-70.

McKay, M. T., McBride, N. T., Sumnall, H. R., & Cole, J. C. (2012). Reducing the harm from adolescent alcohol consumption: results from an adapted version of SHAHRP in Northern Ireland. *Journal of Substance Use, 17*(2), 98-121. doi:10.3109/14659891.2011.615884

McNamara, E., & Atkinson, C. (2010). Engaging the reluctant with MI. Counselling Children and Young People.

Mfidi, F. H., Thupayagale-Tshweneagae, G., & Akpor, O. A. (2018). The TEAM model for mental health promotion among school-going adolescents. *Journal of Child & Adolescent Mental Health, 30*(2), 99-110.

Michie, S., Atkins, L., & West, R. (2014). The behaviour change wheel: A guide to designing interventions. *London: Silverback Publishing. www.behaviourchangewheel.com*, 1003-1010.

Michie, S., Johnston, M., Abraham, C., Lawton, R., Parker, D., & Walker, A. (2005). Making psychological theory useful for implementing evidence based practice: a consensus approach. *BMJ Quality & Safety, 14*(1), 26-33.

Michie, S., Johnston, M., Francis, J., Hardeman, W., & Eccles, M. (2008). From theory to intervention: mapping theoretically derived behavioural determinants to behaviour change techniques. *Applied psychology, 57*(4), 660-680.

Michie, S., Richardson, M., Johnston, M., Abraham, C., Francis, J., Hardeman, W., . . . Wood, C. E. (2013). The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: building an international consensus for the reporting of behavior change interventions. *Annals of Behavioral Medicine, 46*(1), 81-95.

Michie, S., Van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science, 6*(1), 42.

Michie, S., Whittington, C., Hamoudi, Z., Zarnani, F., Tober, G., & West, R. (2012). Identification of behaviour change techniques to reduce excessive alcohol consumption. *Addiction, 107*(8), 1431-1440.

Michie, S., Wood, C. E., Johnston, M., Abraham, C., Francis, J., & Hardeman, W. (2015). Behaviour change techniques: the development and evaluation of a taxonomic method for reporting and describing behaviour change interventions (a suite of five studies involving consensus methods,

randomised controlled trials and analysis of qualitative data). *Health technology assessment, 19*(99).

Midford, R. (2010). Drug prevention programmes for young people: where have we been and where should we be going? *Addiction, 105*(10), 1688-1695.

Midford, R., Cahill, H., Lester, L., Ramsden, R., Foxcroft, D., & Venning, L. (2018). Alcohol prevention for school students: Results from a 1-year follow up of a cluster-randomised controlled trial of harm minimisation school drug education. *Drugs: Education, Prevention & Policy, 25*(1), 88-96. doi:10.1080/09687637.2017.1290788

Midford, R., Cahill, H., Ramsden, R., Davenport, G., Venning, L., Lester, L., . . . Michelle, P. (2012). Alcohol prevention: what can be expected of a harm reduction focused school drug education programme? (Vol. 19, pp. 102-110). United Kingdom.

Midford, R., Mitchell, J., Lester, L., Cahill, H., Foxcroft, D., Ramsden, R., . . . Pose, M. (2014). Preventing alcohol harm: Early results from a cluster randomised, controlled trial in Victoria, Australia of comprehensive harm minimisation school drug education. *International Journal of Drug Policy, 25*(1), 142-150. doi:http://dx.doi.org/10.1016/j.drugpo.2013.05.012

Midford, R., Ramsden, R., Lester, L., Cahill, H., Mitchell, J., Foxcroft, D. R., & Venning, L. (2014). Alcohol Prevention and School Students: findings From an Australian 2-Year Trial of Integrated Harm Minimization School Drug Education. *J Drug Educ, 44*(3‐4), 71‐94. doi:10.1177/0047237915579886

Miller, D. P., Waldfogel, J., & Han, W. J. (2012). Family meals and child academic and behavioral outcomes. *Child Development, 83*(6), 2104-2120.

Miller, J. W., Naimi, T. S., Brewer, R. D., & Jones, S. E. (2007). Binge drinking and associated health risk behaviors among high school students. *Pediatrics, 119*(1), 76-85.

Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change*: Guilford press.

Monahan, K. C., Oesterle, S., & Hawkins, J. D. (2010). Predictors and consequences of school connectedness: The case for prevention. *The Prevention Researcher, 17*(3), 3-7.

Moore, G. F., Audrey, S., Barker, M., Bond, L., Bonell, C., Hardeman, W., . . . Wight, D. (2015). Process evaluation of complex interventions: Medical Research Council guidance. *bmj, 350*, h1258.

Moore, G. F., Rothwell, H., & Segrott, J. (2010). An exploratory study of the relationship between parental attitudes and behaviour and young people's consumption of alcohol. *Substance abuse treatment, prevention, and policy, 5*(1), 6.

Moss, C. (2014). Motivational Interviewing and Self-Esteem. In E. MCNamara (Ed.), *Motivational Interviewing: Children and Young People II: Issues and Further Applications*. Merseyside: Positive Behaviour Management.

MRC, U. (2008). Developing and evaluating complex interventions: new guidance. *London: Medical Research Council*.

Nakashian, M. (2010). *A New D.A.R.E. Curriculum Gets Mixed Reviews: Communications Activities for Improving and Evaluating the DARE School-Based Substance Abuse Prevention Curriculum. Program Results Report*. Retrieved from https://manchester.idm.oclc.org/login?url=https://search.proquest.com/docview/1347461430?accountid=12253

http://man-fe.hosted.exlibrisgroup.com/openurl/44MAN/44MAN_services_page?genre=report&atitle=&author=Nakashian%2C+Mary&volume=&issue=&spage=1&date=2010&rft.btitle=A+New+D.A.R.E.+Curriculum+Gets+Mixed+Reviews%3A+Communications+Activities+for+Improving+and+Evaluating+the+DARE+School-Based+Substance+Abuse+Prevention+Curriculum.+Program+Results+Report&rft.jtitle=&issn=&isbn=&sid=ERIC_ED540729

Nargiso, J. E., Friend, K., & Florin, P. (2013). *An Examination of Peer, Family, and Community Context Risk Factors for Alcohol Use and Alcohol Use Intentions in Early Adolescents*. Retrieved from https://manchester.idm.oclc.org/login?url=https://search.proquest.com/docview/1651840966?accountid=12253

http://man-fe.hosted.exlibrisgroup.com/openurl/44MAN/44MAN_services_page?genre=article&atitle=An+Examination+of+Peer%2C+Family%2C+and+Community+Context+Risk+Factors+for+Alcohol+Use+and+Alcohol+Use+Intentions+in+Early+Adolescents&author=Nargiso%2C+Jessica+E.%3BFriend%2C+Karen%3BFlorin%2C+Paul&volume=33&issue=7&spage=973&date=2013&rft.btitle=&rft.jtitle=Journal+of+Early+Adolescence&issn=0272-4316&isbn=&sid=ProQ%3Aeric_EJ1019412

Natvig, H., & Aaro, L. E. (2014). Effects of induced compliance on alcohol use: Evaluation of a school-based intervention among Norwegian 8th graders. *Nordic Psychology, 66*(1), 2-19. doi:10.1080/19012276.2014.885763

Neelands, J. (2009). Acting together: ensemble as a democratic process in art and life. *RiDE: The Journal of Applied Theatre and Performance, 14*(2), 173-189.

Neelands, J., Belfiore, E., Firth, C., Hart, N., Perrin, L., Brock, S., . . . Woddis, J. (2015). Enriching Britain: Culture, creativity and growth: The 2015 report by the Warwick Commission on the Future of Cultural Value. *Coventry: University of Warwick*.

Neighbors, C., LaBrie, J. W., Hummer, J. F., Lewis, M. A., Lee, C. M., Desai, S., . . . Larimer, M. E. (2010). Group identification as a moderator of the relationship between perceived social norms and alcohol consumption. *Psychology of Addictive Behaviors, 24*(3), 522.

Ng, J. Y., Ntoumanis, N., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Duda, J. L., & Williams, G. C. (2012). Self-determination theory applied to health contexts: A meta-analysis. *Perspectives on Psychological Science, 7*(4), 325-340.

NHS Digital. (2017). Smoking, Drinking and Drug Use Among Young People in England.

NHS Digital. (2018a). Smoking, Drinking and Drug Use among Young People in England 2018.

NHS Digital. (2018b). Smoking, Drinking and Drug Use Among Young People in England: Appendices.

NHS Digital. (2018c). Statistics on Alcohol, England 2018.

NICE. (2010). *Alcohol-use disorders: prevention*. National Institute for Health and Care Excellence.

NICE. (2019). *Alcohol interventions in secondary and further education.* . National Institute for Health and Care Excellence.

Nigg, C. R., Allegrante, J. P., & Ory, M. (2002). Theory-comparison and multiple-behavior research: common themes advancing health behavior research. *Health Education Research, 17*(5), 670-679.

Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation science, 10*(1), 53.

Nixon, K., & McClain, J. A. (2010). Adolescence as a critical window for developing an alcohol use disorder: current findings in neuroscience. *Current opinion in psychiatry, 23*(3), 227.

Nutbeam, D., Harris, E., & Wise, W. (2010). *Theory in a nutshell: a practical guide to health promotion theories*: McGraw-Hill.

O'Cathain, A., Croot, L., Duncan, E., Rousseau, N., Sworn, K., Turner, K. M., . . . Hoddinott, P. (2019). Guidance on how to develop complex interventions to improve health and healthcare. *Bmj Open, 9*(8), e029954.

O'Reilly, A., Peiper, N., O'Keeffe, L., Illback, R., & Clayton, R. (2016). Performance of the CORE‐10 and YP‐CORE measures in a sample of youth engaging with a community mental health service. *International journal of methods in psychiatric research, 25*(4), 324-332.

OECD. (2017). *"Alcohol consumption among adults", in Health at a Glance 2017: OECD Indicators, OECD Publishing, Paris.*

Ogden, J. (2016). Celebrating variability and a call to limit systematisation: the example of the Behaviour Change Technique Taxonomy and the Behaviour Change Wheel. *Health psychology review, 10*(3), 245-250.

Olumide, A. O., Robinson, A. C., Levy, P. A., Mashimbye, L., Brahmbhatt, H., Lian, Q., . . . Blum, R. W. (2014). Predictors of substance use among vulnerable adolescents in five cities: findings from the well-being of adolescents in vulnerable environments study. *J Adolesc Health, 55*(6 Suppl), S39-47. doi:10.1016/j.jadohealth.2014.08.024

Onrust, S. A., Otten, R., Lammers, J., & Smit, F. (2016). School-based programmes to reduce and prevent substance use in different age groups: What works for whom? Systematic review and meta-regression analysis. *Clin Psychol Rev, 44*, 45-59. doi:10.1016/j.cpr.2015.11.002

ONS. (2017a). Adult drinking habits in Great Britain: 2005 to 2016: Office for National Statistics Newport.

ONS. (2017b). Alcohol-specific deaths in the UK: Registered in 2017.

ONS. (2018). Office for National Statistics. The nature of violent crime in England and Wales: year ending March 2018.

ONS. (2019). Office for National Statistics. Avoidable mortality in the UK: 2017. .

Patrick, H., & Williams, G. C. (2012). Self-determination theory: its application to health behavior and complementarity with motivational interviewing. *International Journal of behavioral nutrition and physical Activity, 9*(1), 18.

Peacock, A., Leung, J., Larney, S., Colledge, S., Hickman, M., Rehm, J., . . . Griffiths, P. (2018). Global statistics on alcohol, tobacco and illicit drug use: 2017 status report. *Addiction, 113*(10), 1905-1926.

Pearson, M., Chilton, R., Wyatt, K., Abraham, C., Ford, T., Woods, H. B., & Anderson, R. (2015). Implementing health promotion programmes in schools: a realist systematic review of research and experience in the United Kingdom. *Implementation science, 10*(1), 149.

Peters, L. W., Kok, G., Ten Dam, G. T., Buijs, G. J., & Paulussen, T. G. (2009a). Effective elements of school health promotion across behavioral domains: a

systematic review of reviews. *BMC Public Health, 9*(182), 14. doi:10.1186/1471-2458-9-182

Peters, L. W., Kok, G., Ten Dam, G. T., Buijs, G. J., & Paulussen, T. G. (2009b). Effective elements of school health promotion across behavioral domains: a systematic review of reviews. *BMC Public Health, 9*(1), 182.

PHE. (2015). *Improving young people's health and wellbeing: A framework for public health.* Public Health England.

PHE. (2016a). The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies An evidence review.

PHE. (2016b). Working Years of Life Lost due to Alcohol: Ad hoc statistical realease.

Phillips-Howard, P. A., Bellis, M. A., Briant, L. B., Jones, H., Downing, J., Kelly, I. E., . . . Cook, P. A. (2010). Wellbeing, alcohol use and sexual activity in young teenagers: findings from a cross-sectional survey in school children in North West England. *Substance abuse treatment, prevention, and policy, 5*(1), 27.

Phillips-Howard, P. A., Madden, H. C., Mason, L., Kelly, I., Briant, L., Bellis, M. A., & Cook, P. A. The WiSHing Project.

Pomeroy, E., & Steiker, L. (2012). Prevention and Intervention on the Care Continuum. *Social Work, 57*(2), 4. doi:10.1093/sw/sws028

Potard, C., Kubiszewski, V., Camus, G., Courtois, R., & Gaymard, S. (2018). Driving under the influence of alcohol and perceived invulnerability among young adults: An extension of the theory of planned behavior. *Transportation research part F: traffic psychology and behaviour, 55*, 38-46.

Pöttgen, S., Samkange-Zeeb, F., Brand, T., Steenbock, B., & Pischke, C. (2016). Effectiveness of School-based Interventions to Prevent and/or Reduce Substance Use among Primary and Secondary School Pupils: A Review of Reviews.

Poulin, L. E., Button, M. L., Westra, H. A., Constantino, M. J., & Antony, M. M. (2019). The predictive capacity of self-reported motivation vs. early observed motivational language in cognitive behavioural therapy for generalized anxiety disorder. *Cognitive behaviour therapy, 48*(5), 369-384.

Prestwich, A., Conner, M., & Kenworthy, J. (2017). *Health behavior change: Theories, methods and interventions*: Routledge.

Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change in smoking: toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 5*, 390-395.

Prochaska, J. O., & DiClemente, C. C. (2005). The transtheoretical approach. *Handbook of psychotherapy integration, 2*, 147-171.

Quek, L. H., White, A., Low, C., Brown, J., Dalton, N., Dow, D., & Connor, J. P. (2012). Good choices, great future: An applied theatre prevention program to reduce alcohol-related risky behaviours during Schoolies. *Drug and Alcohol Review, 31*(7), 897-902. doi:10.1111/j.1465-3362.2012.00453.x

Rees, G., Bradshaw, J., Goswami, H., & Keung, A. (2010). Understanding children's well-being: A national survey of young people's well-being: The Children's Society.

Rehm, J., Mathers, C., Popova, S., Thavorncharoensap, M., Teerawattananon, Y., & Patra, J. (2009). Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet, 373*(9682), 2223-2233.

Reich, C. M., Howard Sharp, K. M., & Berman, J. S. (2015). A motivational interviewing intervention for the classroom. *Teaching of Psychology, 42*(4), 339-344.

Revans, R. (1981). The nature of action learning. *Omega, 9*(1), 9-24.

Ringwalt, C., Ennett, S. T., & Holt, K. D. (1991). An outcome evaluation of Project DARE (Drug Abuse Resistance Education). *Health Education Research. Theory and Practice., 6*(3), 11.

Ringwalt, C. L., Clark, H. K., Hanley, S., Shamblen, S. R., & Flewelling, R. L. (2009). Project ALERT: a cluster randomized trial. *Arch Pediatr Adolesc Med, 163*(7), 625-632. doi:10.1001/archpediatrics.2009.88

Ringwalt, C. L., Clark, H. K., Hanley, S., Shamblen, S. R., & Flewelling, R. L. (2010). The effects of project ALERT one year past curriculum completion. *Prevention Science, 11*(2), 172-184.

Rolfe, G. (2006). Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal of advanced nursing, 53*(3), 304-310.

Rollnick, S., Heather, N., & Bell, A. (1992). Negotiating behaviour change in medical settings: the development of brief motivational interviewing. *Journal of Mental Health, 1*(1), 25-37.

Rollnick, S., Kaplan, S. G., & Rutschman, R. (2016). *Motivational interviewing in schools: Conversations to improve behavior and learning*: Guilford Publications.

Sadler, K., Vizard, T., Ford, T., Marchesell, F., Pearce, N., Mandalia, D., . . . Goodman, A. (2018). Mental health of children and young people in England, 2017.

Sajnani, N., Jewers-Dailley, K., Brillante, A., Puglisi, J., Johnson, D. R., Sajnani, N., & Johnson, D. R. (2014 (b)). Animating learning by integrating and validating experience. *Trauma informed drama therapy: Transforming clinics, classrooms, and communities*, 206-240.

Sajnani, N., & Johnson, D. R. (2014 (a)). *Trauma-informed Drama Therapy: Transforming Clinics, Classrooms, and Communities*. Springfield, Illinois: Charles C. Thomas, Publisher, Ltd.

Sanchez, Z. M., Valente, J. Y., Sanudo, A., Pereira, A. P. D., Cruz, J. I., Schneider, D., & Andreoni, S. (2017). The# Tamojunto Drug prevention program in Brazilian schools: a randomized controlled trial. *Prevention Science, 18*(7), 772-782.

Sanchez, Z. M., Valente, J. Y., Sanudo, A., Pereira, A. P. D., Schneider, D. R., & Andreoni, S. (2018). Effectiveness evaluation of the school-based drug prevention program# Tamojunto in Brazil: 21-month follow-up of a randomized controlled trial. *International Journal of Drug Policy, 60*, 10-17.

Sassi, F. (2015). Tackling harmful alcohol use: economics and public health policy. *France: OECD Publishing*.

Saunders, R. P., Evans, M. H., & Joshi, P. (2005). Developing a process-evaluation plan for assessing health promotion program implementation: a how-to guide. *Health Promotion Practice, 6*(2), 134-147.

Schilling, E. A., Aseltine, R. H., Glanovsky, J. L., James, A., & Jacobs, D. (2009). Adolescent alcohol use, suicidal ideation, and suicide attempts. *Journal of Adolescent Health, 44*(4), 335-341.

Schmutte, P. S., & Ryff, C. D. (1997). Personality and well-being: reexamining methods and meanings. *Journal of Personality and Social Psychology, 73*(3), 549.

Schneider, J. J., Crumpler, T. P., & Rogers, T. (2006). Process drama and multiple literacies. *Portsmouth, NH*.

Schunk, D. H., & Pajares, F. (2009). Self-efficacy theory. *Handbook of motivation at school*, 35-53.

Segrott, J., Rothwell, H., Hewitt, G., Playle, R., Huang, C., Murphy, S., . . . Reed, H. (2015). Preventing alcohol misuse in young people: an exploratory cluster randomised controlled trial of the Kids, Adults Together (KAT) programme. *Public Health Research, 3*(15), 1-188.

Senn, B., Kirsch, M., Sanz, C., Karlou, C., Tulus, K., De Leeuw, J., & Ringner, A. (2013). Developing and evaluating complex interventions: the new Medical Research Council guidance. *Studies, 59*, 587-592.

SHAAP. (2013). *Alcohol and the Developing Adolescent Brain: Evidence Review*. Retrieved from

Shaikh, M. A., Lloyd, J., Acquah, E., Celedonia, K. L., & M, L. W. (2016). Suicide attempts and behavioral correlates among a nationally representative sample of school-attending adolescents in the Republic of Malawi. *BMC Public Health, 16*(1), 843. doi:10.1186/s12889-016-3509-8

Simons-Morton, B., McLeroy, K., & Wendel, M. (2011). *Behavior theory in health promotion practice and research*: Jones & Bartlett Publishers.

Sloboda, Z., Stephens, R. C., Stephens, P. C., Grey, S. F., Teasdale, B., Hawthorne, R. D., . . . Marquette, J. F. (2009). The Adolescent Substance Abuse Prevention Study: A randomized field trial of a universal substance abuse prevention program. *Drug and Alcohol Dependence, 102*(1-3), 1-10.

Smagorinsky, P. (2011). Vygotsky's stage theory: The psychology of art and the actor under the direction of perezhivanie. *Mind, Culture, and Activity, 18*(4), 319-341.

Smith, A. M. (2017). Utilizing the Social Ecological Model to Address Drinking Behaviors Among College Students Participating in NCAA Division I Non-revenue Generating Sports.

Smith, M. K. (2014). The impact of austerity on schools and children's education and well-being. *The encyclopedia of informal education.*

Snape, L., & Atkinson, C. (2015). Exploring and challenging pupil disaffection: an evaluation of a motivational interviewing-based intervention delivered by paraprofessionals. *Pastoral Care in Education*(ahead-of-print), 1-14.

Sørensen, H. J., Manzardo, A. M., Knop, J., Penick, E. C., Madarasz, W., Nickel, E. J., . . . Mortensen, E. L. (2011). The contribution of parental alcohol use disorders and other psychiatric illness to the risk of alcohol use disorders in the offspring. *Alcoholism: Clinical and Experimental Research, 35*(7), 1315-1320.

Spaeth, M., Weichold, K., Silbereisen, R. K., & Wiesner, M. (2010). Examining the differential effectiveness of a life skills program (IPSY) on alcohol use trajectories in early adolescence. *Journal of Consulting and Clinical Psychology, 78*(3), 334.

Spoth, R., Greenberg, M., & Turrisi, R. (2008). Preventive interventions addressing underage drinking: State of the evidence and steps toward public health impact. *Pediatrics, 121*(Supplement 4), S311-S336.

Spoth, R., Greenberg, M., & Turrisi, R. (2009). Overview of preventive interventions addressing underage drinking: State of the evidence and steps toward public health impact. *Alcohol Research & Health, 32*(1), 53.

Squeglia, L. M., Brammer, W. A., Ray, L. A., & Lee, S. S. (2016). Attention Deficit/Hyperactivity Disorder (ADHD) Symptoms Predict Alcohol Expectancy Development. *Journal of Child & Adolescent Substance Abuse, 25*(2), 169-179. doi:10.1080/1067828x.2014.969856

Squeglia, L. M., Jacobus, J., & Tapert, S. F. (2014). The effect of alcohol use on human adolescent brain structures and systems *Handbook of clinical neurology* (Vol. 125, pp. 501-510): Elsevier.

Stang, J., & Story, M. (2005). Adolescent growth and development. *Guidelines for adolescent nutrition services, 1*(6).

Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in cognitive sciences, 9*(2), 69-74.

Steinberg, L. (2007). Risk taking in adolescence new perspectives from brain and behavioral science. *Current Directions in Psychological Science, 16*(2), 55-59.

Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. *Developmental Review, 28*(1), 78-106. doi:http://dx.doi.org/10.1016/j.dr.2007.08.002

Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*: Houghton Mifflin Harcourt.

Steinberg, L., Albert, D., Cauffman, E., Banich, M., Graham, S., & Woolard, J. (2008). Age differences in sensation seeking and impulsivity as indexed by behavior and self-report: evidence for a dual systems model. *Developmental Psychology, 44*(6), 1764.

Stephenson, M. T., Hoyle, R. H., Palmgreen, P., & Slater, M. D. (2003). Brief measures of sensation seeking for screening and large-scale surveys. *Drug Alcohol Depend, 72*(3), 279-286. doi:http://dx.doi.org/10.1016/j.drugalcdep.2003.08.003

Stephenson, M. T., Velez, L. F., Chalela, P., Ramirez, A., & Hoyle, R. H. (2007). The reliability and validity of the Brief Sensation Seeking Scale (BSSS‐8) with young adult Latino workers: Implications for tobacco and alcohol disparity research. *Addiction, 102*, 79-91.

Stewart, D. G., Siebert, E. C., Arlt, V. K., Moise-Campbell, C., & Lehinger, E. (2016). READY or not: Findings from a school-based MI intervention for adolescent substance use. *Journal of Substance Abuse Treatment, 71*, 23-29.

Stigler, M. H., Neusel, E., & Perry, C. L. (2011). School-based programs to prevent and reduce alcohol use among youth. *Alcohol Research & Health, 34*(2), 157.

Stock, C., Vallentin-Holbech, L., & Rasmussen, B. M. (2016). The GOOD life: study protocol for a social norms intervention to reduce alcohol and other drug use among Danish adolescents. *BMC Public Health, 15*, 704. doi:10.1186/s12889-016-3333-1

Stockings, E., Hall, W. D., Lynskey, M., Morley, K. I., Reavley, N., Strang, J., . . . Degenhardt, L. (2016). Prevention, early intervention, harm reduction, and treatment of substance use in young people. *The Lancet Psychiatry, 3*(3), 280-296.

Stolle, M., Sack, P.-M., & Thomasius, R. (2009). Binge drinking in childhood and adolescence: epidemiology, consequences, and interventions. *Deutsches Ärzteblatt International, 106*(19), 323.

Stratford, N., & Roth, W. (1999). *The 1998 Youth Lifestyles Survey: Technical Report*: National Centre for Social Research.

Strøm, H. K., Adolfsen, F., Fossum, S., Kaiser, S., & Martinussen, M. (2014). Effectiveness of school-based preventive interventions on adolescent alcohol

use: a meta-analysis of randomized controlled trials. *Substance abuse treatment, prevention, and policy, 9*(1), 48.

Strom, H. K., Adolfsen, F., Handegard, B. H., Natvig, H., Eisemann, M., Martinussen, M., & Koposov, R. (2015). Preventing alcohol use with a universal school-based intervention: results from an effectiveness study. *BMC Public Health, 15.* doi:10.1186/s12889-015-1704-7

Strøm, H. K., Adolfsen, F., Handegård, B. H., Natvig, H., Eisemann, M., Martinussen, M., & Koposov, R. (2015). Preventing alcohol use with a universal school-based intervention: results from an effectiveness study. *BMC Public Health, 15*(1), 337.

Sumnall, H., Agus, A., Cole, J., Doherty, P., Foxcroft, D., Harvey, S., . . . Percy, A. (2017). Steps Towards Alcohol Misuse Prevention Programme (STAMPP): a school-and community-based cluster randomised controlled trial.

Sussman, S., Sun, P., Rohrbach, L. A., & Spruijt-Metz, D. (2012). One-year outcomes of a drug abuse prevention program for older teens and emerging adults: Evaluating a motivational interviewing booster component. *Health Psychology, 31*(4), 476.

Swahn, M. H., & Bossarte, R. M. (2007). Gender, early alcohol use, and suicide ideation and attempts: findings from the 2005 youth risk behavior survey. *Journal of Adolescent Health, 41*(2), 175-181.

Swahn, M. H., Bossarte, R. M., Ashby, J. S., & Meyers, J. (2010). Pre-teen alcohol use initiation and suicide attempts among middle and high school students: Findings from the 2006 Georgia Student Health Survey. *Addictive Behaviors, 35*(5), 452-458.

Tahan, H. A., & Sminkey, P. V. (2012). Motivational interviewing: Building rapport with clients to encourage desirable behavioral and lifestyle changes. *Professional case management, 17*(4), 164-172.

Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior.

Teddlie, C., & Tashakkori, A. (2003). Major issues and controveries inthe use of mixed methods in the social and behvioral sciences. *Handbook of mixed methods in social & behavioral research*, 3-50.

Teesson, M., Newton, N. C., & Barrett, E. L. (2012). Australian school-based prevention programs for alcohol and other drugs: A systematic review. *Drug and Alcohol Review, 31*(6), 731-736. doi:10.1111/j.1465-3362.2012.00420.x

Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., . . . Goldsmith, C. H. (2010). A tutorial on pilot studies: the what, why and how. *BMC medical research methodology, 10*(1), 1.

The Children's Society. (2018). *The good childhood report 2018*. Retrieved from London.:

The Childrens Society. (2018). The Good Childhool Report 2018.

Thrash, C. R., & Warner, T. D. (2019). Behavioral misperceptions, attitudinal discrepancies, and adolescent alcohol and marijuana use. *Journal of Substance Use, 24*(4), 394-399.

Tomczyk, S., Hanewinkel, R., & Isensee, B. (2015). 'Klar bleiben': a school-based alcohol prevention programme for German adolescents-study protocol for a cluster randomised controlled trial. *BMJ Open, 5*(11), e010141. doi:10.1136/bmjopen-2015-010141

Torgerson, C. J., & Torgerson, D. J. (2001). The Need for Randomised Controlled Trials in Educational Research. *British Journal of Educational Studies, 49*(3), 316-328. doi:10.1111/1467-8527.t01-1-00178

Towberman, D. B., & McDonald, R. M. (1993). Dimensions of adolescent drug-avoidant attitude. *Journal of Substance Abuse Treatment, 10*(1), 45-52.

Trucco, E. M., Colder, C. R., & Wieczorek, W. F. (2011). Vulnerability to peer influence: A moderated mediation study of early adolescent alcohol use initiation. *Addictive Behaviors, 36*(7), 729-736.

Twigg, E., Barkham, M., Bewick, B. M., Mulhern, B., Connell, J., & Cooper, M. (2009). The Young Person's CORE: Development of a brief outcome measure for young people. *Counselling and Psychotherapy Research, 9*(3), 160-168.

Twigg, E., Cooper, M., Evans, C., Freire, E., Mellor‑Clark, J., McInnes, B., & Barkham, M. (2016). Acceptability, reliability, referential distributions and sensitivity to change in the Young Person's Clinical Outcomes in Routine Evaluation (YP‑CORE) outcome measure: replication and refinement. *Child and Adolescent Mental Health, 21*(2), 115-123.

UN. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. United Nations.

UNICEF. (2007). *Child Poverty in Perspective: An Overview of Child Wellbeing in Rich Countries*. Florence, Italy.

UNICEF. (2011). *The state of the world's children 2011: Adolescence an age of opportunity*: Unicef.

UNICEF. (2013). *Child well-being in rich countries: A comparative overview*. Florence, Italy.

University of Essex, I. f. S., & Economic Research, N. S. R., Kantar Public. (2017). Understanding Society: Waves 1-7, 2009-2016 and Harmonised BHPS: Waves 1-18, 1991-2009 [data collection]: UK Data Service.

Valente, J. Y., Cogo-Moreira, H., Swardfager, W., & Sanchez, Z. M. (2018). A latent transition analysis of a cluster randomized controlled trial for drug use prevention. *Journal of Consulting and Clinical Psychology, 86*(8), 657.

Vallentin-Holbech, L., Rasmussen, B. M., & Stock, C. (2018). Effects of the social norms intervention The GOOD Life on norm perceptions, binge drinking and alcohol-related harms: a cluster-randomised controlled trial. *Preventive medicine reports, 12*, 304‑311. doi:10.1016/j.pmedr.2018.10.019

van Rens, M., Haelermans, C., Groot, W., & van den Brink, H. M. (2018). Facilitating a successful transition to secondary school:(how) does it work? A systematic literature review. *Adolescent Research Review, 3*(1), 43-56.

van Teijlingen, E., & Hundley, V. (2002). The importance of pilot studies. *Nursing standard (Royal College of Nursing (Great Britain) : 1987), 16*(40), 33-36.

Viner, R. (2013). Life stage: Adolescence *In Annual Report of the Chief Medical Officer 2012. Our Children Deserve Better: Prevention Pays.*: Department of Health.

Viner, R., & Booy, R. (2005). ABC of adolescence - Epidemiology of health and illness. *British Medical Journal, 330*(7488), 411-414. doi:10.1136/bmj.330.7488.411

Viner, R. M., Ozer, E. M., Denny, S., Marmot, M., Resnick, M., Fatusi, A., & Currie, C. (2012). Adolescence and the social determinants of health. *The Lancet, 379*(9826), 1641-1652.

Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children, 23*(3), 34-41.

Wagner, C. C., & Ingersoll, K. S. (2012). *Motivational interviewing in groups*: Guilford Press.

Wagner, E. F., Brown, S. A., Monti, P. M., Myers, M. G., & Waldron, H. B. (1999). Innovations in adolescent substance abuse intervention. *Alcoholism: Clinical and Experimental Research, 23*(2), 236-249.

Wang, M.-T., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American educational research journal, 47*(3), 633-662.

Wang, Y., Chen, M., & Lee, J. H. (2019). Adolescents' Social Norms across Family, Peer, and School Settings: Linking Social Norm Profiles to Adolescent Risky Health Behaviors. *Journal of Youth and Adolescence, 48*(5), 935-948.

Waters, S. K., Cross, D. S., & Runions, K. (2009). Social and ecological structures supporting adolescent connectedness to school: A theoretical model. *Journal of School Health, 79*(11), 516-524.

Weichold, K. (2014). Translation of etiology into evidence‐based prevention: The life skills program IPSY. *New Directions for Student Leadership, 2014*(141), 83-94.

Weichold, K., & Blumenthal, A. (2016). Long-Term Effects of the Life Skills Program IPSY on Substance Use: Results of a 4.5-Year Longitudinal Study. *Prev Sci, 17*(1), 13-23. doi:10.1007/s11121-015-0576-5

Weichold, K., Brambosch, A., & Silbereisen, R. K. (2012). Do Girls Profit More? Gender-Specific Effectiveness of a Life Skills Program Against Alcohol Consumption in Early Adolescence. *Journal of Early Adolescence, 32*(2), 200-225. doi:10.1177/0272431610384489

Weichold, K., & Silbereisen, R. K. (2012). Peers and Teachers as Facilitators of the Life Skills Program IPSY: Results from a Pilot Study. *Sucht, 58*(4), 247-258.

Weichold, K., Tomasik, M. J., Silbereisen, R. K., & Spaeth, M. (2016). The Effectiveness of the Life Skills Program IPSY for the Prevention of Adolescent Tobacco Use: The Mediating Role of Yielding to Peer Pressure. *The Journal of Early Adolescence, 36*(7), 881-908.

Weichold, K., Wiesner, M. F., & Silbereisen, R. K. (2014). Childhood predictors and mid-adolescent correlates of developmental trajectories of alcohol use among male and female youth. *J Youth Adolesc, 43*(5), 698-716. doi:10.1007/s10964-013-0014-6

Welch. (2013). *The effects of alcohol on the developing adolescent brain.* Paper presented at the Scottish Health Action on Alcohol Problems (SHAAP), Edinburgh.

Welch, Carson, & Lawrie. (2013). Brain Structure in Adolescents and Young Adults with Alcohol Problems: Systematic Review of Imaging Studies. *Alcohol and alcoholism, 48*(4), 433-444. doi:10.1093/alcalc/agt037

Wells, K. E., Morgan, G., Worrell, F. C., Sumnall, H., & McKay, M. T. (2018). The influence of time attitudes on alcohol-related attitudes, behaviors and subjective life expectancy in early adolescence: A longitudinal examination using mover–stayer latent transition analysis. *International Journal of Behavioral Development, 42*(1), 93-105.

Wenzel, V., Weichold, K., & Silbereisen, R. K. (2009). The life skills program IPSY: Positive influences on school bonding and prevention of substance misuse. *Journal of Adolescence, 32*(6), 1391-1401.

Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*: Harvard University Press.

WHO. (2010). *Global strategy to reduce the harmful use of alcohol.* Geneva: World Health Organization.

WHO. (2014). *Global status report on alcohol and health-2014*: World Health Organization.

WHO. (2015). Adolescent Health.   Retrieved from http://www.who.int/topics/adolescent_health/en/

WHO. (2018). *Global status report on alcohol and health - 2018*. Retrieved from

Willoughby, T., & Fortner, A. (2015). At-Risk Depressive Symptoms and Alcohol Use Trajectories in Adolescence: A Person-Centred Analysis of Co-Occurrence. *Journal of Youth and Adolescence, 44*(4), 793-805. doi:10.1007/s10964-014-0106-y

Woods, K., McArdle, P., & Tabassum, N. (2014). Evaluating Movitational Interviewing as Evidence-Based Practice using Systematic Literature Review. In E. MCNamara (Ed.), *Motivational Interviewing: Children and Young People II: Issues and Further Applications*. Merseyside: Positive Behaviour Management.

Workman, J. W., Huber, M. J., Ford, J. A., Mayer, T., Moore, D., Wilson, J. F., & Kinzeler, N. (2012). THE PALS PREVENTION PROGRAM AND ITS LONG-TERM IMPACT ON STUDENT INTENTIONS TO USE ALCOHOL, TOBACCO, AND MARIJUANA. *J Drug Educ, 42*(4), 469-485. doi:10.2190/DE.42.4.f

Zarobe, L., & Bungay, H. (2017). The role of arts activities in developing resilience and mental wellbeing in children and young people a rapid review of the literature. *Perspectives in Public Health, 137*(6), 337-347.

Zoffmann, V., Hörnsten, Å., Storbækken, S., Graue, M., Rasmussen, B., Wahl, A., & Kirkevold, M. (2016). Translating person-centered care into practice: a comparative analysis of motivational interviewing, illness-integration support, and guided self-determination. *Patient Education and Counseling, 99*(3), 400-407.

Zuckerman, M. (1994). *Behavioral expressions and biosocial bases of sensation seeking*: Cambridge university press.

Zuckerman, M., Eysenck, S., & Eysenck, H. J. (1978). Sensation seeking in England and America: Cross-cultural, age, and sex comparisons. *Journal of Consulting and Clinical Psychology, 46*, 139 - 149.

Zullig, K. J., & Valois, R. F. (2016). Perceptions of Harm from Substance Use and Social Self-Efficacy among Early Adolescents. *J Drug Educ, 46*(3-4), 96-112. doi:http://dx.doi.org/10.1177/0047237917735043

Appendix I: Search Strategy Development

PsychINFO (last searched 01/03/2019)

Search Strategy No.1   **Articles**
1.   alcohol [including Related terms]   14272
2.   substance [including Related terms]   22783
3.   substance abuse [including Related terms]   7550
4.   alcohol prevention [including Related terms]   9339
5.   substance misuse [including Related terms]   6586
6.   alcohol abuse [including Related terms]   18220
7.   (#1 or #2 or #3 or #4 or #5 or #6) [All Fields]   4588576
8.   #7 [Abstract]   228258
9.   Intervention [including Related terms]   63436
10. Prevention [including Related terms]   12774
11. School-based intervention [including Related terms]   17484
12. Early intervention [including Related terms]   10851
13. (#9 or #10 or #11 or #12) [All Fields]   2419535
14. #13 [Abstract]   72710
15. Universal [including Related terms]   26015
16. School [including Related terms]   16230
17. Classroom [including Related terms]   6367
18. (#15 or #16 or #17) [All Fields]   1282708
19. #18 [Abstract]   55792
20. Adolescent [including Related terms]   100766
21. Teenage [including Related terms]   107868
22. Young people [including Related terms]   4973
23. (#20 or #21 or #22) [All Fields]   1376904
24. #23 [Abstract]   37497
25. (#24 and #19 and #14 and #8) [Abstract]   235
26. Limit 25 to yr="2009-Current"   181

This first iteration did not yield the anticipated articles, most of which had a medical/pharmacological focus. It was decided that the terms "substance", "substance abuse", "substance misuse" and "alcohol abuse" were likely to be associated with the problem of existing illicit drug use and addiction. This research takes a preventative approach in targeting young adolescents prior to or in the very early stages of consuming alcohol and hence, such terms are unlikely to be used in the types of studies sought for this literature review.

Search Strategy No.2
1.   alcohol [including Related terms]   14272
2.   alcohol prevention [including Related terms]   9339
3.   (#1 or #2) [Abstract]   1381358
4.   Intervention [including Related terms]   63436
5.   Prevention [including Related terms]   12774
6.   Universal intervention [including Related terms]   26015
7.   Early intervention [including Related terms]   10851

8. (#4 or #5 or #6 or #7) [All Fields]   3299976
9. #8 [Abstract]   23984
10. School [including Related terms]   16230
11. Classroom [including Related terms]   6367
12. (#10 or #11) [Abstract]   106499
13. Adolescent [including Related terms]   100766
14. Teenage [including Related terms]   107868
15. Young people [including Related terms]   4973
16. (#13 or #14 or #15) [Abstract]   37497
17. (#3 and #9 and #12 and #6) [Abstract]   38
18. Limit 17 to yr="2009-Current"   31

The second iteration of results also failed to produce the desired results, the articles covered a range of topics such as "Occurrence of pregnancy and pregnancy outcomes during isotretinoin therapy" to "Comorbidity in multiple sclerosis is associated with diagnostic delays and increased mortality". In conducting the initial searches, the terms were exploded to include all Related Terms, making the search too broad. Hence, a more simplistic model was used in the next iteration.

Search Strategy No.3
1. Alcohol [including Related terms]   14272
2. Intervention [including Related terms]   63436
3. Adolescent [including Related terms]   100766
4. School [including Related terms]   16230
5. (#1 and #2 and #3 and #4) [Abstract]   42931
6. Limit 5 to yr="2009-Current"   22494
7. #1 [Title] and #2 [Abstract] and #3 [Abstract] and #4 [Abstract]   908
8. Limit 7 to yr="2009-Current"   557
9. Limit 8 to (human and adolescence <13 to 17 years>)   139

Again, the results did not provide the anticipated response. Exploded terms proved to be too broad, for example terms related to "alcohol" includes "ethanol" and therefore captures all the medical studies. The exploded terms for "intervention" includes "therapy" and "treatment" which are not terms that would necessarily be associated with school-based alcohol intervention. It was therefore decided to search using more carefully selected terms, ie "intervention" and "prevention". The exploded terms associated with "adolescent", however, were judged to be relevant, for example "teenage", "teen", "adolescence" etc. so remained in the search strategy. The terms associated with "school" were also retained in the search as they were judged to be relevant, for example, "education" or "educational".

Search Strategy No.4
1. Alcohol [No Related Terms]   40125
2. Intervention [No Related Terms]   14470
3. Prevention [No Related Terms]   8398
4. (#2 or #3) [Abstract]   1006453
5. Adolescent [including Related Terms]   100766
6. School [including Related Terms]   16230
7. #1 [title] and #4 [Abstract] and #5 [Abstract] and #6 [Abstract]   426
8. Limit 7 to yr"2009-Current"   285

Once again, the search did not produce the desired results.

Search Strategy No.5
1. Alcohol and Intervention and Adolescent and School 243
2. Limit 1 to yr="2009-Current" 176

This very simple search resulted in 176 articles, which were broadly judged to meet the search criteria. The articles were then screened according to title and abstract which resulted in 77 items. The references, including abstract, were imported into EndNote for further processing and analysis. The articles that were not selected included prevalence studies, studies that explored contextual factors associated with alcohol consumption and risk taking etc. Whilst these references were not of relevance to this particular review, they were retained for information and have contributed to other sections of this thesis.

The search strategies varied according to the database. The strategy used for the Cochrane Library is shown as follows:

Cochrane Library - Search Strategy 1

	Search terms
#1	Substance
#2	Substance-abuse
#3	Substance abuse
#4	Alcohol
#5	Alcohol-abuse
#6	Alcohol abuse
#7	#1 or #2 or #3 or #4 or #5 or #6
#8	Intervention
#9	Prevention
#10	#8 or #9
#11	Young people
#12	Teenager
#13	Adolescent
#14	Youth
#15	Child
#16	#11 or #12 or #13 or #14 or #15
#17	Education
#18	Secondary School
#19	School
#20	High school
#21	#17 or #18 or #19 or #20
#22	#7 and #10 and #16 and #21
#23	#22 (filtered by years 2009-2015)
#24	#23 (filtered by Reviews only)

Appendix II: Summary of Literature Review Evidence

Table II i Summary of Systematic Reviews/Reviews of Reviews

	Reference	Journal	Description	Findings
1	(Demant & Schierff, 2019)	Drugs: Education Prevention and Policy	Systematic literature review from Western countries on the topic of school-based interventions and prevention initiatives targeting young people aged 12–20. A review study grouping the qualitatively different content components of the various approaches Peer-reviewed articles between January 2010 and December 2014 **Web of Science, PubMed**, Sociological Abstracts, and **PsycINFO** 33 articles included in review	Five categories of intervention and prevention programmes identified: 1. Information-based or testing-based primary prevention approaches 2. Primary prevention approaches incorporating skill-training components 3. Universal or primary prevention approaches that include family components 4. Targeted approaches incorporating skill-training components 5. Approaches incorporating digital features Only four studies that employed any form of targeting or profiling of the subjects prior to the delivery of the prevention intervention or initiative were identified. The skewness towards primary prevention skill-training approaches should be addressed, given the diverse consumption patterns among adolescents
2	(Martínez et al., 2018)	Enfermería Global	Overview of interventions to reduce alcohol consumption amongst adolescents. EBSCO, **PubMed, Science Direct**, Scielo Redalyc and Google academic 2006-2016 61 articles were included that met the inclusion criteria (universal school-based interventions analysed alongside other approaches, not possible to separate within the results)	Interventions in adolescents regarding alcohol consumption are complex, due to the stage in which the study subject is. The psychosocial aspect is of the utmost importance for individuals, such as peer acceptance and the pressure of the immediate social group, (imitation and curiosity) being common reasons why adolescents begin to consume alcohol. Intervention timing is crucial.

	Reference	Journal	Description	Findings
3	(Jiloha, 2017)	Indian Journal of Psychiatry	Systematic review on the effectiveness of prevention, early intervention, and harm reduction including treatment of substance abuse among adolescents for tobacco, alcohol and illicit drugs.	School-based prevention and skill-training interventions are effective tools to reduce substance use among adolescents. Social norms and intervention to reduce substance use in adolescents do not have strong evidence of effectiveness.
4	(Hodder et al., 2017b)	Preventative Medicine	Systematic review to assess effectiveness of universal school-based "resilience" interventions (addressing both individual (e.g. self-esteem) and environmental (e.g. school connectedness) protective factors of resilience) **MEDLINE, Cochrane** Central Register of Controlled Trials (CENTRAL), **EMBASE**, CINAHL, **PsycINFO**, and **ERIC**. 1994-2005 5-18 year olds	Overall effectiveness for illicit substance use but not for tobacco or alcohol use. Alternative methods required for tobacco and alcohol use.

5	(Lee et al., 2016)	Health Education Journal	Systematic review of school-based programmes that targeted alcohol within a school setting and included at least one alcohol behaviour or knowledge change outcome
			PubMed, PsycINFO, Web of Science, CINAHL, ERIC and the Cochrane Database of Systematic Reviews.
			
			1998-2013
			
			40 programmes (70 studies)
				Three programmes included in the review had sufficient positive outcomes to be recommended for implementation:
				    Climate Schools (computerised programme)
				    Project ALERT
				    All Stars
				and four showed good outcomes in some areas:
				    Life Skills Programme (IPSY)
				    SHAHRP
				    Unplugged-EU
				Little or no evidence:
				    DARE
				Inconclusive evidence for 30 programmes
				Evidence of negative effect:

	Reference	Journal	Description	Findings
				Peer Acceleration Social Network (Project TND) Take Charge of Your Life (TCYL) Effective components: • Evidence based • Use of theory • Information provision • Social acceptability/social norms • Resistance skills • Interactive learning • Peer interaction • Teacher training • Consistent with whole school approach
6	(Onrust et al., 2016)	Clinical Psychology Review	Systematic review with the hypothesis that effective intervention programmes need to be aligned to developmental stages of the target group Meta-analysis of 288 programmes (154 relating to alcohol) according to age range: Grade 1-5 = 22 (age 4-9) Grade 6&7 = 56 (age 9-11) Grade 8&9 = 23 (age 11-13) Grade 10-12 = 6 (age 14-16)	Specific aspects of school-based programmes are effective in specific developmental stages – effectiveness relates to psychological and cognitive needs and capabilities Alcohol use predicted by: **Grade 1-5:** self-control training, problem-solving or decision-making skills training, cognitive behavioural techniques and behavioural management by parent or teacher **Grade 6-7:** self-control training, problem-solving or decision-making skills training, focus on healthy alternatives, cognitive behavioural techniques, behavioural management by parent or teacher and parental involvement. Adverse effects from refusal skills training and peer education **Grade 8-9:** Adverse effects from refusal skills training and making a public commitment not to use substances.

	Reference	Journal	Description	Findings
				Grade 10-12: self-control training, problem-solving or decision-making skills training, health education on the interference of substance use with personal goals, refusal skills training, social influence approach, cognitive behavioural techniques and parental involvement.
7	(MacArthur et al., 2016)	Addiction	Systematic review to investigate and quantify the effect of peer-led interventions that sought to prevent tobacco, alcohol and/or drug use among young people aged 11–21 years up to 2015 **Medline, Embase, PsycINFO** (all via OvidSP), CINAHL (via EBSCOhost), **ERIC** (via ProQuest), the Australian Education Index**, British Education Index** and the **Cochrane Library**	Peer-led interventions may be effective in preventing tobacco, alcohol (P=0.034) and possibly cannabis use among adolescents. (based on relatively limited evidence – small number of low quality studies) No clear pattern of factors associated with impact
8	(Pöttgen et al., 2016)	Das Gesundheitswesen	Review of reviews – systematic review providing overview of the effectiveness of school-based interventions on prevention and/or reduction of substance use among children and adolescents aged 5–19 years	Capacity-promoting interventions, eg, those focusing on strengthening self-confidence and peer resistance, show promising evidence of effectiveness. Multi-component and multi-level interventions are more suitable for the prevention of alcohol and cannabis consumption. The effectiveness of knowledge-based interventions is limited
9	(Stockings et al., 2016)	The Lancet, Psychiatry	Systematic review of reviews with evidence on the effectiveness of prevention, early intervention, harm reduction, and treatment of problem use in young people for tobacco, alcohol, and illicit drugs.	Interpretation of the available evidence for school-based prevention is affected by methodological issues.

	Reference	Journal	Description	Findings
				Interventions that incorporate skills training are more likely to be effective than information provision—which is ineffective. Social norms and brief interventions to reduce substance use in young people do not have strong evidence of effectiveness. Generic prevention programmes seem to have greater effectiveness than substance-specific programmes. Interventions that focus on general psychosocial development and develop life skills might be effective in reducing alcohol use but not in reducing alcohol-related harm. Interventions that target only knowledge and awareness of illicit-drug harms do not change drug use in young people
10	(Das et al., 2016)	Journal of Adolescent Health	Overview of systematic reviews to evaluate the effectiveness of interventions to prevent substance abuse among adolescents. **Cochrane Library** and **PubMed**	Among interventions for alcohol use, school-based alcohol prevention interventions have been associated with reduced frequency of drinking, while family-based interventions have a small but persistent effect on alcohol misuse among adolescents. Lack of consistent data rigorously evaluating the sustainability and long-term impact of substance use programs targeting adolescents
11	(Dietrich, Rundle-Thiele, Schuster, & Connor, 2016)	Health Education	Systematic literature review of alcohol education programmes targeting adolescents in middle and high school settings. The review sought to understand the extent to which the programmes adhered to social marketing benchmark criteria including behaviour change and use of theory (of particular relevance in this research).	The majority of alcohol education programmes were developed on the basis of theory and achieved short- and medium-term behavioural effects

	Reference	Journal	Description	Findings
			2000-2013 Proquest Education Journals, Sociological Abstracts, ERIC, PsycINFO, PubMed, A+ Education, CINAHL, Medline, Business Source Complete, Drug Database, ScienceDirect, Emerald Full text, Web of Science	
12	(Flynn et al., 2015)	JAMA Pediatrics	Systematic review to: identify independently evaluated RCTs of universal, middle school–based drug abuse prevention curricula; extract data on study quality and substance use outcomes; and assess evidence of program effectiveness **PsycInfo, Educational Resources Information Center**, Science Citation Index, Social Science Citation Index, Cumulative Index to Nursing and Allied Health Literature, **MEDLINE, EMBASE**, and the **Cochrane** Database	The results demonstrate the dearth of independent research that appropriately evaluates the effectiveness of universal, middle school–based drug prevention curricula. Independent evaluations show little evidence of effectiveness for widely used programs. New methods may be necessary to approach school-based adolescent drug prevention.
13	(Emmers et al., 2015)	Nordic Studies on Alcohol and Drugs	An overview of recent systematic reviews, summarising the evidence on the effectiveness of prevention strategies which target adolescents misusing alcohol and/or drugs **MEDLINE**, **EMBASE**, CINAHL, **Psych Info**, **ERIC**, DARE, PROSPERO and the **Cochrane library**	Twenty-one systematic reviews were identified. Ten of these were rated as of high quality. There was little overlap between reviews in terms of the target group, intervention, setting and outcome measures. The components or mechanisms of the prevention programmes were poorly described. Ten reviews evaluated school-based prevention. The effects of these prevention programmes are promising, while effects of community-based, family-based and multifaceted programmes were less convincing. Small but consistent positive effect of school-based prevention programmes, but it is less clear what the "active ingredient" is.

	Reference	Journal	Description	Findings
14	(Agabio et al., 2015)	Clinical Practice & Epidemiology in Mental Health	Systematic search of meta-analyses and/or randomized controlled trials (RCTs) on interventions school-based prevention programs aimed at preventing alcohol consumption or changing the attitudes to consume alcohol **PubMed/Medline** 2010-2014	Some evidence of effectiveness Unplugged appears to be the prevention project with the best evidence of effectiveness in European studies
15	(Strøm et al., 2014)	Substance Abuse Treatment, Prevention and Policy	To assess the effectiveness of universal school-based prevention programs on alcohol use among adolescents by using meta-analytic techniques **PubMed, PsychINFO, EMBASE, Web of Science** 1990 - 2014	The effects of school-based preventive alcohol interventions on adolescent alcohol use were small but positive among studies reporting the continuous measures, whereas no effect was found among studies reporting the categorical outcomes. No evidence to suggest which age group is best to target. Recommends that interventions should be focused on specific ingredients that lead to preventing alcohol use among adolescents.
16	(Hale et al., 2014)	American Public Health Association	Systematic review of primary and secondary interventions that prevented or reduced two or more adolescent health risk behaviours (tobacco use, alcohol use, illicit drug use, risky sexual behaviour, aggressive acts).	Effects were small, in line with findings for other universal prevention programs. In some studies, effects for more than one health risk behaviour only emerged at long-term follow-up. Integrated prevention programs are feasible and effective and may be more efficient than discrete prevention strategies.
17	(Foxcroft & Tsertsvadze, 2011a, 2011b, 2012, 2012b)	Perspectives in Public Health	Three Cochrane systematic reviews to examine the effectiveness of (1) school-based, (2) family-based and (3) multi-component universal alcohol misuse prevention programmes in children and adolescents.	Certain generic psychosocial and life skills school-based programmes were effective in reducing alcohol use in youth. Most family-based programmes were effective. There was insufficient evidence to conclude that multiple interventions provided additional benefit over single interventions.

	Reference	Journal	Description	Findings
			MEDLINE, EMBASE, PsycINFO, Project CORK and the **Cochrane** Register of Controlled Trials	
18	(Karki et al., 2012)	Journal of Child and Adolescent Substance Abuse	Systematic review to describe and evaluate effects of interventions used for preventing or reducing substance use among adolescents under 18 years of age. CINAHL and **PubMed**	Results showed family-based interventions and combined interventions have significant outcomes for substance use among adolescents. School-based interventions were effective in providing knowledge about substance use, which eventually reduced the substance use.
19	(Teesson, Newton, & Barrett, 2012)	Drug and Alcohol Review	Given the emphasis on early intervention and prevention in Australia, this review reports the type and efficacy of Australian school-based prevention programs for alcohol and other drugs. up to 2011 **Cochrane, PsychInfo** and **PubMed**	Eight trials of seven intervention programs were identified. The programs targeted alcohol, cannabis and tobacco and most were based on social learning principles. All were universal. Five of the seven intervention programs achieved reductions in alcohol, cannabis and tobacco use at follow up.
20	(Stigler et al., 2011)	Alcohol Research Current Reviews (ARCR)	Summary based on several reviews focusing on alcohol prevention among underage youth conducted by: Foxcroft and colleagues (2002), Komro and Toomey (2002), and Spoth and colleagues (2008, 2009). The previous reviews addressed interventions in a variety of contexts (e.g. families, schools, and communities), this article highlights key findings specific to school-based interventions.	To be most effective, interventions should be theory driven, address social norms around alcohol use, build personal and social skills helping students resist pressure to use alcohol, involve interactive teaching approaches, use peer leaders, integrate other segments of the population into the program, be delivered over several sessions and years, provide training and support to facilitators, and be culturally and developmentally appropriate. Additional research is needed to develop interventions for elementary-school and high school students and for special populations
21	(Lemstra et al., 2010)	Addiction Research and Theory	A systematic review of school-based marijuana and alcohol prevention programs targeting adolescents aged 10–15. The review examined knowledge versus comprehensive type prevention programs to better understand the	The most effective primary prevention programs for reducing marijuana and alcohol use among adolescents aged 10–15 years in the long-term were comprehensive programs that included anti-drug information combined with refusal

	Reference	Journal	Description	Findings
			inconsistency of results in school-based marijuana and alcohol prevention programs found in the literature 1980-2007 **PubMed, PsycINFO, CINAHL, ERIC**, and **EMBASE**	skills, self-management skills and social-skills training.
22	(Peters et al., 2009a)	BMC Public Health	Systematic review of reviews of the effectiveness of school-based health promotion Programs - conducted for the domains of substance abuse, sexual behaviour, and nutrition. **PubMed, PsychINFO, ERIC**	Five elements with evidence from strong reviews were found to be similar for all three domains: use of theory; addressing social influences, especially social norms; addressing cognitive-behavioural skills; training of facilitators; and multiple components
23	(Spoth et al., 2008, 2009)	Alcohol Research and Health	Overview of Preventive Interventions Addressing Underage Drinking. Systematic review using stringent criteria for the types of studies and interventions included, as well as for the evaluation and classification of the studies. Out of more than 400 studies screened, only 127 could be evaluated for efficacy and only 41 showed some evidence of effects The review included interventions targeting the three age-groups: less than 10 years, 10 to 15 years, and 16 to more than 20 years.	Not all developmental stages, population subgroups, and intervention domains are adequately covered by existing interventions. Evidence and reporting standards also warrant further improvements, as do intervention research models and strategies to enhance dissemination and quality of implementation, and sustainability of evidence-based interventions in real-world settings. Many studies still have significant limitations and gaps, there has been limited study of what factors are responsible for observed effects and what factors moderate the effect of the intervention. There also needs to be greater consistency in and a broader approach to evaluation criteria.

Table II ii Summary of Primary Reviews

	Intervention and key references	Country	Rationale or Theory	Description	Findings
1	TRIAD (Beckman et al., 2017)	Sweden	Not informed by research Some components corroborated by research; Interactive learning strategies Strengthening moral and social competencies Partly based on resistance training – not supported by research	quasi-experimental evaluation of the alcohol use part of the Triad intervention 11 Swedish intervention schools (285 pupils) and 3 control schools (159 pupils) school year 6, ages 12–13 2011	RESULTS: The main results show no effect on the likelihood of drinking alcohol or drinking to intoxication. CONCLUSIONS: The lack of positive effects highlights the need for policy-makers and public health officials to carefully consider and evaluate prevention programs in order to ensure that they are worthwhile from school, health, and societal perspectives. Poor implementation may be one factor that explains lack of evidence.
2	The GOOD Life (Stock, Vallentin-Holbech, & Rasmussen, 2016; Vallentin-Holbech, Rasmussen, & Stock, 2018)	Denmark	school-based social norms intervention	Cluster randomised control trial of school-based social norms intervention designed to reduce misperceptions, heavy alcohol use and alcohol-related harms among adolescents 38 schools 1,355 participants aged 13–17years (641 intervention, 714 control) 2015-16	The intervention had a positive effect on norm perceptions and alcohol-related harms. The intervention effect differed by baseline status of alcohol use.
3	ALERT (Kovach Clark et al., 2010; Ringwalt, Clark, Hanley, Shamblen, & Flewelling, 2009; Ringwalt, Clark, Hanley, Shamblen, & Flewelling, 2010)	USA 11 states	Health belief model Self-efficacy theory	A manualized classroom-based substance use prevention curriculum aiming to motivate students against using drugs and give them skills to develop effective resistance behaviours	No evidence to suggest that Project ALERT had a positive impact on any alcohol, cigarette, or marijuana prodrug beliefs.

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				Cluster randomised control trial

11 states enrolled
2 successive cohorts 2004 - 2008
34 schools, 5,883 participants
Intervention delivered to 6th graders (aged 11/12)
Booster session to 7th graders (aged 12/13) | Positive effects reported by Lee et al, 2016 in systematic review |
| 4 | PALS (Prevention through Alternative Learning Styles)
(Huber, Workman, Ford, Moore, & Mayer, 2009; Workman, Huber, Ford, Mayer, Moore, Wilson et al., 2012) | USA | | PALS aims to promote knowledge of the harmful effects of alcohol, tobacco and other drugs (ATOD); to develop refusal skills; to reduce intention to engage with ATOD.

Five topics presented across ten lessons.

Quasi-experimental study

Year 1: 2005-2006
1,170 6th-8th grade students (11-14 years) from 6 schools participated in the study; 192 in the comparison group and 978 in the PALS group.

Year 2: 2006-2007
704 6th-8th grade students (11-14 years) from 5 schools; all took the PALS programme. | Positive impact - increased student knowledge about ATOD and decreased intentions to use ATOD.

No data yet on actual consumption. |
| 5 | Life skills training (LST)
(Botvin & Griffin, 2015; Kindle, 2013) | USA | social learning theory and problem behaviour theory | The LST program consists of three major components: (a) a personal competence component that | Concluded that it does not matter which of two approaches is used when the goal is to influence student |

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				teaches self-management skills, (b) a social competence component that teaches an array of social skills, and (c) a drug resistance component that teaches health-related content, resistance skills, and pro-health attitudes and norms evidence for the effectiveness of LST has been documented by 32 outcome studies (prior to 2009) Kindle (2013) compared whether the Life Skills Training-Elementary School (LST-ES) or the Standard Elementary Guidance curriculum was most effective in addressing Alcohol and Tobacco Prevention.	attitudes. It does matter which approach is used to affect students' knowledge, because LST-ES was demonstrably more effective than the standard elementary guidance curriculum.
6	IPSY (Information + Psychosocial Competence = Protection) Life Skills (Giannotta & Weichold, 2016; Spaeth, Weichold, Silbereisen, & Wiesner, 2010; Weichold, 2014; Weichold & Blumenthal, 2016; Weichold, Brambosch, & Silbereisen, 2012; Weichold & Silbereisen, 2012; Weichold, Tomasik, Silbereisen, & Spaeth, 2016; Weichold, Wiesner, & Silbereisen, 2014; Wenzel, Weichold, & Silbereisen, 2009)	Germany		IPSY based on the Life Skills Model proposed by the WHO (1997) IPSY is a comprehensive program that combines training in intrapersonal and interpersonal Life Skills (e.g., self-awareness, coping strategies, assertiveness, or communication skills) with instruction on substance-specific skills (e.g., resistance to peers offering substances) and the promotion of school bonding. Implemented and evaluated over 3 years as longitudinal quasi-	IPSY had a significant positive effect on adolescents' frequency of alcohol use during the time of program implementation, which faded during the subsequent 2 years. Such diminishing intervention effects are also evident in other studies on the long-term effectiveness of substance use prevention programs and raises two questions: (1) Why does only the intervention effect on alcohol but not on tobacco and illicit substance use fade?; and (2) Does this result indicate that the program is only able to prevent frequent and rather problematic

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				experimental design with an intervention and comparison group (4 measurement points; N = 1,657 German students, age 10 at T1). Intervention in grade 5, booster sessions in grades 6 and 7.	alcohol use early in adolescence, but not later on? Concludes that it may be necessary to develop and implement further booster sessions in later adolescence to enhance youths' resistance skills when alcohol use becomes highly normative among peers.
7	No specific name (Natvig & Aaro, 2014)	Norway	Social influence model (following Botvin et al) Use of role play	Aim to correct the 'normative beliefs' fallacy' – perceptions of how often most adolescents drink alcohol 8th grade students produce videos for 7th graders designed to convince them not to start drinking 978 8th grade students participated from 60 classes from 32 schools from all parts of Norway	The intervention group (n=586) had significantly lower increase in alcohol use compared to the comparison group (n=392) after controlling for covariates.
8	Keepin' it REAL Designed, implemented and evaluated by The Drug Resistance Strategies Project (DRS) (Hecht et al., 2003; Hecht et al., 2018)	USA	culturally oriented prevention cultural resiliency model	curriculum consisting of 10 lessons promoting anti-drug norms and teaching resistance and other social skills, reinforced by booster activities and a media campaign. Three versions were delivered: Mexican American, combined African American and European American, and Multicultural. Thirty-five middle schools were randomly assigned to 1 of the 3 versions or the control. Students completed baseline and	Analyses utilizing a generalized estimating equations approach assessed the overall effectiveness of cultural grounding and the cultural matching hypothesis. Support was found for the intervention's overall effectiveness, with statistically significant effects on gateway drug use as well as norms, attitudes, and resistance strategies but with little support for the cultural matching hypothesis. Specific contrasts found the Mexican American and Multicultural versions impacted the most outcomes.

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				follow-up questionnaires over a 2-year period (1997-98) (total 6,035 respondents).	
9	DARE (Drug Abuse Resistance Education) (Hansen, Johnson, Flay, Graham, & Sobel, 1988; Ringwalt, Ennett, & Holt, 1991)	USA	Social skills approach suggests that social pressures (i.e. those generated by peers and the family, and possibly the mass media) are major determinants of drug use (Huba and Bentler, 1980; Glynn, 1981; Flay and Sobel, 1983; Kandel and Andrews, 1987). Social skills programs assume that adolescents use drugs because they lack appropriate skills for countering pro-drug use pressures The DARE curriculum was derived in part from two separate approaches to drug use prevention tested by Project SMART: one using a social influences approach and the other an affective education approach (Hansen et al., 1988).	focused primarily on training students to resist social pressures to use drugs. DARE is offered in the early adolescent years, usually in the last year of elementary school. Through discussion, role playing, behavioural modelling and extended practice, students are taught to recognize and resist pressures that can lead to experimentation with drugs. DARE uses approaches to drug education in addition to social skills training. Several lessons are derived from traditional knowledge or attitudes approaches (e.g. negative consequences of drug use), affective education (e.g. promoting self-esteem; development of decision-making skills) and alternatives to drug use (e.g. physical activity; stress management). 5th (10-11 years) and 6th (11-12 years) grade Delivered by uniformed police officers 17 lessons 20 schools participated:	DARE demonstrated no effect on adolescents' use of alcohol, cigarettes or inhalants, or on their future intentions to use these substances. However, did make a positive impact on adolescents' awareness of the costs of using alcohol and cigarettes, perceptions of the media's portrayal of these substances, general and specific attitudes towards drugs, perceived peer attitudes toward drug use, and assertiveness.

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				10 to receive the DARE intervention (N = 685) and 10 control (N = 585).	
10	All Stars and All Stars Plus (Gottfredson, Cross, Wilson, Rorie, & Connell, 2010; Gottfredson & Hussong, 2011; Hansen & Dusenbury, 2004)	USA	Health belief model? Hansen et al (2004) suggest seven distinguishable 'theoretical approaches' used in previous prevention programmes: (i) changing access within the environment; (ii) promoting personal and social skills; (iii) promoting positive affiliation; (iv) addressing social influences; (v) providing social support; (vi) developing positive schools; (vii) enhancing motivation to avoid substance use. change in beliefs and commitment to abstain from substance use, as well as bonding to school, family communication and improved decision-making and goal-setting skills, would reduce risk for substance use and conduct problems	School-based drug abuse prevention program. Focuses on five qualities that protect children from drug use: i) viewing drug use as uncommon and unacceptable to the peer group (norms); ii) viewing drug use as interfering with future goals; iii) commitment to avoid drug use; iv) positive attention from parents; and v) feeling accepted at school. All Star Plus expanded the Core program to include the development of three competencies: i) goal setting, ii) decision making, and iii) skills to resist peer pressure resistance. 11-14 year olds non-randomized trial Students either received All Stars Core, All Stars Plus, or were assigned to the non-treated control group.	Both programs outperformed the control group; however, All Stars Plus was more effective in preventing drug use than All Stars Core. All Stars Plus was found to reduce alcohol use, drunkenness, cigarette smoking, marijuana use, and inhalant use. The Plus program appeared to have achieved these outcomes by improving norms, increasing persistence in pursuing goals, and by increasing attention from parents.
11	Take Charge of Your Life (TCYL)	USA		83 school clusters from 6 metropolitan areas – 19,529 7th	Main effect analysis showed a negative program effect for use of alcohol and

	Intervention and key references	Country	Rationale or Theory	Description	Findings
	(Nakashian, 2010; Sloboda et al., 2009)			grade students participated (aged 12-13 years) Police officers trained in Drug Abuse Resistance Education (DARE) presented TCYL in 7th and 9th grades	cigarettes and no effect for marijuana use. Subgroup analysis indicated that the negative effect occurred amongst non-users at baseline, and mostly amongst white students of both genders. Conclusion: the negative impact of the program on baseline nonusers of alcohol and tobacco indicate that TCYL should not be delivered as a universal prevention intervention.
12	EU-Dap study (EUropean Drug Addiction Prevention trial) named UNPLUGGED (Caria, Faggiano, Bellocco, Galanti, & Grp, 2011; Faggiano et al., 2014; Faggiano et al., 2010; Giannotta, Vigna-Taglianti, Rosaria Galanti, Scatigna, & Faggiano, 2014)	Europe: Italy, Germany, Austria, Spain, Sweden, Belgium, Greece	Comprehensive social influence approach (Sussman et al., 2004), incorporating life skills elements, and is designed to delay or prevent the onset of substance misuse among junior high school students	Cluster Randomized Controlled Trial. Nine centres across seven European countries participated; 170 schools (7,079 pupils aged 12–14 years) randomly assigned to one of three experimental conditions or to a control condition during school year 2004/2005. 12-hour curriculum based on a comprehensive social influence approach	Persisting beneficial program effects were found for episodes of drunkenness
13	"Unge & Rus" (Youth and Alcohol) (Strøm et al., 2015)	Norway	This program shares several core components with successful interventions like the European Drug Addiction Prevention (EU-DAP) program "Unplugged" and is based on a Social Influence Model in which the students are asked to participate and share normative beliefs	2,020 students from 41 junior high schools participated (mean age 13.5 years) longitudinal pre, post and one-year follow-up study with a quasi-experimental design, involving an intervention group and a comparison group	Results showed an increased level of alcohol-related knowledge in the intervention group ($p < .005$) as compared to the comparison group at one-year follow-up. However, no significant difference in change was found between the intervention group and the comparison group in frequency of monthly alcohol use, alcohol-related attitudes, PBC or alcohol expectancy at one-year follow-up.

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				Multilevel analysis was used to account for the repeated observations (level 1) nested within students (level 2) who in turn were clustered within school classes (level 3). Main outcome measures: frequency of monthly alcohol use, favorable alcohol attitudes, perceived behavioral control (PBC), positive alcohol expectancy and alcohol-related knowledge	
14	#Tamojunto (adapted version of UNPLUGGED) (Sanchez, Valente, Sanudo, Pereira, Cruz, Schneider et al., 2017; Sanchez, Valente, Sanudo, Pereira, Schneider, & Andreoni, 2018; Valente, Cogo-Moreira, Swardfager, & Sanchez, 2018)	Brazil		Randomized controlled trial conducted in 2014 with 7th and 8th grade students from 72 public schools in 6 Brazilian cities. The trial aimed to evaluate the effects of an adapted European school-based drug prevention program *Unplugged*, called *#Tamojunto* in Brazil, which was implemented by the Ministry of Health as part of public policy. The experimental group (n = 3340) attended 12 classes in the *#Tamojunto* program, and the control group (n = 3318) did not receive a school prevention program.	The program seemed to increase alcohol use initiation (first alcohol use); students in the experimental group had a 30% increased risk of initiating alcohol use during the 9-month follow-up (aRR = 1.30, 95% confidence interval (95%CI) 1.13–1.49, p < 0.001) compared to the control group. The results of the *#Tamojunto* program suggest that the content and lessons regarding alcohol may enhance curiosity about its use among adolescents.
15	Iudicium (Bajac, Feliu-Soler, Meerhoff, Latorre, & Elices, 2016)	Uruguay		evaluation of Iudicium, an educational drama-based intervention designed to increase risk perception of alcohol abuse.	Data regarding risk perception of alcohol abuse and adequacy of the activity was collected before and after the intervention. Results suggest that Iudicium was

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				318 participants from 5 high schools in Uruguay 2012 In this activity, high school students judge a case in which alcohol consumption had negative consequences (e.g., fights, unwanted pregnancy, and car accident). A trial is simulated and after that, a debriefing takes place during which the activity is discussed and informational materials on the effects of alcohol is provided and commented	effective in increasing risk perception of abusive drinking, reaching a 34% of increase regarding risk perception. Participants highlighted the experiential component of ludicium as a strength. The intervention was well-accepted, easy to understand and apparently an effective tool for increasing risk perception of alcohol abuse amongst high school students.
16	TEAM (Mfidi, Thupayagale-Tshweneagae, & Akpor, 2018)	Nigeria	Social and Emotional Learning Model.	Development of an intervention to promote well-being. "TEAM" T = Treating each other with respect E = Engaging in schools; earning the right to be at school; and have supportive peers A = Acknowledging differences of strengths and weaknesses in both self and others • M = Membership in positive gangs to promote social and emotional well-being; teach adolescents to look out for one another; respect others' strengths and weaknesses; and learn to live responsibly in schools as a community. 347 young people aged 15-19	Key findings from the study revealed inappropriate handling of emotions by adolescents, leading them to form destructive groups (gangs); involvement in alcohol and substance abuse; disrespect; and adolescent pregnancy. Conclusion: A **universal team-oriented collaborative model** that will assist adolescents to shift negative energy and attitudes to positive and productive lifestyles is required. The TEAM model centres all the activities of a collaborative and focused team on the facilitation of a sense of **belonging, ownership and complete engagement of pupils** in schools that will contribute positively to social and emotional well-being.

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				Data collection 2012-15	
17	Multi-strategic intervention (Hodder, Daly, Freund, Bowman, Hazell, & Wiggers, 2011; Hodder, Freund, Bowman, Wolfenden, Campbell, Dray et al., 2017a; Hodder, Freund, Bowman, Wolfenden, Campbell, Wye et al., 2012; Hodder, Freund, Bowman, Wolfenden, Gillham, Dray et al., 2016; Hodder et al., 2017b)	Australia	**Resilience theory** and using the **Health Promoting Schools framework** The survey, based on the resilience module from California Healthy Kids Survey included items relating to six resilience and six protective factor subscales. The six resilience factor subscales included items addressing the following: empathy (2 questions), effective help seeking (3 questions), self esteem (3 questions), communication and cooperation (2 questions), self awareness (2 questions), and goals and aspirations (2 questions). The six protective factor subscales included items regarding: family connection (4 questions), pro-social peers (3 questions), autonomy experience (4 questions), community connection (4 questions), school connection (4 questions), and pro-social group (3 questions).	A multi-strategic intervention based upon an existing student resilience and protective factor program implemented - involved various curriculum materials and programs designed to enhance student resilience and protective characteristics including curriculum materials designed to enhance student communication, connectedness, empathy and self-awareness across all grades (**MindMatters**); and implementation of programs targeting particular resilience and protective factors (including the **Rock and Water Program** and the **Resourceful Adolescent Program**) Data collection 2002 and follow-up 2006 All Grade 7-10 students (aged 12-16 years) in 3 high schools were eligible to participate (2002: n = 1899; 2006: n = 1965). Students were blinded to the study aim of decreasing health risk behaviours. All schools ranked in the lowest quintile of socio-economic disadvantage	results of this study confirm the feasibility, and suggest the potential, of a resilience based intervention approach with the inclusion of explicit adoption strategies, in reducing the unacceptably high tobacco, alcohol and marijuana use among adolescents. 2. there was no difference in the prevalence of any measure of substance use between intervention and control students, nor was there any difference for aggregate or individual measure of individual and environmental protective factors

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				At baseline and follow up, 1449 (76.3%) and 1205 (61.3%) students respectively with parental consent participated in the study 2. 3-year universal ('whole of school') intervention was delivered to all students in grades 8–10 Cluster randomised control trial of 32 schools 2105 Grade 7-10 students 2012-2014 (aged 15-16 in 2014)	
18	"Klar bleiben" (Keep a Clear Head) (Hanewinkel, Tomczyk, Goecke, & Isensee, 2017; Tomczyk, Hanewinkel, & Isensee, 2015)	Germany	Social norms approach - to facilitate the development of personal and social skills with particular emphasis on skills for coping with social influence for substance use	'Klar bleiben' consists of a class commitment to drink responsibly and refrain from hazardous consumption patterns for 9 weeks. The commitment is accompanied by educational lessons on alcohol-related cognitions and consequences. Aimed at 10th grade students	Study protocol – no results available
19	Choices (Quek, White, Low, Brown, Dalton, Dow et al., 2012)	Australia	Harm minimisation framework *Applied theatre programs (broadly defined as using theatre to address social issues) are not only an excellent medium for engaging young people [17,18], but also effective for raising awareness of drug*	Applied theatre prevention programme – specifically designed to influence 12th grade students' drinking and other risk behaviours during their end of school celebrations "Schoolies". 352 school leavers participated in the study (mean age 17.14) 49% received the Choices intervention.	School leavers who attended Choices were significantly less likely to report illicit drug use (OR = 0.51,P < 0.05) and problem behaviours (OR = 0.40, P < 0.01) than those who did not attend Choices. There was, however, no intervention effect in risky drinking (ie drank on 5 or more days, typical amount five or more standard drink and binge drank on 3 or more days) at Schoolies (OR = 0.92, P = 0.80).

	Intervention and key references	Country	Rationale or Theory	Description	Findings
			issues, increasing knowledge and changing attitudes and behaviours [19,20]. Unlike the traditional drug education programs (e.g. Drug Abuse Resistance Education (DARE)) [21],applied theatre programs such as Choices are designed to be evocative and stimulating learning experiences by eliciting emotional responses and act as a springboard for further discussion [22–24].		
20	UHS (Utrecht Healthy School) (Busch, De Leeuw, & Schrijvers, 2013)	Netherlands	Unhealthy behaviours influence each other	UHS pilot promoting healthy behaviour aimed to improve a wide range of health-related behaviours in young adolescents by giving pupils tools to enable them to make healthy choices, including: Providing a healthier environment Interactive learning methods Developing skills Integrated the five components from the European Network of Health-Promoting Schools for Health in Europe (SHE) whole school framework.	Significant behavioural changes reported for extreme alcohol use. Postintervention showed significantly fewer psychosocial problems.
21	SHAHRP	Australia	Harm minimisation approach	Longitudinal research study to influence alcohol related	

	Intervention and key references	Country	Rationale or Theory	Description	Findings
	(McBride, Farringdon, & Midford, 2002; McBride et al., 2013; McBride, Midford, Farringdon, & Phillips, 2000)			behaviours in junior secondary school students (aged 13 to 15 years) Took a harm minimisation approach Initial implementation 1996 – anticipated that over a three-year measurement period, students would develop: i) greater knowledge of alcohol issues, ii) safer alcohol related attitudes, and iii) experience less harm from their own and from other people's use of alcohol. Behavioural changes were expected to occur during the later stages of the study as the prevalence of alcohol use increased with age in both intervention and control groups. A previous paper provides methodology details (McBride, Midford, Farringdon 2000). Intervention conducted in two phases over two year period: i) 1st year of secondary school (12-13 years) 17 sequential skills-based activities over 8-10 lessons.	

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				ii) 12 sequential activities (5-7 lessons) during the following year.	
22	SHAHRP – adapted version (Harvey & McKay, 2017; Harvey, McKay, & Sumnall, 2016; McKay, Sumnall, McBride, & Harvey, 2014; McKay, McBride, Sumnall, & Cole, 2012)	Northern Ireland, UK	Harm minimisation approach The Young Person's Behaviour and Attitudes Survey (YPBAS)	The intervention aims to enhance alcohol-related knowledge, create more healthy alcohol-related attitudes and reduce alcohol-related harms in 14–16-year-olds A non-randomised control longitudinal design with intervention and control groups assessed students at baseline and 12, 24 and 32 months after baseline. 2,349 participants harm reduction education intervention which combines a harm reduction philosophy with skills training, education and activities designed to encourage positive behavioural change concerning the harms experienced as a result of drinking	Significant positive changes in knowledge about and attitudes towards alcohol in baseline abstainers, supervised drinkers and unsupervised drinkers. Significant positive behavioural effects in terms of amounts consumed, frequency of drinking and self-reported alcohol related harms observed almost exclusively among baseline unsupervised drinkers. Conclusion: These behavioural effects support those previously observed in Australia and suggest that the intervention is a viable health promotion tool in the UK.
23	STAMPP (Steps Towards Alcohol Misuse Prevention Programme) (McKay, Agus, Cole, Doherty, Foxcroft, Harvey et al., 2018; Sumnall et al., 2017)	UK – Northern Ireland and Scotland (Glasgow & Inverclyde)	Harm minimisation approach	The STAMPP intervention combined a culturally adapted intervention based on the School Health and Alcohol Harm Reduction Project (SHAHRP) curriculum with a researcher-developed brief parental intervention based on the Swedish Örebro Prevention Program	The results of this trial provide some support for the effectiveness and cost-effectiveness of STAMPP in reducing heavy episodic (binge) drinking, but not in reducing self-reported alcohol-related harms, in young people over a 33-month follow-up period. As there was low uptake of the parental component, it is uncertain whether or not the intervention effect was

	Intervention and key references	Country	Rationale or Theory	Description	Findings
				school-based skills development curriculum and a brief parental intervention

105 schools – 12,738 pupils in year 9 (aged 12-13) | accounted for by the classroom component alone. |
| 24 | DEVS (Drug Education in Victorian Schools) programme

(Midford, Cahill, Lester, Ramsden, Foxcroft, & Venning, 2018; Midford, Cahill, Ramsden, Davenport, Venning, Lester et al., 2012; Richard Midford et al., 2014; R. Midford et al., 2014) | Australia | Social learning theory, post-Structuralist subjectivity theory and cognitive dissonance theory

also informed by research in the field of resilience education that has identified social competence, problem-solving, autonomy and a sense of purpose as key attributes of resilient young people, and highlighted the importance of interactive and applied learning strategies in enhancing social and emotional learning. | Taught about licit and illicit drugs over two years (2010-2011) with follow-up in 2012

Focussed on minimising harm and employed participatory, crucial-thinking and skill-focussed pedagogy.

DEVS incorporated learning strategies that address knowledge; enhance negotiation skills; involve participants in rehearsing problem-solving and problem-prevention strategies; and engage them in deconstructing social pressures and perceived norms about levels of drug use.

Cluster-randomised controlled trial Student cohorts year 8 (12-13 years) year 9 (14-15 years) and year 10 (15-16 years) – 14 schools n=1163 participated in the DEVS programme and 7 schools n=589 in usual drug education (control)

18 lessons provided over two years | Over 3 years, greater increase in intervention students' knowledge about drugs, including alcohol. Their alcohol consumption did not increase as much as controls. Fewer intervention group were risky drinkers and reduced consumption compared to controls. Harms decreased for intervention risky drinkers, but increased for controls.

Conclusions: Skill-focussed, harm minimisation drug education can remain effective, subsequent to programme completion, in reducing students' alcohol consumption and harm, even with risky drinkers.

Interactive group learning is critical to the delivery of effective drug education |

Appendix III: The Process of Selecting Behaviour Change Techniques

Part 1: Consulting Theoretical Models

The theories of reasoned action and planned behaviour

The theory of reasoned action (TRA) describes behaviour in terms of behavioural intention, subjective norms and attitudes (Fishbein & Ajzen, 1976). It positions behavioural intention as the most important determinant of behaviour, making the assumption that behavioural intention, which is influenced by attitude, can predict actual behaviour. The TRA was later modified to include perceived behavioural control, a reflection of how easy or difficult the individual perceives the behaviour to be, and was named the theory of planned behaviour (TPB) (Ajzen, 1991) (***Figure III i***). The following components of the model resonate with the objectives for this research; *Behavioural intention* – the perceived likelihood of drinking alcohol; *Attitude toward behaviour* - perceived evaluation – do you see drinking alcohol as good, neutral or bad?; *Subjective norm* - beliefs about the approval/disapproval of key people such as family or peer group, and the motivation to drink alcohol if it gains their approval; and *Perceived behavioural control* - beliefs that you can exercise control regarding drinking alcohol – is it up to you or not? These are the areas which the intervention might address.

Figure III i Theory of Planned Behaviour
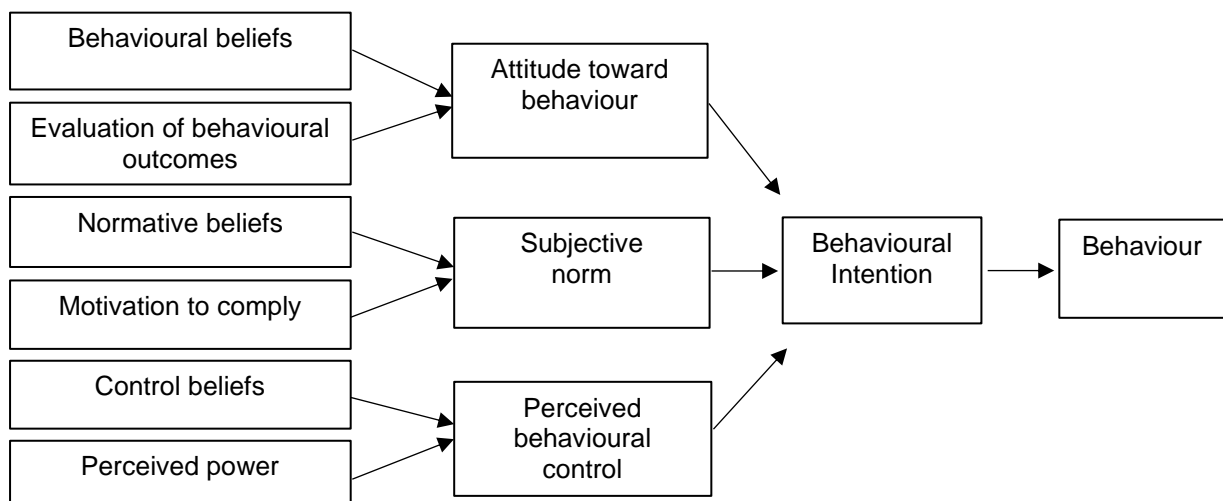
Source: The Theory of Planned Behaviour (Ajzen, 1991)

The TPB has been widely used in behaviour change studies in the field of substance misuse (Armitage & Conner, 2001; Huang, Zheng, Liao, Huang, Lin, & Guo, 2018; Potard, Kubiszewski, Camus, Courtois, & Gaymard, 2018) and its efficacy in predicting adult alcohol consumption has been tested and confirmed (Hasking & Schofield, 2015) including by systematic review and meta-analysis (Cooke, Dahdah, Norman, & French, 2016). However, the TPB's predictive capability was found to be less effective with adolescents (Cooke et al., 2016). A major assumption of the model is that people are usually rational and will make predictable decisions in well-defined circumstances and that the intention to act is the most immediate determinant of behaviour. As previously discussed, research on adolescents suggests that their behaviour is not necessarily so predictable, that they are prone to making impulsive decisions that override previous rational hypothetical responses (Steinberg, 2008). This model was not used in any of the interventions that featured in the systematic review.

Information Motivation Behavioural model (IMB)

The IMB model (Fisher & Fisher, 1992, 2002) was originally devised to explain HIV-related behaviour but has been more widely accepted as a general model of health behaviour change. Fisher & Fisher (2002) sought to address the limitations evident in existing theory for social and health psychology. The IMB provides a simple method to guide thinking about complex behaviour whereby information, motivation and behavioural skills are placed as the determinants of preventative behaviour (*Figure III ii*). So, if individuals are well-informed, motivated to act and possess the behavioural skills to act effectively, they will be likely to achieve the desired outcome behaviour. It was developed to address limitations of existing theory in social and health psychology

They suggest reasons, from a review of HIV prevention, to explain why many interventions fail, for example: they are not grounded in theory; the needs of the target group have not been systematically assessed prior to the intervention; interventions often focus on changing general patterns of behaviour rather than inclination or ability to enact the behaviour; they often fail to motivate individuals to change their risky behaviour; and interventions have not been evaluated with sufficient rigour. These reasons resonate with outcomes from the literature review for

this research namely the lack of theoretical grounding, insufficient evaluation rigour, and failure to motivate individuals. Therefore, perhaps this theoretical model can contribute something to alcohol intervention research.

Figure III ii Information Motivation Behavioural Model
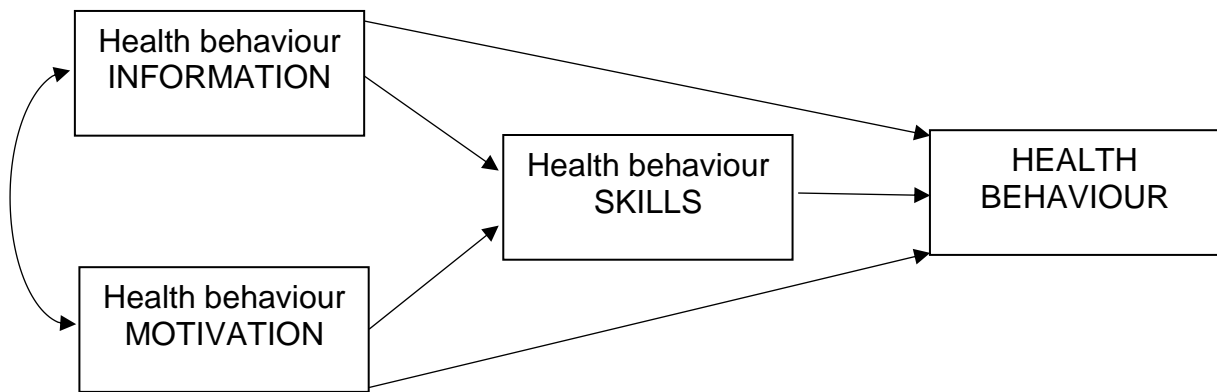
Source: Fisher and Fisher (2002).

Social Learning Theory (SLT)

Social learning theory (Bandura, 1971; Bandura & Walters, 1977) is one of many approaches that child development and educational scholars use to explain how children acquire knowledge. The premise of SLT is that people learn from one another through observation, imitation and modelling, learning being influenced both by psychological and behavioural factors. SLT explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioural and environmental influences. One strength of SLT is that it is a flexible approach in terms of explaining differences in behaviour or learning that are affected by the environmental or social aspects ie the theory states that children learn in a social context. The idea being that changes in environment may impact on behaviour, but also that behaviour influences environment (Bandura, 1973). One weakness with this theory is that it doesn't emphasise the individual's accountability for their own behaviour, for example, how they handle and process information. The blame is perhaps too readily placed on society for the way it influences behaviour rather than expecting a degree of responsibility from the individual. SLT is also criticised as it doesn't account for the different stages of child development. For example, from birth the child learns and models their behaviour from those closest to them, ie their family and siblings, but are too young to question their own actions. As a child grows, they are still strongly influenced by those closest to them but are also exposed to broader

influences ie from school, community etc, so have more capacity and information to question their own behaviour. Therefore, the idea of observation, imitation and modelling is quite simplistic and would maybe benefit from greater nuance, which leads on to social cognitive theory as a development from SLT.

Social cognitive theory

Social cognitive theory (SCT) (Bandura, 1971) is perhaps one of the most widely used theories in health promotion as it addresses both the underlying determinants of health behaviour and methods of promoting change (Glanz, 2016; Nutbeam et al., 2010). This theory is a the cognitive formulation of social learning theory (Vygotsky argues that social learning precedes and directly influences cognitive development (Curtis, 2015)). SCT explains human behaviour in terms of a three-way, dynamic, reciprocal model in which the individual (personal factors), their environment, and their behaviour continually interact and influence each other (Cherry, 2012; Schunk & Pajares, 2009) (***Figure III iii***).

Figure III iii Social Cognitive Theory
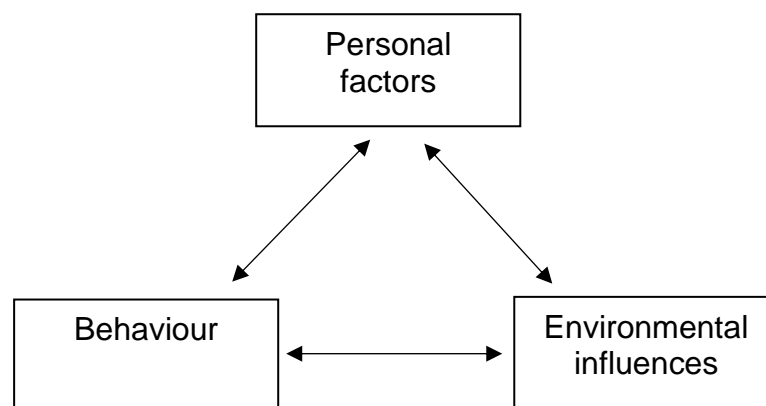
There are three main concepts involved in SCT (Nutbeam et al., 2010):

i) *observational learning*: people can learn by observing both the behaviour of others and the rewards received for different behaviours;

ii) *outcome expectancy*: to anticipate and place value on the outcomes of different behaviour patterns.

iii) *self-efficacy*: belief in one's own ability to perform a behaviour

The individual, by observing the actions of others and the consequences of those actions (for example, what they perceive as 'normal' or 'acceptable' behaviour) forms

judgements about their own actions. Their perceptions are influenced by their surrounding family, social and community networks, therefore this influence can be both positive and negative depending on the circumstances. For example, there is a common mis-perception amongst adolescents about alcohol prevalence amongst their peers (François, Lindstrom Johnson, Waasdorp, Parker, & Bradshaw, 2017; Thrash & Warner, 2019) and adolescent substance use can be affected more by perceptions of peer behaviour than by actual peer behaviour (Amialchuk, Ajilore, & Egan, 2019; Deutsch, Chernyavskiy, Steinley, & Slutske, 2015). This is strongly influenced by the desire to gain peer approval during adolescence (Curtis, 2015) and the correlation between affiliation with deviant peers and alcohol use was more pronounced amongst adolescents with lower social self-efficacy (Trucco, Colder, & Wieczorek, 2011; Zullig & Valois, 2016). Moderating factors have also been reported, such as the fear of being caught drinking by parents or fear of being labelled as problematic by teachers (McKay, Cole, & Sumnall, 2011). Authors recommend using programs to address inaccurate perceptions of peer substance use, behaviours and attitudes, for example, social norm interventions which present accurate information on actual group norms (François et al., 2017; Thrash & Warner, 2019; Zullig & Valois, 2016).

Bandura considered self-efficacy to be the most important prerequisite for facilitating behaviour change, as it affects how the individual approaches goals, tasks and challenges. Self-efficacy is also shaped by the three-way relationship between person, behaviour and environment, so can be both behaviour-specific and situation-specific (dependent on the environment). This aspect of SCT aligns with the social ecological perspective. For example, young adolescents are influenced at different levels - individual, organisational, community – therefore, it is possible to intervene at different levels to influence behaviour.

Social Norms Theory (SNT)

Social norms theory was first used by Perkins and Berkowitz in 1986 to address student alcohol use patterns. The main assumption is that behaviour is influenced by perceptions of behavioural norms - this can be the real, imagined or implied behaviour of peers. The assumptions of social norms theory are:

1. Actions are often based on misinformation about or misperceptions of others' attitudes and/or behaviour.
2. When misperceptions are defined or perceived as real, they have real consequences.
3. Individuals passively accept misperceptions rather than actively intervene to change them, hiding from others their true perceptions, feelings or beliefs.
4. The effects of misperceptions are self-perpetuating, because they discourage the expression of opinions and actions that are falsely believed to be non-conforming, while encouraging problem behaviours that are falsely believed to be normative.
5. Appropriate information about the actual norm will encourage individuals to express those beliefs that are consistent with the true, healthier norm, and inhibit problem behaviours that are inconsistent with it.
6. Individuals who do not personally engage in the problematic behaviour may contribute to the problem by the way in which they talk about the behaviour. Misperceptions can strengthen the beliefs and values that the "carriers of the misperception" do not themselves hold and contribute to the climate that encourages problem behaviour.
7. For a norm to be perpetuated it is not necessary for the majority to believe it, but only for the majority to believe that the majority believes it.

Drinking tends to be a social activity amongst groups of peers and is subject to intragroup processes, including pressure to conform and the desire for peer acceptance which impacts on drinking behaviour and perceptions about existing norms regarding alcohol consumption (Johnson, 2012). Research suggests that people tend to misjudge actual normative drinking tendencies and perceive that peers consume alcohol more frequently and in greater volume than they actually do (Amialchuk et al., 2019). This study also discovered a possible boomerang effect where students start using substances more after they realise that others use them more than they thought (Amialchuk et al., 2019). Interventions using this theory have attempted to modify perceptions of what behaviour is normative as a means of influencing actual behaviour. However, the influence of social norms is highly complex, varying according to context (family, friends, schoolmates) and nature of

social norm profile (developmental, risky) (Wang, Chen, & Lee, 2019). The impact of social norms also differs for different substances (Deutsch et al., 2015).

Social Identity Theory (SIT)

Social Identity Theory (Tajfel & Turner, 2004) explains the importance of social group membership in terms of the individuals' self-concept and social behaviour. Two distinct aspects of self-concept are identified: *personal identity* – specific attributes, competence, talent and sociability; and *social identity* – the part of self-concept that relates to membership of social groups and the value and emotional significance attached to that membership. Research found that greater identification with social groups was associated with a stronger relationship between drinking norms within the group and the individual's own drinking behaviour (Neighbors, LaBrie, Hummer, Lewis, Lee, Desai et al., 2010). It is therefore important to attempt to improve self-concept, to help young people to be confident in establishing their own beliefs whilst also recognising the importance of their social position within a peer group. This process may result in the young person questioning their respect for and place within a specific peer network, potentially resulting in a change. Best et al (2016) used SIT in the context of alcohol recovery suggesting that identity change (or formation) is socially negotiated and that recovery (or behaviour) is transmitted in social networks via a process of social influence (Best, Beckwith, Haslam, Alexander Haslam, Jetten, Mawson et al., 2016). On this basis, the intervention could also help to facilitate the development of strategies that might help young people to avoid engaging in behaviour that they are not comfortable with. Such strategies could enable them to carry their behavioural intention through to their actual behaviour, at the same time maintaining their position within and the respect of their social group.

Self Determination Theory (SDT)

Self-determination theory (SDT) is a leading theory of human motivation that has been shown to be efficacious in identifying the conditions affecting motivation and behaviour in numerous domains (Deci & Ryan, 1985; Hagger & Chatzisarantis, 2009). SDT suggests that motivation lies on a continuum from intrinsic or autonomous motivation (self-determination resulting in positive behavioural, cognitive and psychological outcomes) to extrinsic or controlled motivation (when motivation is influenced or controlled by rewards or sanctions). The quality of the

motivation is influential in behavioural engagement and persistence, behaviour change being more effective and lasting when patients are autonomously motivated (Caudwell, Mullan, & Hagger, 2016; Ng, Ntoumanis, Thøgersen-Ntoumani, Deci, Ryan, Duda et al., 2012). A meta-analysis by Ng et al (2012) concluded that interventions promoting autonomous motivation were effective in inducing behavioural change in a wide context of health behavioural settings (Ng et al., 2012). This evidence suggests that interventions to elicit adolescent behaviour change need to encourage autonomous motivation. A weakness with this theory is that it doesn't clearly map the process that links motivation to intentions and behaviour (Hagger & Chatzisarantis, 2009). However, it is important in understanding the nature of motivation.

Part 2: Selecting the behaviour change techniques

Behaviour change techniques were selected according to TDF (*Table III i*), intervention function (*Table III ii*) and intervention functions identified for reducing excessive alcohol consumption (*Table III iii*). The BCTs highlighted in red represent those that were selected for possible inclusion in the intervention design for this research and were collated to create Table 2.5.

Table III i Selection of BCTs by TDF domain

TDF domain	Behaviour Change Techniques	Suitability
Knowledge	**Health consequences**	**Yes**
	Biofeedback	n/a
	Antecedents	**Yes**
	Feedback on behaviour	n/a
Skills	Graded tasks	n/a
	Behavioural rehearsal/practice	**Yes**
	Habit reversal	n/a
	Body changes	n/a
	Habit formation	n/a
Professional role and identity	No BCTs linked to this domain	
Beliefs about capabilities	**Verbal persuasion to boost self-efficacy**	**Yes**
	Focus on past success	n/a
Optimism	**Verbal persuasion to boost self-efficacy**	**Yes**
Beliefs about consequences	**Emotional consequences**	**Yes**
	Salience of consequences	**Yes**
	Covert sensitisation	n/a
	Anticipated regret	**Yes**
	Social and environmental consequences	**Yes**
	Comparative imagining of future outcomes	**Yes**
	Vicarious reinforcement	**Yes**
	Threat	n/a
	Pros and cons	**Yes**
	Covert conditioning	n/a
Reinforcement	Threat	n/a
	Self-reward	n/a
	Differential reinforcement	n/a
	Incentive	**Yes**
	Thinning	n/a
	Negative reinforcement	n/a
	Shaping	n/a
	Counter conditioning	n/a
	Discrimination training	n/a
	Material reward	n/a
	Social reward	**Yes**
	Non-specific reward	n/a
	Response cost	n/a
	Anticipation of future rewards or removal of punishment	**Yes**
	Punishment	n/a

TDF domain	Behaviour Change Techniques	Suitability
	Extinction	n/a
	Classical conditioning	n/a
Intentions	Commitment	n/a
	Behavioural contract	n/a
Goals	**Goal setting (outcome)**	**Yes**
	Goal setting (behaviour)	n/a
	Review of outcome goal(s)	n/a
	Review of behaviour goals	n/a
	Action planning (including implementation intentions)	n/a
Memory, attention and decision processes	No BCTs are linked to this domain	
Environmental context and resources	Restructuring the physical environment	n/a
	Discriminative (learned) cue	n/a
	Prompts/cues	**Yes**
	Restructuring the social environment	**Yes**
	Avoidance/changing exposure to cues for the behaviour	**Yes**
Social influences	**Social comparison**	**Yes**
	Social support or encouragement (general)	**Yes**
	Information about others' approval	**Yes**
	Social support (emotional)	**Yes**
	Social support (practical)	**Yes**
	Vicarious reinforcement	**Yes**
	Restructuring the social environment	**Yes**
	Modelling or demonstrating the behaviour	**Yes**
	Identification of self as role model	**Yes**
	Social reward	**Yes**
Emotion	**Reduce negative emotions**	**Yes**
	Emotional consequences	**Yes**
	Self-assessment of affective consequences	**Yes**
	Social support (emotional)	**Yes**
Behavioural regulation	Self-monitoring of behaviour	n/a

Source: *The Behaviour Change Wheel: A Guide to Designing Interventions* (Michie et al 2014). Bold highlighting indicates the BCTs selected for intervention design.

Table III ii Selection of BCTs by Intervention Function

Intervention function	COM-B component	Behaviour change techniques	Does BCT meet the APEASE criteria?
Education	Physical capability Automatic motivation	*Most frequently used:* **Information about social and environmental consequences**	**Yes**
		Information about health consequences	**Yes**
		Feedback on behaviour	n/a
		Feedback on outcome(s) of the behaviour	n/a
		Prompts/cues	n/a
		Self-monitoring of behaviour	n/a

Intervention function	COM-B component	Behaviour change techniques	Does BCT meet the APEASE criteria?
		Less frequently used:	
		Biofeedback	n/a
		Self-monitoring of outcome(s) of behaviour	n/a
		Cue signalling reward	n/a
		Satiation	n/a
		Information about antecedents	Yes
		Re-attribution	n/a
		Behavioural experiments	n/a
		Information about emotional consequences	Yes
		Information about others' approval	Yes
Persuasion	Reflective motivation Automatic motivation	*Most frequently used:*	
		Credible source	n/a
		Information about social and environmental consequences	**Yes**
		Information about health consequences	**Yes**
		Feedback on behaviour	n/a
		Feedback on outcome(s) of the behaviour	n/a
		Less frequently used:	
		Biofeedback	n/a
		Re-attribution	n/a
		Focus on past success	n/a
		Verbal persuasion about capability	**Yes**
		Framing/reframing	n/a
		Identity associated with changed behaviour	n/a
		Identification as self as role model	**Yes**
		Information about emotional consequences	**Yes**
		Salience of consequences	**Yes**
		Information about others' approval	**Yes**
		Social comparison	**Yes**
Incentivisation	Reflective motivation Automatic motivation	*Most frequently used:*	
		Feedback on behaviour	n/a
		Feedback on outcome(s) of behaviour	n/a
		Monitoring of behaviour by others without evidence of feedback	n/a
		Monitoring outcome of behaviour by others without evidence of feedback	n/a
		Self-monitoring of behaviour	n/a
		Less frequently used:	
		Paradoxical instructions	n/a
		Biofeedback	n/a
		Self-monitoring of outcome(s) of behaviour	n/a
		Cue signalling reward	n/a

Intervention function	COM-B component	Behaviour change techniques	Does BCT meet the APEASE criteria?
		Remove aversive stimulus	n/a
		Reward approximation	n/a
		Rewarding completion	n/a
		Situation-specific reward	n/a
		Reward incompatible behaviour	n/a
		Reduce reward frequency	n/a
		Reward alternative behaviour	n/a
		Remove punishment	n/a
		Social reward	**Yes**
		Material reward	n/a
		Material reward (outcome)	n/a
		Self-reward	n/a
		Non-specific reward	n/a
		Incentive	**Yes**
		Behavioural contract	n/a
		Commitment	n/a
		Discrepancy between current behaviour and goal	**Yes**
		Imaginary reward	n/a
Coercion	Reflective motivation Automatic motivation	*Most frequently used:*	
		Feedback on behaviour	n/a
		Feedback on outcomes of behaviour	n/a
		Monitoring of behaviour by others without evidence of feedback	n/a
		Monitoring of outcome of behaviour by others without evidence of feedback	n/a
		Self-monitoring of behaviour	n/a
		Less frequently used:	
		Biofeedback	n/a
		Self-monitoring of outcome(s) of behaviour	n/a
		Remove access to the reward	n/a
		Punishment	n/a
		Behaviour cost	**Yes**
		Remove reward	n/a
		Future punishment	n/a
		Behavioural contract	n/a
		Commitment	n/a
		Discrepancy between current behaviour and goal	**Yes**
		Incompatible beliefs	n/a
		Anticipated regret	**Yes**
		Imaginary punishment	n/a
Training	Psychological capability Physical capability Physical opportunity	*Most frequently used:*	
		Demonstration of the behaviour	**Yes**
		Instruction on how to perform a behaviour	**Yes**
		Feedback on the behaviour	n/a

Intervention function	COM-B component	Behaviour change techniques	Does BCT meet the APEASE criteria?
	Reflective motivation	Feedback on outcome(s) of the behaviour	n/a
		Self-monitoring of behaviour	n/a
		Behavioural practice/rehearsal	**Yes**
		Less frequently used:	
		Biofeedback	n/a
		Self-monitoring of outcome(s) of behaviour	n/a
		Habit formation	n/a
		Habit reversal	n/a
		Graded tasks	n/a
		Behavioural experiments	n/a
		Mental rehearsal of successful performance	n/a
		Self-talk	n/a
		Self-reward	n/a
Restriction	Physical opportunity Social opportunity	No BCTs in BCTTv1 are linked to this intervention function because they are focused on changing the way that people think, feel and react rather than the way the external environment limits their behaviour.	
Environmental re-structuring	Physical opportunity Social opportunity Reflective motivation	*Most frequently used:*	
		Adding objects to the environment	n/a
		Prompts/cues	n/a
		Restructuring the physical environment	n/a
		Less frequently used:	
		Cue signalling reward	n/a
		Remove access to the reward	n/a
		Remove aversive stimulus	n/a
		Satiation	n/a
		Exposure	n/a
		Associative learning	n/a
		Reduce prompt/cue	n/a
		Restructuring the social environment	**Yes**
Modelling	Social opportunity Reflective motivation	*Most frequently used:*	
		Demonstration of the behaviour	**Yes**
Enablement	Psychological capability Physical capability Physical opportunity Social opportunity	*Most frequently used:*	
		Social support (unspecified)	**Yes**
		Social support (practical)	**Yes**
		Goal setting (behaviour)	n/a
		Goal setting (outcome)	**Yes**
		Adding objects to the environment	n/a
		Problem solving	n/a
		Action planning	n/a
		Self-monitoring of behaviour	n/a

Intervention function	COM-B component	Behaviour change techniques	Does BCT meet the APEASE criteria?
	Reflective motivation	Restructuring the physical environment	n/a
		Review behaviour goal(s)	n/a
		Review outcome goal(s)	n/a
		Less frequently used:	
		Social support (emotional)	**Yes**
		Reduce negative emotions	**Yes**
		Conserve mental resources	n/a
		Pharmacological support	n/a
		Self-monitoring of outcome(s) of behaviour	n/a
		Behaviour substitution	n/a
		Overcorrection	n/a
		Generalisation of a target behaviour	n/a
		Graded tasks	n/a
		Avoidance/reducing exposure to cues for the behaviour	**Yes**
		Restructuring the social environment	**Yes**
		Distraction	n/a
		Body changes	n/a
		Behavioural experiments	n/a
		Mental rehearsal of successful performance	n/a
		Focus on past success	n/a
		Self-talk	n/a
		Verbal persuasion about capability	**Yes**
		Self-reward	n/a
		Behavioural contract	n/a
		Commitment	n/a
		Discrepancy between current behaviour and goal	**Yes**
		Pros and cons	**Yes**
		Comparative imagining of future outcomes	**Yes**
		Valued self-identity	**Yes**
		Framing/reframing	n/a
		Incompatible beliefs	n/a
		Identity associated with changed behaviour	n/a
		Identification of self as role model	**Yes**
		Salience of consequences	**Yes**
		Monitoring of emotional consequences	**Yes**
		Anticipated regret	**Yes**
		Imaginary punishment	n/a
		Imaginary reward	n/a
		Vicarious consequences	**Yes**

313

Table III iii Selection of BCTs for reducing excessive alcohol consumption

Intervention Function	Behaviour change techniques	Suitability	BCT related to adolescent target group
Address motivation	**Provide information on consequences of excessive alcohol consumption** and reducing excessive alcohol consumption	**Yes**	Provide information on consequences of alcohol consumption
	Identify reasons for wanting and not wanting to reduce excessive alcohol consumption	**Yes**	Identify reasons for wanting and not wanting to consume alcohol (abstinence, moderate and excessive consumption)
	Boost motivation and self-efficacy	**Yes**	Boost motivation and self-efficacy
	Provide normative information about others' behaviour and experiences	**Yes**	Provide normative information about others' behaviour and experiences (eg older adolescents and adults)
	Provide feedback on performance	n/a	
	Provide information on withdrawal symptoms	n/a	
	Provide rewards contingent on effort or progress	n/a	
	Prompt commitment from the client there and then	n/a	
	Conduct motivational interviewing	**Yes**	Use motivational interviewing approach
	Provide rewards contingent on successfully reducing excessive alcohol consumption	**Yes**	Incentives for future healthy alcohol consumption (or abstinence)
	Prompt use of imagery	**Yes**	Use of practical activities – drawing, role play to visualise alcohol-related consequences
	Model/demonstrate the behaviour	**Yes**	Use of local role models/role play behaviour
	Explain the importance of abrupt cessation	n/a	
Address self-regulation	**Facilitate goal setting**	**Yes**	Facilitate goal setting (ie incentives for healthy alcohol consumption (or abstinence)
	Facilitate action planning/help identify relapse triggers	n/a	n/a
	Advise on avoidance of social cues for drinking	**Yes**	Recognise and navigate situations where alcohol

Intervention Function	Behaviour change techniques	Suitability	BCT related to adolescent target group
			consumption is expected – avoidance strategies
	Behaviour substitution	n/a	
	Prompt review of goals	n/a	
	Facilitate relapse prevention and coping	n/a	
	Prompt self-recording	n/a	
	Facilitate barrier identification and problem-solving	**Yes**	Barriers and facilitators in achieving future goals
	Advise on environmental restructuring	**Yes**	Environmental restructuring – awareness of peer influence, consequences of friendship alliances
	Set graded tasks	n/a	
	Advise on conserving mental resources	n/a	
	Change routine	n/a	
Promote adjuvant activities	**Advise on/facilitate use of social support**	**Yes**	Identify/recognise social support – peers, family, teachers
	Give options for additional and later support	**Yes**	Awareness of support organisations
Address general aspects of interaction	**Emphasize choice**	**Yes**	Emphasize choice – *It's My Life*
	Assess current readiness and ability to reduce excessive alcohol consumption	n/a	n/a
	Offer/direct towards appropriate written materials	**Yes**	Awareness of information about alcohol (eg websites)
	Assess current and past drinking behaviour	**Yes**	Assess current and past drinking experiences
	Assess past history of attempts to reduce excessive alcohol consumption	n/a	n/a
	Assess withdrawal symptoms	n/a	n/a
	Explain expectations regarding treatment programme	n/a	n/a
	Tailor interactions appropriately	**Yes**	Tailor interactions appropriately
	Build general rapport	**Yes (MI)**	Build General rapport – safe, confidential environment to discuss alcohol and associated risks/consequences

Intervention Function	Behaviour change techniques	Suitability	BCT related to adolescent target group
	Use reflective listening	**Yes** (MI)	Use reflective listening (peer learning approach)
	Provide reassurance	**Yes**	Provide reassurance (affirmation)
	Summarize information/confirm client decisions	**Yes** (MI)	Summarise information from peer discussions
	Elicit and answer questions	**Yes**	Elicit and answer questions
	Elicit client views	**Yes**	Elicit views (peer learning)
	General communication skills training	**Yes**	General communication skills training

Source: *Identification of behaviour change techniques to reduce excessive alcohol consumption* (Michie et al 2012). Bold highlighting indicates the BCTs selected for intervention design.

Appendix IV: The Intervention

It's My Life: Staying in Control – version 1

'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

This intervention is designed to take on a motivational interviewing (MI) approach. MI is a therapeutic technique employed to encourage young people to generate their own internal motivations for changes in their attitude or behaviour. It was originally developed and has been effectively used to elicit change regarding substance misuse. Previously MI has been used with individuals or small groups of adolescents who have been identified as having an issue with substance misuse, but the aim of this intervention is to use a MI approach as a preventative technique at a whole class level with adolescents before they engage with alcohol. National statistics show a sharp increase in adolescents drinking alcohol around year 9, so it is proposed that this intervention be implemented at the start of their secondary school phase, in year 7.

The intervention will not include interviews as suggested in the name 'motivational interviewing' but is structured around the MI Menu of Strategies and embraces the spirit and principles of MI, as outlined below:

The spirit of MI:

Collaboration: "*the method of motivational interviewing involves exploration more than exhortation, interest and support rather than persuasion or argument*" (Miller & Rollnick, 2012 p15)

Evocation: MI is not about imparting information, but finding things within the person and drawing them out. It requires finding intrinsic motivation for change from within the person and evoking it.

Autonomy: Any responsibility for change is left with the client, no matter what the views of the professionals. It is the client rather than the counsellor that should ultimately present arguments for change.

The principles of MI:

Express empathy – to view matters from the client's point of view, to establish their trust, allowing them to share their thoughts with you, thus facilitating discussion that might result in their desire to change.

Support self-efficacy – helping the client to stay motivated. Maintaining that there is 'no right way' to change is a useful MI technique and perhaps sharing stories of other clients' success stories.

Roll with resistance – don't challenge client resistance, but 'roll' with it harnessing the momentum to explore further viewpoints. The aim is to reduce resistance and discourage the client from becoming more argumentative.

Develop discrepancy - "*Motivation for change occurs when people perceive a discrepancy between where they are and where they want to be*" (Miller, Zweben, DiClemente, & Rychtarik, 1992, p. 8). Work to examine the discrepancies between where the client is now and where they'd like to be in the future. Guide the client to the self-realisation that if they make changes to their behaviour, those future goals might be achievable.

It is important that the intervention classes evoke the pupil voice, that through discussion and group activities, the young people form their own opinions and ideas. To facilitate pupil-focused learning, it

is suggested that the classroom be re-organised so that the class sit round in a circle (without the formality of desks).

The intervention content is outlined as follows:

Week 1

Introduction *"All about you"*

Discussion about what we're going to do in the classes and why. Talk about the evaluation element. Any questions before we start?

Complete Q-sort and surveys

'Getting to know you' activities

What do you like/enjoy? Doing? Where? When? - *at school, at home, outside school, in the holidays - hang out with mates, watch TV, X-box, snap chat, cinema, park, clubs, sports.*

Strengths *"everyone has their strengths"*

Brainstorm what 'strengths' could be

Compassionate	sensitive	reliable	trustworthy
Confident	energetic	gentle	friendly
Cheerful	kind	sense of humour	creative
Communicative	hard working	thoughtful	brave

Discuss employment – "employability" facets – top 4 from small/medium businesses (majority of businesses)

What are your main strengths? Work/discuss in groups to help identify your strengths
(you might not even recognise your own qualities)

Week 2

Aspirations *"where do you want to be in the future?"*

At this point in time (starting high school) you have a lot of potential to go almost anywhere …

- To be almost anything you choose
- To live where you choose etc

Are you going to live at home with your parents/carers all your life?
What kind of place would you like? Big, small, old, modern
Where? town, city, countryside, abroad
Garden, hot tub, pool, gym
Will you have a car?
What kind of lifestyle do you want to live?
Holidays? Meals out, shopping, concerts, cinema, adventures

"it's your choice, you have to decide"

Examples of rags to riches stories – if possible use local examples

Barriers/facilitators *"how will you achieve your goal?*

What things will help you get to where you want to be? Or hinder you in getting there?

Brainstorm:

Help	**Hinder**
Education	getting in trouble at school
Voluntary work	getting in trouble with police
Part time job	Stealing
Getting on with people	drinking
Being cheerful	drugs
Good health	poor health

Discuss how these things might help/hinder.

Anyone been in trouble? Discuss situations where alcohol could get you/or others into trouble or create other problems.

Over the next couple of weeks we're going to work on some role play dramas – (in groups) can you start to think about some situations where people might be drinking (eg at home, in the park, in a pub) – select a main character who is a teenager and build a situation – where are they? who is there? What are people drinking? How much are they drinking? How are they behaving?

Week 3

Teenager: Good day/not so good day

Role play scenarios to see how a situation escalates with more alcohol involved or with less alcohol – using the Motivational Interviewing idea of good days and not so good days from the Menu of Strategies.

Building on the role play ideas you started last week, develop the plot to explore:

A good day (when drinks moderately) – the teenager is drinking and having a good time, things are going well

A not so good day (when drinks too much) – things don't go so well, what happens? Why does it happen? Who is affected (friends, parents, siblings)? Can you pinpoint the time that things start to change? What could be done to avoid things changing for the worse?

Strategies "avoiding situations"
Think about how to avoid getting involved when you don't want to

The message is not 'don't drink' or 'don't have fun' or 'don't be cool with your mates' it's about individual choice and self-control.

There might be situations where you know people are going to be drinking a lot (binge drinking) and looking for trouble (kicks they might say) – acting like idiots, getting aggressive, putting yourself at risk

Think about how you might moderate your behaviour/engagement with drink
Eg my daughter's friends all drink too much at parties and try to snog boys etc and everyone takes the micky behind their backs – she thinks some of the girls are degrading/disrespecting themselves, all kinds of rumours going around school – not cool … what does she do?

Have a goal – sporty, healthy – likes nice holidays, clothes, make-up, meals out – get good job, earn own money to support that lifestyle, don't depend on anyone else

In the role play scenarios – perhaps use a freeze frame technique ie at the point of choice, what are the options? If you take option A what might happen, if you take option B what happens then?

Week 4

Explore scenarios at different life stages: as a teenager – as a young adult – as a parent in their 40s to illustrate where a drinking trajectory might lead in the future

Young Adult: Good day/not so good day
The teenager has grown into a young adult – what is their life like now? Role play a new scenario, it could be a similar situation but it doesn't have to be.

What is the situation? where are they? who is there? What are people drinking? How much are they drinking? How are they behaving?

If the teenager carries on a pattern of heavy drinking – what is the typical drinking scenario?

If the teenager moderates or controls their drinking, or perhaps they don't drink alcohol at all?

Take the good day/not so good day idea with the heavy drinker and freeze frame the scenario at the point at which things could go differently – either better or worse – what are the choices? Who is affected (partner, children, neighbours, friends, innocent by-standers)?

Week 5

Explore scenarios at different life stages: as a teenager – as a young adult – as a parent in their 40s to illustrate where a drinking trajectory might lead in the future

Adult (your parents' age): Good day/not so good day
The young adult is now in their 40s – what is their life like now? Do they have a family? Role play a new scenario, it could be a similar situation but it doesn't have to be.

What is the situation? where are they? who is there? What are people drinking? How much are they drinking? How are they behaving?

If the young adult carries on a pattern of heavy drinking – what is the typical drinking scenario?

If the young adult moderates or controls their drinking, or perhaps they don't drink alcohol at all?

Take the good day/not so good day idea with the heavy drinker and freeze frame the scenario at the point at which things could go differently – either better or worse – what are the choices? Who is affected (spouse, children, neighbours, friends, innocent by-standers)?

Week 6

Play back role play scenarios to each other

Discuss different situations and range of different solutions/choices

Summary *"What have you learnt?"*

Have you learnt anything about yourself?
Have you got a goal in life? An achievable one?
Do you know where you're headed?
What's stopping you?
Are you going to let things hold you back?

Repeat surveys
Ask for volunteers to interview
Nominate parents

It's My Life: Staying in Control – version 2

'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

This intervention is designed to take on a motivational interviewing (MI) approach. MI is a therapeutic technique employed to encourage young people to generate their own internal motivations for changes in their attitude or behaviour. It was originally developed and has been effectively used to elicit change regarding substance misuse. Previously MI has been used with individuals or small groups of adolescents who have been identified as having an issue with substance misuse, but the aim of this intervention is to use the MI approach as a preventative technique at a whole class level with adolescents before they engage with alcohol. National statistics show a sharp increase in adolescents drinking alcohol around year 9, so it is proposed that this intervention be implemented at the start of their secondary school phase, in year 7.

The intervention will not include interviews as suggested in the name 'motivational interviewing' but is structured around the MI Menu of Strategies and embraces the spirit and principles of MI, as outlined below:

The spirit of MI:

Collaboration: "*the method of motivational interviewing involves exploration more than exhortation, interest and support rather than persuasion or argument*" (Miller & Rollnick, 2012 p15)

Evocation: MI is not about imparting information but finding things within the person and drawing them out. It requires finding intrinsic motivation for change from within the person and evoking it.

Autonomy: Any responsibility for change is left with the client, no matter what the views of the professionals. It is the client rather than the counsellor that should ultimately present arguments for change.

The principles of MI:

Express empathy – to view matters from the client's point of view, to establish their trust, allowing them to share their thoughts with you, thus facilitating discussion that might result in their desire to change.

Support self-efficacy – helping the client to stay motivated. Maintaining that there is 'no right way' to change is a useful MI technique and perhaps sharing stories of other clients' success stories.

Roll with resistance – don't challenge client resistance, but 'roll' with it harnessing the momentum to explore further viewpoints. The aim is to reduce resistance and discourage the client from becoming more argumentative.

Develop discrepancy - "*Motivation for change occurs when people perceive a discrepancy between where they are and where they want to be*" (Miller, Zweben, DiClemente, & Rychtarik, 1992, p. 8). Work to examine the discrepancies between where the client is now and where they'd like to be in the future. Guide the client to the self-realisation that if they make changes to their behaviour, those future goals might be achievable.

It is important that the intervention classes evoke the pupil voice, that through discussion and group activities, the young people form their own opinions and ideas. The OARS interaction technique should also be used to encourage discussion, but also to affirm emerging ideas and to help pupils to reflect upon these.

The OARS interaction technique:

*O*pen-Ended Questions - A question that cannot be answered with yes or no, that opens up a larger conversation.

*A*ffirmations - Recognition of the pupils' strengths.

*R*eflective Listening - Listen to the class and focus on change talk. Reflect back to them what they have told you, making connections between themes.

*S*ummary - Announce that you are going to summarize, list selected elements of what the class has told you and ask them to make meaning of these things.

To further facilitate pupil-focused learning, it is suggested that the classroom be re-organised so that the class sit round in a circle (without the formality of desks) or in small groups (depending on the activity). Minimal use of Powerpoint slides is recommended.

Each session will also start with a short mindfulness exercise. This not only helps pupils to relax and focus their attention, but also creates a different atmosphere in the classroom.

The suggested weekly intervention content is outlined as follows:

Week 1

Introduction *"All about you"*

Discussion about what we're going to do in the classes and why. Talk about the evaluation element (ie the survey – the research is to test whether these classes make a difference before and after taking part) Explain the ethical aspects – confidentiality issues and exceptions to those – stress that they are not being tested or judged, but to be as honest as possible with their responses. Also, stress that no one is expected to discuss anything personal/private in the sessions, but any matters that are discussed should remain within the class (so, respect one another and don't go gossiping to anyone else!)

Any questions before we start?

Lesson Objectives

• Awareness of ourselves - *who we are, what we like doing, how we spend our time, what we'd like to do in the future, what's preventing us from doing some activities now (cost, time, access)*
• Awareness of others – *what do other people enjoy?*
• Recognising that we are all different

1. Mindfulness exercise: (Lorraine can supply other ideas)

Stand relaxed with your legs slightly apart, give your body a gentle shake to loosen your arms and legs, close your eyes, breathe in over seven counts and breathe out over eleven counts. Repeat three or four times.

2. Complete survey (10-15 minutes)

3. Complete Q-sort (20 minutes)

'Getting to know you' activities

4. Discuss in groups:

What do you like/enjoy? Doing? Where? When? - *at school, at home, outside school, in the holidays - hang out with mates, watch TV, X-box, snap chat, cinema, park, clubs, sports*.
Write your ideas in your books (or all on large sheet of paper) – maybe act out some of them.
Feedback to class – verbally or acting.
What else would you like to do, but can't do at the moment? What is stopping you*? (cost, time, availability)* – this could be a homework activity if not enough time in class.

Week 2

Strengths *"everyone has their strengths"*

Learning Objectives

> * *Recognising your strengths and why they are important*
> * *Recognising the difference between character and skill*
> * *Awareness of others – other people's strengths*

1. Mindfulness exercise: (Lorraine can supply other ideas)

Stand relaxed with your legs slightly apart, give your body a gentle shake to loosen your arms and legs, close your eyes, imagine you're in your favourite place, a special place, it can be anywhere (in your bedroom, on a beach, on top of a mountain) what does this place look like? What can you see? Are you sitting, standing, lying down? What can you feel? (your soft bed, warm sand, the sun on your face?) What can you hear? What can you smell? Imagine you can taste some fresh fruit in your mouth?

2. Last week we talked about what sorts of things you like doing and we thought about other activities that we might like to try and what was stopping us from doing certain things – discuss …

All of these activities that you do, show that you are interested in things and that you have 'strengths' – you might be sporty, sociable, good at concentrating, artistic, determined etc etc

These strengths fall into two categories:

Character – what makes you who you are: compassionate, kind, gentle (these strengths are not really learned, they are natural to you)

Skill – you can work at and develop to make you better at them: fast at swimming, good at drawing, good at maths

Brainstorm what 'strengths' could be, examples:

Compassionate	sensitive	reliable	trustworthy
Confident	energetic	gentle	friendly
Cheerful	kind	sense of humour	creative
Communicative	hard working	thoughtful	brave

Discuss in small groups to identify your own/each other's strengths (maybe just two) what are your main strengths? (you might not even recognise your own qualities) – write a list together or in books – maybe act out – and a nominated speaker from each group to feedback to whole class, (or volunteers could enact their strength for the class to guess) facilitated by pupil volunteer who can write them on the whiteboard. Perhaps send postcards to other members of the *class "I think you are a very kind person" "I think you're great at football"*

3. Extension activity – complete worksheets (stick in books) – identifying strengths

4. Discuss employment – "employability" facets – what do you think most employers are looking for in their new employees? What small/medium businesses (majority of businesses) are actually looking for:

Small Medium Enterprises (SMEs) account for 99.2% of all businesses and 47% of all employment in England

SMEs recruit mainly from school leavers

SMEs value general employability skills rather than particular vocational or technical skills

The top three employability skills:

- o Willingness to learn

- o Ability to take instruction

- o Work ethic/professionalism

Homework activity

Think about your (hidden) strengths and also about the strengths that the people around you have, for example, your mum, your teacher, your friends and try to recognise why these things are important – *what do other people do for you? How does that show their strengths?*

Week 3

Aspirations *"where do you want to be in the future?"*

Learning Objectives

> - *Establish your future goals*
> - *Recognising the difference between dreams and achievable goals*
> - *Recognising what might help or hinder you in achieving your goals*

1. Mindfulness Exercise:

2. At this point in time (starting high school) you have a lot of potential to go almost anywhere …

- To be almost anything you choose
- To live where you choose etc

Are you going to live at home with your parents/carers all your life?

What kind of place would you like? Big, small, old, modern

Where? town, city, countryside, abroad

Garden, hot tub, pool, gym

Will you have a car?

What kind of lifestyle do you want to live?

Holidays? Meals out, shopping, concerts, cinema, adventures

"it's your choice, you have to decide"

Examples of rags to riches stories – if possible use local examples

Working in groups – draw what your future will look like (or discuss in groups and then draw own version in your book)

3. Barriers/Facilitators - How will you achieve your goal?

Discuss differences between dreams and achievable goals

Certain things will help you or hinder you in achieving your goals

What things will help you get to where you want to be? Or hinder you in getting there?

Brainstorm whole class (facilitated by student) or in groups and feedback

Help	**Hinder**
Education	getting in trouble at school
Voluntary work	getting in trouble with police
Part time job	Stealing
Getting on with people	drinking
Being cheerful	drugs
Good health	poor health

Discuss how these things might help/hinder. In particular, discuss how alcohol might be a barrier to achieving your goals.

Anyone been in trouble? Discuss situations where alcohol could get you/or others into trouble or create other problems.

4. We are going to take alcohol as an example of something that can potentially hinder you in achieving your goals/potential in life. So, we will begin by finding out a bit more about alcohol.

Alcohol Survey – pupils to design in groups

Come up with 3 or 4 questions and design a short survey.

find out what people think about the drinking rules, what age should people be allowed to drink? How much should people drink to stay healthy? How much should alcohol cost? Should you be able to drive if you've had any amount of alcohol?

Homework activity: ask people to complete your survey – parents, family friends, teachers, local shop keepers, lolly-pop man etc and record the results

Week 4

Learning about alcohol

Learning Objectives

> • Awareness of the risks of alcohol misuse
> • Recognising how alcohol might help or hinder you in achieving your goals

1. Mindfulness exercise

2. Discuss outcomes from homework survey exercise – were pupils surprised by peoples' opinions, did they have some interesting discussions?

3. Introducing 'Lucy' reformed alcoholic (teacher in role)

We have a special visitor today, she has very kindly agreed to come and talk to you about her experiences. In the past she has had a problem with alcohol, but now with the help of Alcoholics Anonymous she is recovering. You are invited to ask her questions, to find out about her life and experiences, but please be very polite and respectful and ask sensible questions.

4. Alcohol Quiz (information sharing/awareness raising)

Clear the floor and assign one side of the room to TRUE and the other side FALSE – pupils can position themselves according to their responses (in the middle for don't know). Ask them to explain why they have chosen to stand in each place. Discuss/debate responses.

Over the next few weeks we are going to do some role play to help us explore situations involving alcohol – how people behave, how to keep yourself safe, strategies to avoid drinking too much …

Homework activity (or start to do this in groups in class if enough time): can you start to think about some situations where people might be drinking (eg at home, in the park, in a pub) – think about developing a main character who is a teenager and build a situation – where are they? who is there? What are people drinking? How much are they drinking? How are they behaving?

Week 5

Role Play Teenager: Good day/not so good day

Learning Objective

> * Awareness of drinking levels – moderate/excessive – and how situations may change accordingly
> * Recognising that you can manage/control drinking
> * Strategies to avoid excessive drinking and keeping safe

1. Mindfulness Exercise

Organise the class into groups of 5 or 6.

2. Alcohol units activity – bring in props – wine glass, pint glass, shot glass and some coloured water (wine coloured and beer coloured) get each group to pour out what they think a unit of alcohol is into each glass. Play the drink aware short film about units of alcohol and the impact on your body.

Maybe let the groups use the glasses as props in their role play scenarios

3. Role play scenarios to see how a situation escalates with more alcohol involved or with less alcohol (using the Motivational Interviewing idea of good days and not so good days from the Menu of Strategies).

Using the role play ideas that you started to think about for your homework/last week, develop a plot to explore:

A good day (when drinks moderately) – the teenager is drinking and having a good time, things are going well

A not so good day (when drinks too much) – things don't go so well, what happens? Why does it happen? Who is affected (friends, parents, siblings)? Can you pinpoint the time that things start to change? What could be done to avoid things changing for the worse?

Strategies "avoiding situations"

Think about how to avoid getting involved when you don't want to

The message is not 'don't drink' or 'don't have fun' or 'don't be cool with your mates' it's about individual choice and self-control and keeping yourself safe.

There might be situations where you know people are going to be drinking a lot (binge drinking) and looking for trouble (kicks they might say) – acting like idiots, getting aggressive, putting yourself at risk

Think about how you might moderate your behaviour/engagement with drink

Eg my daughter's friends all drink too much at parties and try to snog boys etc and everyone takes the micky behind their backs – she thinks some of the girls are degrading/disrespecting themselves, all kinds of rumours going round school – not cool …

what does she do to avoid getting into those situations? Think about your own strategies – practical solutions – drink more slowly, alternate with soft drinks, use low alcohol products, mixers

Have a goal – sporty, healthy – likes nice holidays, clothes, make-up, meals out – get good job, earn own money to support that lifestyle, don't depend on anyone else

In the role play scenarios – perhaps use a freeze frame technique ie at the point of choice, what are the options? If you take option A what might happen, if you take option B what happens then?

Week 6

Role Play Young Adult: Good day/not so good day

Learning Objectives

> - Awareness of drinking levels – moderate/excessive – and how situations may change accordingly
> - Awareness of how drinking habits can form over time
> - Recognising that you can manage/control drinking
> - Strategies to avoid excessive drinking and keeping safe

1. Mindfulness Exercise

Organise the class into groups of 5 or 6. (either keep same groups as before or try working in different groups)

2. The teenager has grown into a young adult – what is their life like now? Discuss the impacts of regular drinking from teenage to young adulthood. What might the young adult's life be like now?

Role play a new scenario, it could be a similar situation but it doesn't have to be.

What is the situation? where are they? who is there? What are people drinking? How much are they drinking? How are they behaving?

If the teenager carried on a pattern of heavy drinking – what is the typical drinking scenario?

If the teenager moderated or controls their drinking, or perhaps they don't drink alcohol at all?

The role play might show a group of young adults all enjoying a drink together, but one individual drinks too much and loses control …

Take the good day/not so good day idea with the heavy drinker and freeze frame the scenario at the point at which things could go differently – either better or worse – what are the choices? Who is affected (partner, children, neighbours, friends, innocent by-standers)?

Week 7

Adult (your parents' age): Good day/not so good day

Learning Objective

> • Awareness of drinking levels – moderate/excessive – and how
>   situations may change accordingly
> • Recognising that you can manage/control drinking
> • Strategies to avoid excessive drinking and keeping safe
> • that you can manage/control drinking

1. Mindfulness Exercise

Organise the class into groups of 5 or 6. (either keep same groups as before or try working in different groups)

2. We have been exploring drinking scenarios at different life stages: as a teenager and as a young adult, now we're looking at someone in their 40s, perhaps the age of your parents or carers.

Discuss the impact of prolonged drinking habits over years and what that person's life might be like now – do they have a family? Do they work? Are they healthy?

Role play some of these ideas in a new scenario, it could be a similar situation to previous weeks but it doesn't have to be.

What is the situation? where are they? who is there? What are people drinking? How much are they drinking? How are they behaving?

If the young adult carried on a pattern of heavy drinking – what is the typical drinking scenario?

If the young adult moderates or controls their drinking, or perhaps they don't drink alcohol at all?

Take the good day/not so good day idea with the heavy drinker and freeze frame the scenario at the point at which things could go differently – either better or worse – what are the choices? Who is affected (spouse, children, neighbours, friends, innocent by-standers)?

Week 8

Summary *"What have you learnt?"*

Learning Objective

> - Awareness of drinking levels – moderate/excessive – and how situations may change accordingly
> - Recognising that you can manage/control drinking

1. Mindfulness Exercise

2. Conscience Alley (role play)

Discuss in groups and then role play the positive and negative voices that might persuade/dissuade you from drinking excessively

Discuss different situations and range of different solutions/choices

3. Reflecting on the intervention classes overall

Have you learnt anything about yourself?

Have you got a goal in life? An achievable one?

Do you know where you're headed?

What's stopping you?

Are you going to let things hold you back?

What went well? Even better if?

4. Repeat survey

5. Certificates (fill in your strengths, your plans for the future and a photograph of yourself)

Appendix V: Ethics Documents

Ethics approval letter – Application 1, November 2015
Ethics approval letter – Application 2, November 2016

Discussion paper: Ethical decision making regarding the 'opt in' or 'opt out' methods of consent

School Intervention Proposal
School Management Consent/Agreement Letter
Letter – parental consent
Letter – invitation for parent interview
Participant Information Sheet – parental consent
Participant Information Sheet – parental interview
Participant Information Sheet – pupils
Participant Information Sheet – teachers
Consent Form – parents
Assent Form – pupils
Consent Form – teachers
Fidelity Survey - teachers
Draft Interview Schedule – parents
Draft Interview Schedule – pupils
Draft Interview Schedule – teachers

21 December 2015

Dear Joanna,

RE: ETHICS APPLICATION HSCR15-102 – Developing an effective school-based intervention to address adolescent wellbeing, self-esteem and aspiration in order to facilitate healthy lifestyle choices with respect to alcohol consumption

Based on the information you provided, I am pleased to inform you that application HSCR15-102 has been approved.

If there are any changes to the project and/ or its methodology, please inform the Panel as soon as possible by contacting Health-ResearchEthics@salford.ac.uk

Yours sincerely,

Sue McAndrew
Chair of the Research Ethics Panel

12 December 2016

Dear Joanna,

RE: ETHICS APPLICATION–HSR1617-12–'Developing a school-based intervention to facilitate adolescent behaviour change with respect to alcohol consumption.'

Based on the information you provided I am pleased to inform you that application HSR1617-12 has been approved.

If there are any changes to the project and/or its methodology, then please inform the Panel as soon as possible by contacting Health-ResearchEthics@salford.ac.uk

Yours sincerely,

Sue McAndrew
Chair of the Research Ethics Panel

Ethical decision making regarding the 'opt in' or 'opt out' methods of consent

Joanna Bragg 29/04/16

In addition to the discussion paper (below) already submitted to the Ethics Committee, data are now available from the pilot study conducted for the PGR research project entitled *"Its My Life: Staying in Control" Developing a school-based intervention to facilitate adolescent behaviour change with respect to alcohol consumption* that further supports the rationale to permit a parental 'opt out' clause for the main project study.

Three schools were recruited for the study, all located in equivalent areas of significant socio-economic deprivation. In all cases the senior leadership agreed to the school participating in the study, which (in the two intervention schools) involved embedding a six week classroom intervention into their compulsory PSHE curriculum and (in all three schools) the collection of survey data. Senior leaders were informed about the content of the intervention and survey beforehand and were invited to view the documents. Considering that child safeguarding is of the highest importance in schools, none of the senior leaders expressed any concern regarding the content of the intervention or the survey.

Schools were informed that parental informed 'opt in' consent would be required. However, the first school disregarded this requirement and sent out for parental 'opt out' consent – no objections were received from parents. A class of 30 pupils was nominated for the intervention which proceeded with the teacher delivering the intervention. The class were requested to take letters home to their parents to ask them for their signed 'opt in' consent – three forms were returned. There were a number of requests for further forms because of lost letters. The pupils reported that they enjoyed taking part in the intervention and seemed to have picked up the key messages. Nine pupils volunteered to be interviewed at the end of the intervention, but were informed that they would have to have signed parental consent in order to take part. The class were offered a prize draw raffle to all those who returned signed forms – two further forms were returned. Of the five pupils who returned signed parental consent, only four had been present in the first lesson and had completed the pre-intervention survey, resulting in four cases that can be analysed as part of the study.

In the second school, all year 7 pupils were invited to take part in the intervention classes and 150 pupils volunteered. They were instructed that they must get signed parental consent in order to take part in the evaluation component. Out of the 150 pupils who took letters home, only 11 returned signed consent forms – and only 8 pupils were present in the first intervention class. Having spent time talking to the eight pupils, it was clear that they were from supportive home backgrounds (data from the pre-survey indicates that they eat their meals together as a family and that the pupils have conversations with their parents about risky

behaviours). Although these pupils are likely to benefit from the intervention, they are not the cohort of pupils that the intervention is particularly designed to benefit.

The control school, who have yet to provide their completed student surveys, commented on the difficulty in obtaining parental 'opt in' consent and were doubtful that they would get many responses.

So, out of a desired 90 pupils intended to participate in this pilot study, there are only a potential 12 complete cases to analyse from the intervention schools (assuming the eight pupils in the second school remain throughout the intervention) plus an unknown number from the control school, which have yet to materialise. I am thus unable to carry out a sample size calculation for the main study, which was one of the primary outcomes intended for the pilot.

This pilot study shows that the scientific rigour is severely compromised by the need for parental 'opt in' consent. Specifically, this intervention is aimed to benefit the most disadvantaged pupils in UK Schools. It is already known that this group (i.e. pupils eligible for free school meals) shows a response rate of just 10% when relying on parental 'opt in' (Education Endowment Foundation [EEF], 2014). Because of this, EEF concludes that 'opt in' consent seriously jeopardises the recruitment and validity of findings, and my findings add support to these conclusions.

Discussion paper:

Ethical decision making regarding the 'opt in' or 'opt out' methods of consent

Penny A. Cook and Joanna Bragg 29/02/16

This discussion paper puts forwards points in favour of the case for 'relaxing' the current policy regarding the automatic ban on allowing 'opt out' consent clauses. The arguments presented here have particular reference to school-based research projects where parents are required to provide consent for their children to take part in a research study. The maintenance of high ethical standards is undeniably central to good quality research, and appropriate guidelines have been clearly specified by bodies such as the British Psychological Society (BPS), the British Educational Research Association (BERA) and the Economic and Social Research Council (ESRC). Each document details the circumstances and conditions in which informed consent must be obtained, broadly that *"research subjects must be informed fully about the purpose, methods and intended possible uses of the research, what their participation in the research entails and what risks, if any, are involved"* and *"research participants must participate in a voluntary way, free from any coercion"* (ESRC, 2015). However, there is a lack of specific guidance as to whether a particular method of consent should be employed, either; *'opt in'* whereby an individual takes an affirmative action demonstrating their intention to participate; or *'opt out'* where an individual's willingness to participate is assumed unless they actively decline.

The following three points (detailed below) support a rationale for assuming parent/guardian consent using the 'opt out' method in particular research contexts where participants will not be placed at significant risk through their involvement. For example, in an educational situation in which school leadership has agreed to the delivery of an intervention that is designed to benefit the most vulnerable children amongst their cohort, their guidance should arguably be sought regarding consent procedures, both for reasons of best practice but also to maximise participation. It would be counterproductive to conduct the research if parental consent could not be obtained for the very children who are the focus of the research. Following the parental 'opt out' consent procedure, pupils as the actual research participants would then be required to provide their own informed consent by the 'opt in' method. The ESRC Framework raises the question of whether adult approval is appropriate in certain research contexts:

"Researchers should consider whether mature children can confirm consent without adult approval, for example there may be circumstances where seeking consent from parents could jeopardise the research (for example, in research into teenage sexuality or alcohol use). In such circumstances, researchers will need to regard the potential risk to the principal participants of the research as a priority." (ESRC, 2015).

Ensuring that ethical procedures are followed whilst still maximising research participation has a direct impact on the quality of potential research outputs and therefore on the reputation of the University of Salford.

1. Inclusive practice

Research evidence concludes that the 'opt in' method of consent results in lower response rates and in biased samples (Frissell, McCarthy, D'Amico, Metrik, Ellingstad, & Brown, 2004; Hewison & Haines, 2006; Junghans, Feder, Hemingway, Timmis, & Jones, 2005). This might be due to apathy or lack of inertia: for example in a school setting, parents might forget or fail to respond, they might not read the correspondence or perhaps even receive it (Boddy, Neumann, Jennings, Morrow, Alderson, Rees et al., 2011). The issue of biased sampling could be particularly problematic in research that specifically targets participants from socially and economically disadvantaged backgrounds whereby the 'opt in' method of consent might actually exclude the participants that the research is designed to impact on (Boddy et al., 2011). The Education Endowment Foundation (EEF, 2014), major funders of educational research aimed specifically at benefiting the most disadvantaged pupils in UK Schools, cite an average response rate of 10% from their target population of pupils eligible for free school meals when using the 'opt in' method. They are concerned that a requirement for 'opt in' consent could seriously jeopardise not only their recruitment but also the validity of their findings.

The American study by Frissell et al (2004) analysed the *Impact of consent procedures on reported levels of adolescent alcohol use* (Frissell et al., 2004). The study examined bias related to parental consent procedures in school-based survey research on alcohol behaviour. The reported outcomes were that traditional active parental consent ('opt in') resulted in i) under-representation of lifetime drinkers and ii) lower levels of high-risk drinking compared with the 'opt out' method.

Hewison (University of Leeds) and Haines (London School of Hygiene and Tropical Medicine) were concerned that ethical requirements may affect the quality of primary research. In their article *Confidentiality and consent in medical research:* Overcoming barriers to recruitment in health research (Hewison & Haines, 2006) they claim that the 'opt in' method of consent results in lower response rates and they found evidence of increased bias in the sample. Their study concludes that; i) the scientific quality of health research is compromised using the 'opt in' method; and ii) there is no evidence that potential participants object to the 'opt out' method.

Junghans and colleagues (2005) evaluated the effect of 'opt in' compared with 'opt out' recruitment on a study of patients with angina, *Recruiting patients to medical research: double blind randomised trial of "opt-*

in" versus "opt-out" strategies (Junghans et al., 2005). They concluded that the 'opt in' method of consent resulted in lower response rates and a biased sample. They propose that 'opt out' should be the default strategy for studies that present low risk for participants.

2. Flexibility to fit with recommended school approach

Schools are autonomous organisations - academies and free schools in particular operate independently of their Local Authority. Child safeguarding is high on the school agenda especially in schools located in areas of significant social and economic disadvantage and has become so increasingly throughout the recent years of austerity due to the additional pressures on low income families and the resultant impact on children. It could be argued therefore that schools being the responsible agents with the child's best interest at heart (perhaps better than the parents in some instances) are well qualified to decide how best to obtain parental consent for a child's participation in research. As the gatekeepers of children's safety, schools will follow their own protocol to ensure that children are protected and this varies between schools.

Ideally the researcher could take the lead from each school and use whichever method of consent is preferred by the school in accordance with their policy. This was the approach taken by Fernie and colleagues (Fernie, Peeters, Gullo, Christiansen, Cole, Sumnall et al., 2013) from Liverpool John Moores University in their study *Multiple behavioural impulsivity tasks predict prospective alcohol involvement in adolescents.* They used a cross-legged design involving 287 pupils aged 12-13 sampled from five schools in Merseyside. All pupils gave consent to participate. Parents/Guardians provided either 'opt in' or 'opt out' consent depending on the preference of each school.

3. Maintaining a competitive research profile

In the current higher education context whereby universities are judged according to the quality and quantity of their research output and its impact both within and beyond academia it is important to maximise research potential. It is evident that other UK institutions, including University of Manchester and Liverpool John Moores University amongst other research competitors allow the method of 'opt out' consent in their published research. By completely excluding the use of 'opt out' consent, the quality of some research studies may suffer and the potential to produce high level competitive research output may be compromised.

Manchester University's *From Boys to Men Project* (Fox et al., 2014) www.fromboystomenproject.com is an example of a study that would not have been possible for researchers from the University of Salford to gain ethical approval for under the current framework. It involved the implementation of a six-week class-based

intervention designed to raise awareness of domestic violence. The sample of 1,203 participants aged 13-14 were recruited from 13 schools in Staffordshire. All pupils gave their consent to participate and complete before and after survey measures and also one at three-month follow-up. Parents/Guardians were informed of the project and allowed to opt their child out of the study. A lack of response from parents/guardians was taken as implied consent. The surveys measured attitudes towards domestic violence, incidence and prevalence of domestic abuse victimisation (personal experience as victim), witnessing domestic abuse between adult carers and self-reported domestic abuse perpetration.

The Economic and Social Research Council (ESRC) awarded the study an impact acceleration grant which resulted in outputs including; a project website, with reports, articles, research materials, places to seek help, links to support organisations; and an end of project event. Researchers Gadd and Fox were invited to meet with policy makers and other influential bodies, including the Home Office, Welsh Government, Scottish Parliament, National Institute for Health Care Excellence (NICE) and the Violence Against Women and Girls (VAWG) Strategy Group. They also had significant coverage in the national media, including TV, radio and newspapers.

This is an example of a high quality, high impact, high profile piece of work that relied on getting access to the most vulnerable young people; the very individuals who would be least likely to take part if participation had depended on parents/guardians returning a form.

References

Boddy, J., Neumann, T., Jennings, S., Morrow, V., Alderson, P., Rees, R., & Gibson, W. (2011). *The Research Ethics Guidebook* Retrieved from http://ethicsguidebook.ac.uk/

EEF. (2014). *Consent and the Data Protection Act: Advice for Evaluators.* Retrieved from Education Endowment Foundation, London.: https://educationendowmentfoundation.org.uk/uploads/pdf/EEF_guidance_for_evaluators_on_consent_and_the_Data_Protection_Act_FINAL.pdf

ESRC. (2015). *ESRC Framework for Research Ethics.* Retrieved from Economic and Social Research Council: http://www.esrc.ac.uk/files/funding/guidance-for-applicants/esrc-framework-for-research-ethics_2015/

Fernie, G., Peeters, M., Gullo, M. J., Christiansen, P., Cole, J. C., Sumnall, H., & Field, M. (2013). Multiple behavioural impulsivity tasks predict prospective alcohol involvement in adolescents. *Addiction*, *108*(11), 1916-1923.

Fox, C. L., Corr, M.-L., Gadd, D., & Butler, I. (2014). Young teenagers' experiences of domestic abuse. *Journal of Youth Studies, 17*(4), 510-526.

Frissell, K. C., McCarthy, D. M., D'Amico, E. J., Metrik, J., Ellingstad, T. P., & Brown, S. A. (2004). Impact of consent procedures on reported levels of adolescent alcohol use. *Psychology of Addictive Behaviors, 18*(4), 307.

Hewison, J., & Haines, A. (2006). Confidentiality and consent in medical research: overcoming barriers to recruitment in health research. *BMJ: British Medical Journal, 333*(7562), 300.

Junghans, C., Feder, G., Hemingway, H., Timmis, A., & Jones, M. (2005). Recruiting patients to medical research: double blind randomised trial of "opt-in" versus "opt-out" strategies. *Bmj, 331*(7522), 940.

It's My Life: staying in control:
A universal school-based intervention to improve adolescent wellbeing and reduce alcohol consumption

Joanna Bragg, University of Salford (j.bragg@edu.salford.ac.uk)

Adolescents in the UK are amongst the highest consumers of alcohol worldwide for their age group. National trends show that adolescent alcohol consumption increases from 12% in year 7 to 74% in year 11, with a sharp increase around year 9 (see Chart 1).

Chart 1: Percentage of children who have consumed alcohol at least once (2012)
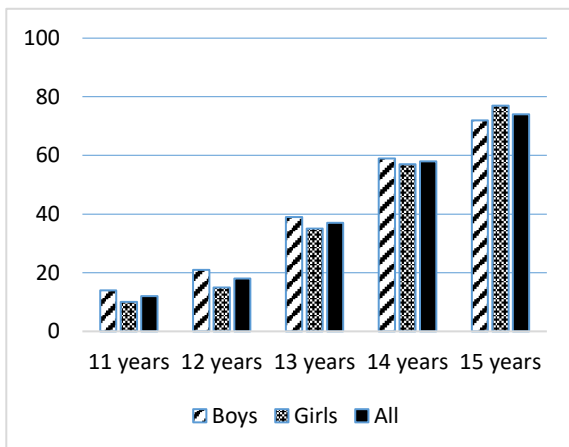
Despite a reduction in consumption levels over recent years there are still evident pockets of 'binge' drinking that are cause for concern. There are many reasons that adolescents choose to drink alcohol, such as family and peer influence. This age group are particularly susceptible to peer pressure due to developmental changes that occur in the brain as they pass through puberty. As a result, they may struggle to comprehend the longer-term impacts of their behaviour and to anticipate adverse consequences. Potential risks associated with harmful alcohol consumption for the younger population include alcohol-related violence and regretted sex.

More disadvantaged social groups tend to experience disproportionately higher levels of alcohol attributable harm, adolescents being more likely to engage in risky behaviours, are particularly vulnerable to the risks of alcohol misuse. Research evidence shows a relationship between alcohol consumption and school disengagement, increasing the likelihood of a child leaving with poor educational outcomes, such as NEET (not in education, employment or training). The social

binge drinking adolescents in the UK were found to have almost a five-fold increased risk of becoming pregnant or getting someone pregnant …

determinants for both health and education are characterised by factors such as low self-esteem, lack of aspiration, poor parenting skills and a lack of good role models. It would therefore make sense, given the timetabling pressures faced by schools, to address the matter of alcohol awareness within a broader context.

The aim of this intervention is to improve pupil wellbeing, addressing issues of low self-esteem and lack of aspiration, alongside awareness raising and information sharing, to both motivate and better equip children to make more informed, responsible choices regarding alcohol consumption.

School Intervention Proposal:

Aim: To trial and evaluate the effectiveness of a school-based intervention incorporating motivational interviewing as a therapeutic approach combined with role play to target adolescent wellbeing, self-esteem and aspiration that raises awareness of alcohol misuse with the longer term aim of promoting healthier life style choices.

What is the intervention? The intervention will consist of a six-week class-based programme which would ideally be incorporated into the PSHE curriculum. The sessions will be structured to develop young peoples' awareness of themselves, their skills, their plans for the future, their knowledge, understanding and attitudes towards problematic behaviours such as alcohol misuse, their ability to make their own decisions and take ownership of their destiny. An element of role play will be incorporated to encourage young people to consider hypothetical scenarios from different perspectives by playing out characters such as the parent, the teacher, the police officer, the friend, the health professional etc. The sessions will be facilitated in a non-didactic manner, discussions will follow the young peoples' ideas and they will be encouraged to debate and draw their own conclusions.

Who will participate? This is designed to be a preventative programme to target young people in year 7. Year 7 is targeted because very few young people consume alcohol at this age. However, by the age of 13 (year 9), around 60% of young people have consumed alcohol. Transition to high school is also a vulnerable time for young people, as they adjust to new friendship groups.

Schools will be allocated at random to participate in the trial either as a *treatment school* in which the pupils receive the intervention or a *control school* in which pupils will only complete the surveys. At the end of the evaluation the control schools will also receive the intervention materials for their own use.

What will participation involve? The intervention will be applied to year 7 pupils.
The evaluation of the intervention will adopt a mixed methods approach. A survey will be carried out: before the intervention to capture the level of young peoples' wellbeing, their attitudes towards alcohol and their risk-taking tendencies; and afterwards to assess whether the intervention has had an impact on wellbeing or attitude. In addition, interviews will be conducted with those teachers, parents and pupils who experience the intervention.

Who will deliver the intervention? The school will nominate a member of staff to deliver the intervention with training and support from Joanna Bragg, experienced Research Associate studying for a PhD at University of Salford.

What incentive is there for participation? It is anticipated that the school will benefit in terms of the intervention making a positive impact on student wellbeing and self-esteem. It is hoped that this impact will be reflected in students' increased confidence, motivation and engagement, and ultimately lead to improved attainment outcomes.

The school will receive evaluation feedback. They will also be free to use the intervention resources themselves in the future. Participation is free – the school will incur no costs.

If you are interested in participating or would like to discuss further, please contact:
j.bragg@edu.salford.ac.uk **or 07961 644443**

Allerton Building L526
College of Health and Social Care
University of Salford
The Crescent
Salford
M5 4WT

Email: j.bragg@edu.salford.ac.uk
Tel: 07961 644443

Date

Dear *(title of appropriate person)*

I am an experienced Research Associate, currently studying for a PhD at the University of Salford. My research study is entitled *'It's My Life: staying in control' Developing a school-based intervention to facilitate adolescent behaviour change with respect to alcohol consumption* and will address pupil wellbeing as the enabler of change. The purpose of the study is to develop and trial a six-week class-based intervention which would be integrated into your PSHE curriculum and delivered to year 7 pupils. The aim of the research is to change attitudes and behaviour relating to alcohol, resulting in a long-term reduction in alcohol consumption. The intervention will utilise a motivational interviewing approach with the pupils to develop their self-esteem, confidence and aspirations in order to improve their wellbeing. Role-play will be used to explore and raise awareness of the implications of alcohol misuse. Through this programme of work, it is anticipated that pupils will develop a positive attitude that will enable them to make healthier lifestyle choices in the future regarding risky behaviours which will lead to a longer-term reduction in alcohol consumption. For further information about the intervention, please refer to the attached proposal.

Prior to undertaking the study, I need your agreement to participate and your permission to approach your PSHE department to take part in the study. I would like them to act as my contact point and to nominate one class of year 7 pupils to participate. Training will be provided to deliver the intervention and the relevant information documents for parents and pupils will be also be supplied, as their consent to participate in the evaluation part of the research will be required.

I can assure you that I will make every effort to minimise any disruption to the normal working environment of your school. All data collected and any information used in publications will remain confidential. I am currently applying for ethical approval for the study from the University of Salford, College of Health and Social Care Research and Governance and Ethics Committee to ensure that the research is carried out appropriately. My research is supervised by Professor Penny Cook (P.A.Cook@salford.ac.uk; 0161 295 2804).

If you are willing to take part in the study, please complete and return the attached reply slip (by post to the above address, or electronically to j.bragg@edu.salford.ac.uk). If would like discuss matters further before making a decision, please do not hesitate to contact me. I hope that you will take the opportunity to participate in this trial and I look forward to hearing from you.

Yours Sincerely

Joanna Bragg

Developing a school-based intervention to facilitate adolescent behaviour change with respect to alcohol consumption

I am interested in taking part in this study *(please tick)*

Name of School: _____

Name of Contact (printed): _____

Name of Contact (signed): _____

Date: _____

Please return:

by post to:
Joanna Bragg, Room L526 Allerton Building, College of Health and Social Care, University of Salford, The Crescent, Salford, M5 4WT

Or by email to: j.bragg@edu.salford.ac.uk

Allerton Building L526
College of Health and Social Care
University of Salford
The Crescent
Salford
M5 4WT

Email: j.bragg@edu.salford.ac.uk
Tel: 07592 909123

Date

Dear Parent/Guardian

I am writing to tell you about a research study that will be conducted with some of the pupils in year 7 at *[insert name of school].* The research is to test the effectiveness of a new programme of activities entitled ***It's My Life: staying in control****.* Schools have been recruited to run the programme for six weeks and the aim is to help pupils to recognise their strengths and develop their self-esteem and aspirations in order to encourage healthier attitudes and positive behaviour regarding alcohol.

I am a research student at the University of Salford and will be evaluating the effectiveness of the programme as part of my study. The evaluation will involve the completion of surveys and possibly the invitation to be interviewed. Further details about the programme and evaluation are outlined on the attached sheet, but if you have any queries, please do not hesitate to contact me. If you have any objections to your child taking part in the evaluation, please complete and return the attached slip to withdraw your child from involvement in survey completion and/or interviews. Reply slips should be handed to your child's PSHE teacher or can be emailed or posted to me personally using the contact details at the top of this letter.

Yours sincerely

Joanna Bragg
PhD Student

I understand that my child may be selected to take part in the ***It's My Life: staying in control*** programme as part of their compulsory PSHE curriculum. However, I do not want my child to take part in the evaluation *(please tick as applicable).*

I wish to withdraw my child from taking part in the survey ☐

I do not want my child to be interviewed ☐

Child's name: _____

Signed: (parent/guardian) _____

Date: _____

University of Salford
MANCHESTER

Allerton Building L526
College of Health and Social Care
University of Salford
The Crescent
Salford
M5 4WT

Email: j.bragg@edu.salford.ac.uk
Tel: 07592 909123

Date

Dear Parent/Guardian

I am writing with reference to the programme that has been running with year 7 pupils entitled *It's My Life: staying in control*. The purpose of the programme, as explained in my previous letter, is to help pupils to recognise their strengths and develop their self-esteem and aspirations in order to encourage healthier attitudes and behaviour regarding alcohol. I am currently involved in evaluating the effectiveness of the programme.

Your child has been taking part in the classes and has completed the surveys as part of the evaluation. They have now been selected to be interviewed to discuss whether they feel the programme has benefited them in any way.

I would now like to take this opportunity to invite you to be interviewed as part of the evaluation to discuss whether you feel the programme has had any impact on your child or whether you think it might have the potential to do so. If you are willing to take part, please confirm this on the reply slip below.

Further details about the programme and evaluation are outlined on the attached sheet, but if you have any further queries, please do not hesitate to contact me. Reply slips should be handed to your child's PSHE teacher or can be emailed or posted to me personally using the contact details at the top of this letter.

Yours sincerely

Joanna Bragg
PhD Student

Evaluation of *It's My Life: staying in control*

I am happy to be interviewed as part of the evaluation *(Please tick)* ☐

Name printed: (parent/guardian) _____

Signed: (parent/guardian) _____

Contact phone number and best time to ring: _____

Child's name: _____   Date: _____

Evaluation of 'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

---

Participant Information Sheet: Parents

Your child is being invited to take part in a research study which aims to test whether a programme of classroom activities can improve the wellbeing, self-esteem and aspiration of young people. They will take part in a six-week programme of activities and discussions designed to help them to recognise their strengths and develop their self-esteem and aspirations in order to encourage more healthy attitudes and behaviour regarding alcohol. To assess whether this programme can make a difference, your child will be asked to complete surveys and perhaps be interviewed. The programme will run for all children in your child's class but participation in the evaluation is voluntary. If you are not happy for your child to take part in the completion of surveys or be interviewed, you may withdraw them from these activities by returning the slip at the bottom of the accompanying letter.

Please take time to read the following information carefully and discuss it with others if you wish. If you would like the researcher to go through the information sheet with you and answer any questions you have, contact details are provided at the end of this document.

What is the purpose of the study?
The purpose of the study is to test whether a specially designed programme of work can improve the wellbeing, self-esteem and aspiration of young people and in doing so encourage healthier attitudes and behaviour regarding alcohol. Participation in this six-week programme of activities and discussions designed to explore the strengths, perceptions and attitudes of young people will hopefully equip your child to approach life with greater confidence and help them to achieve their goals in life.

Why has my child been invited?
Your child has been invited to take part in this study because they are in year 7 and your school has chosen to trial this programme as part of their PSHE curriculum.

Does my child have to take part?
The programme of activities and discussions will be delivered as part of your child's regular PSHE lessons, so they will have to take part in the classes. However, taking part in the evaluation, ie completing the questionnaires or being interviewed is entirely voluntary. If you are not happy for your child to be involved in this way, you can withdraw them from the evaluation by returning the reply slip at the bottom of the accompanying letter. Your child will also be given a participant information sheet similar to this one and asked to sign an assent form to show they agreed to take part. Both you and/or your child are free to withdraw from the study at any time, without giving a reason.

What will happen to my child if they take part?
Your child will be involved in the programme of classes for six weeks at one hour per week. The classes will take place in school during the usual timetabled PSHE lessons. Unless you elect to withdraw your child from taking part in the evaluation, they will be asked to complete surveys at the beginning and the end of the programme. They will also be asked to complete a follow-on survey after a further six months to assess whether the programme has had a lasting impact. They will be asked about their wellbeing and about their knowledge and experience of alcohol. In addition, some children will be asked to participate in an interview

with the researcher. If you are not happy for your child to be interviewed, you can opt them out of the research on the reply slip. If your child is selected for interview, you will be notified in writing and given a further opportunity to withdraw their participation if you are not happy for them to be involved. Interviews will take place at school during school hours, and will last approximately 30 minutes.

Expenses and payments?
No payment will be made for taking part in the research.

What will my child have to do?
Your child will be asked to complete surveys before and after the programme of classes and again after a further six months. They might also be invited for an interview. If your child is selected for an interview, you will also be invited to be interviewed and you will receive further information and a consent form at that stage.

What are the possible disadvantages of taking part?
It is not anticipated that there would be any disadvantages in taking part in the evaluation. Your child will be asked questions about their personal wellbeing, this could potentially prompt them to reflect upon sensitive memories that may cause them pain. Your child will not be expected to discuss any such matters in front of others. If your child should become distressed, the school will support them in accordance with school protocol, the matter would be attended to by the Pastoral Manager.

What are the possible benefits of taking part?
It is not anticipated that there would be any particular benefits in taking part in the evaluation, although participation in the six week programme may prompt your child to reflect more positively regarding their future direction.

What if there is a problem?
If you have a concern about any aspect of this study, you should speak to the researcher, Joanna Bragg, who will do her best to answer your questions. *(contact details at the end of this document)*
If you remain unhappy and wish to complain formally, the University of Salford procedure is to contact Joanna's Research Supervisor, Professor Penny Cook.
>   **email:** P.A.Cook@salford.ac.uk; **tel:** 0161 295 2804

If your issue is not resolved to your satisfaction at this stage you can contact the College Research and Innovation (R&I) Manager, Anish Kurien.
>   **email:** A.Kurien@salford.ac.uk; **tel: 0161 295 5276**

Will my child's taking part in the study be kept confidential?
Yes, all information collected about your child during the course of the research will be kept strictly confidential. The survey information will be entered onto a computer spreadsheet and interviews will be transcribed. Your child's name will be removed and replaced with a unique identification number and a pseudonym will be used in the transcripts. Your child's real identity will only be known to the researcher, who will have sole access to the names. All data will be securely stored in password protected files on an encrypted university computer. Paper copies of transcripts, your child's completed surveys and information about their real identity will be kept in locked storage. Interview recordings will be deleted after transcription. Your child's original surveys will be kept for three years and will then be shredded. The information on the computer files will be kept for at least three years after the research has finished.

The information without your child's name will be shared with the researcher's supervisory team. The information provided will be summarised and the summarised information will be written about in reports and publications. Some quotes may be used in the write-up of the

research, but your child's name and identity will never be revealed in these reports. Anonymising the data includes the removal of any contextual information that might lead to their identification

These safeguards are in compliance with the University of Salford regulations on data protection. However, if the researcher suspects that your child or someone else is at risk of harm, they will report this information (including names) to one of the School Designated Child Protection Officers for their safety. The matter will then be followed-up according to the school Safeguarding Procedures.

What will happen if my child doesn't carry on with the study?
The programme of activities will be part of your child's regular PHSE lessons. The actual research requires them to fill in surveys, and this part is voluntary. Your child will be given time to read and understand an information sheet before they are asked if they would assent to take part in the study. If you or your child have any questions during this time do not hesitate to contact the researcher (contact details below). If you and your child do agree to take part there will be a number of points where you will have the opportunity to change your minds if you wish. For example, if your child doesn't want to fill in the questionnaires they can tell the researcher, or they can hand in a blank questionnaire. If your child fills it in and changes their mind they can ask the researcher to remove it. The latest time in which you or your child can change your mind and withdraw from the research is one month after taking part in a survey or interview.

What will happen to the results of the research study?
The results of the research are planned to be made public in a number of ways: firstly, as part of a PhD thesis and also in the form of published articles in academic journals. At every stage, all efforts will be made to ensure that confidentiality is maintained and no identifiable information will be contained within any publications.

Who is organising or sponsoring the research?
The research is part of a PhD study, conducted by Joanna Bragg, Research Student at University of Salford and funded by the University of Salford.

Further information and contact details:
For any information regarding the study or your involvement in the research, please contact:
Joanna Bragg, Research Student at University of Salford
Email: j.bragg@edu.salford.ac.uk; tel: 07592 909123.

Evaluation of 'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

---

Participant Information Sheet: Parental invitation for interview

Your child has recently taken part in a research study which aims to test whether a programme of classroom activities can improve the wellbeing, self-esteem and aspiration of young people. The six-week programme of activities and discussions was designed to help pupils to recognise their strengths and develop their self-esteem and aspirations in order to encourage more healthy attitudes and behaviour regarding alcohol. To assess whether this programme can make a difference, your child has completed surveys and been interviewed. In order to capture broader contextual information regarding the programme, you are also cordially invited to be interviewed.

Please take time to read the following information carefully and discuss it with others if you wish, before making your decision. If you would like the researcher to go through the information sheet with you and answer any questions you have, contact details are provided at the end of this document.

What is the purpose of the study?
The purpose of the study is to test whether a specially designed programme of work can improve the wellbeing, self-esteem and aspiration of young people and in doing so encourage healthier attitudes and behaviour regarding alcohol. Participation in this six-week programme of activities and discussions designed to explore the strengths, perceptions and attitudes of young people will hopefully equip your child to approach life with greater confidence and help them to achieve their goals in life.

Why have I been invited?
You have been invited to take part in an interview because your child has been selected. If your child believes the programme has impacted on them, it will be interesting to discuss whether you have observed any impact as a parent.

Do I have to take part?
Taking part in the evaluation is entirely voluntary. If you are happy to be interviewed, you will be asked to sign a consent form. However, if you change your mind, you are free to withdraw at any time, without giving a reason.

What will happen to me if I take part?
If you are happy to be interviewed, a time will be scheduled at your convenience. The interview will take place at school, or by telephone and will last approximately 30 minutes.

Expenses and payments?
No payment will be made for taking part in the research.

What are the possible disadvantages of taking part?
It is not anticipated that there would be any disadvantages in taking part in the evaluation. The interviews will discuss your child's personal wellbeing, this could potentially prompt them/you

to reflect upon sensitive memories that may cause pain. Your child will not be expected to discuss any such matters in front of others.

What are the possible benefits of taking part?
It is not anticipated that there would be any particular benefits in taking part in the evaluation, although participation in the six week programme may prompt your child to reflect more positively regarding their future direction.

What if there is a problem?
If you have a concern about any aspect of this study, you should speak to the researcher, Joanna Bragg, who will do her best to answer your questions. *(contact details at the end of this document)*
If you remain unhappy and wish to complain formally, the University of Salford procedure is to contact Joanna's Research Supervisor, Professor Penny Cook.
        email: P.A.Cook@salford.ac.uk; **tel:** 0161 295 2804

If your issue is not resolved to your satisfaction at this stage you can contact the College Research and Innovation (R&I) Manager, Anish Kurien.
        email: A.Kurien@salford.ac.uk**; tel: 0161 295 5276**

Will taking part in the study be kept confidential?
Yes, all information collected about you will be kept strictly confidential. Interviews will be transcribed and your name will be removed and replaced with a pseudonym. Your real identity will only be known to the researcher, who will have sole access to the names. All data will be securely stored in password protected files on an encrypted university computer. Hard copies of transcripts and information about your real identity will be kept in locked storage. Interview recordings will be deleted after transcription. The anonymised data files will be kept indefinitely for use in future research studies.

The information without your name will be shared with the researcher's supervisory team. The data you provide will be summarised and the summarised information will be written about in reports and publications. Some quotes may be used in the write-up of the research, but your name and identity will never be revealed in these reports. Anonymising the data includes the removal of any contextual information that might lead to identification.

These safeguards are in compliance with the University of Salford regulations on data protection. However, if the researcher suspects that your child or someone else is at risk of harm, they will report this information (including names) to one of the School Designated Child Protection Officers for their safety. The matter will then be followed-up according to the school Safeguarding Procedures.

What will happen if we don't carry on with the study?
Taking part in an interview for this study is voluntary. You will be given time to read and understand an information sheet before being asked to consent to take part in the study. If you have any questions during this time do not hesitate to contact the researcher (contact details below). If you agree to take part you will have the opportunity to change your mind if you wish. The latest time in which you can change your mind and withdraw from the research is one month after taking part in the interview.

What will happen to the results of the research study?
The results of the research are planned to be made public in a number of ways: firstly, as part of a PhD thesis and also in the form of published articles in academic journals. At every stage, all efforts will be made to ensure that confidentiality is maintained and no identifiable information will be contained within any publications.

Who is organising or sponsoring the research?
The research is part of a PhD study, conducted by Joanna Bragg, Research Student at University of Salford and funded by the University of Salford.

Further information and contact details:
For any information regarding the study or your involvement in the research, please contact:
Joanna Bragg, Research Student at University of Salford
Email: j.bragg@edu.salford.ac.uk; tel: 07592 909123.

Evaluation of 'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

---

Participant Information Sheet: Pupils

You are being invited to take part in a research study. A set of classroom activities has been designed to improve the wellbeing, self-esteem and aspiration of pupils like yourself. The classes will look at your strengths, your attitudes, your hopes for the future and will help you to find ways to achieve your goals and to make healthy lifestyle choices, such as not drinking too much alcohol. The classes will take place over six-weeks in your usual PSHE lessons.

This research study will test whether the programme of classes can make a difference and improve wellbeing, self-esteem and aspiration – this is called an ***evaluation.*** It is the programme that is being tested, not the pupils. In order to measure whether the programme works, you will be asked to complete surveys and perhaps be interviewed. You will have to take part in the classes because they are part of your PSHE lessons but you don't have to complete the surveys or be interviewed, it is your choice - you will be asked to give your permission to take part in the evaluation.

Please take time to read the following information carefully and discuss it with others if you wish. There will be an opportunity for one of the research team to go through the information with you and answer any questions that you have. Contact details are provided at the end of the information sheet. Take time to decide whether or not you wish to take part.

What is the purpose of the study?
The purpose of the study is to test whether some specially designed classes can improve the wellbeing, self-esteem and aspiration of young people. Taking part in these class activities over six-weeks will hopefully help you to be more confident to achieve your goals in life.

Why have I been invited?
You have been invited to take part in this study because you are in year 7 and your school has chosen to test this programme as part of your PSHE curriculum.

Do I have to take part?
The programme of activities will be part of your regular PSHE lessons, so you will have to take part in the classes. However, taking part in the evaluation – that is completing the surveys or being interviewed - is entirely voluntary. You will be asked to sign an assent form to show you agreed to take part, but you can change your mind at any time (even during an interview or when completing a survey) without giving a reason and your information will not be used.

What will happen to me if I take part?
You will be involved in the classes for six weeks at one hour per week. The classes will take place in school during your timetabled PSHE lessons. If you agree to take part in the evaluation, you will be asked to complete surveys at the beginning and the end of the six weeks and again after six months. You will be asked about your wellbeing and about your knowledge and experience of alcohol. In addition, some children will be asked to take part in an interview with the researcher. If you are happy to be interviewed, you can agree to this on

the assent form. Interviews will take place at school during school hours, and will last approximately 30 minutes.

Expenses and payments?
No payment will be made for taking part in the research.

What will I have to do?
You will be asked to complete surveys before and after the programme of classes and again after six months. You might also be invited for an interview.

What are the possible disadvantages of taking part?
There aren't really any disadvantages in taking part in the evaluation. You will be asked questions about your personal wellbeing, this could make you to think about sensitive memories that might cause you pain, but you will not be expected to discuss such matters in front of others. If you are distressed at any point during the classes or interviews, or whilst completing surveys, school staff will be available to help you.

What are the possible benefits of taking part?
There aren't any particular benefits in taking part in the evaluation. It might help you to feel more confident and to be more positive about your future direction.

What if there is a problem?
If you are concerned about any aspect of this study, you should speak to the researcher, Joanna Bragg, who will do her best to answer your questions. *(contact details at the end of this document)*

If you remain unhappy and wish to complain formally, the University of Salford procedure is to contact Joanna's Research Supervisor, Professor Penny Cook.
      email: P.A.Cook@salford.ac.uk; **tel:** 0161 295 2804

If your issue is not resolved to your satisfaction at this stage you can contact the College Research and Innovation (R&I) Manager, Anish Kurien.
      email: A.Kurien@salford.ac.uk; **tel: 0161 295 5276**

Will my taking part in the study be kept confidential?
Yes, all information collected about you during the course of the research will be kept strictly confidential which means that no one apart from the researcher will know what you said or what answers you gave. The survey information will be entered onto a computer spreadsheet and interviews will be typed up. Your name will be removed and replaced with a unique identification number and you will be given a different name (a pseudonym) in any written documents. Only the researcher will know your real name. All information will be securely stored in password protected files on an encrypted university computer. Paper copies of the typed interviews, your completed surveys and information about your real identity will be kept in locked storage. Interview recordings will be deleted after they have been typed. Your original surveys will be kept for three years and will then be shredded. The information on the computer files will be kept for at least three years after the research has finished.

The information (without your name) will be shared with the researcher's supervisory team. It will be summarised and written about in reports and publications. Some quotes (things that you said) may be used in the write-up of the research, but your name and identity will never be revealed in these reports, or to anyone, including your parents, teachers and friends.

These rules are set by the University of Salford. However, if you mention something that makes the researcher suspect that you or someone else is at risk of harm, they will report this information (including names) to one of the School Designated Child Protection Officers for

your safety. The matter will then be followed-up according to the school Safeguarding Procedures.

What will happen if I don't carry on with the study?
You will be given time to read and understand this information sheet before you are asked if you want to take part in the study. If you have any questions during this time do not hesitate to contact the researcher (contact details below). If you do agree to take part you can change your mind at any time, for example, if you don't want to fill in the survey you can tell the researcher, or you can hand in a blank survey. If you fill it in and change your mind you can ask the researcher to remove it. Even in the middle of an interview, if you change your mind you can just stop. The latest time you can change your mind and pull out of the research is one month after taking part in a survey or interview.

What will happen to the results of the research study?
The results of the research are planned to be made public as published articles and reports. At every stage, your information will remain confidential and your identity will never be revealed in any publications.

Who is organising or sponsoring the research?
The research is funded by the University of Salford. Joanna Bragg is a Research Student and is doing the research as part of her studies.

Further information and contact details:
For any information about the study or your involvement in the research, please contact:
Joanna Bragg, Research Student at University of Salford
Email: j.bragg@edu.salford.ac.uk; tel: 07592 909123.

Evaluation of 'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

---

Participant Information Sheet: Teachers

You are being invited to take part in a research study which aims to test whether a programme of classroom activities can improve the wellbeing, self-esteem and aspiration of young people. You have been nominated by your senior leadership to deliver the six-week programme of activities and discussions designed to help young people to recognise their strengths and develop their self-esteem and aspirations in order to encourage healthier attitudes and behaviour regarding alcohol. In order to monitor the implementation of this programme and to evaluate whether it can make a difference, you will be asked to complete a short survey after delivering each session. In addition, you may also be observed in the classroom and perhaps be invited for interview. However, participation in the monitoring and evaluation is voluntary. If you are not happy to complete the surveys or be observed or interviewed, you may withdraw from some or all of these activities by indicating so on the consent form.

Please take time to read the following information carefully and discuss it with others if you wish. If you would like the researcher to go through the information sheet with you and answer any questions you have, contact details are provided at the end of this document.

What is the purpose of the study?
The purpose of the study is to test whether a specially designed programme of work can improve the wellbeing, self-esteem and aspiration of young people and in doing so encourage healthier attitudes and behaviour regarding alcohol. Participation in this six-week programme of activities and discussions designed to explore the strengths, perceptions and attitudes of young people will hopefully equip children to approach life with greater confidence and help them to achieve their goals in life.

Why have I been invited?
You have been invited to take part in this study because the senior leadership in your school has chosen to trial this programme as part of their PSHE curriculum and have nominated you to deliver the classes.

Do I have to take part?
The programme of activities and discussions will be delivered as part of the regular PSHE lessons, so the classes will have to be implemented at the discretion of your senior leadership. However, taking part in the evaluation, ie completing the surveys, being observed or being interviewed is entirely voluntary. If you are not happy to be involved in this way, you can withdraw from the evaluation by indicating so on the consent form. You are free to withdraw from the study at any time, without giving a reason.

What will happen to me if I take part?
You will deliver the programme of classes for six weeks at one hour per week. The classes will take place in school during the usual timetabled PSHE lessons. If you agree to participate in the monitoring and evaluation of the intervention, you will be asked to complete a short survey at the end of each class. In addition, the researcher may ask to observe you delivering the intervention and may invite you to be interviewed. Observations and interviews will be

scheduled at your convenience. Interviews will take place at school during school hours, and will last approximately 30 minutes.

Expenses and payments?
No payment will be made for taking part in the research.

What will I have to do?
You will be asked to complete a short survey after delivering each session of the intervention. You may be observed delivering one of the sessions. You might also be invited for an interview.

What are the possible disadvantages of taking part?
It is not anticipated that there would be any disadvantages in taking part in the evaluation.

What are the possible benefits of taking part?
It is not anticipated that there would be any particular benefits in taking part in the evaluation, although participation in the six-week programme may contribute ideas that might be useful in your regular teaching practice.

What if there is a problem?
If you have a concern about any aspect of this study, you should speak to the researcher, Joanna Bragg, who will do her best to answer your questions. *(contact details at the end of this document)*

If you remain unhappy and wish to complain formally, the University of Salford procedure is to contact Joanna's Research Supervisor, Professor Penny Cook.
      email: P.A.Cook@salford.ac.uk; **tel:** 0161 295 2804

If your issue is not resolved to your satisfaction at this stage you can contact the College Research and Innovation (R&I) Manager, Anish Kurien.
      email: A.Kurien@salford.ac.uk; **tel: 0161 295 5276**

Will my taking part in the study be kept confidential?
Yes, all information collected during the course of the research will be kept strictly confidential. The survey information will be entered onto a computer spreadsheet and interviews will be transcribed. Your name will be removed and replaced with a unique identification number and a pseudonym will be used in the transcripts. Your real identity will only be known to the researcher, who will have sole access to the names. All data will be securely stored in password protected files on an encrypted university computer. Paper copies of transcripts, your completed surveys and information about your real identity will be kept in locked storage. Interview recordings will be deleted after transcription. Your original surveys will be kept for three years and will then be shredded. The information on the computer files will be kept for at least three years after the research has finished.

The information without your name will be shared with the researcher's supervisory team. The information provided will be summarised and the summarised information will be written about in reports and publications. Some quotes may be used in the write-up of the research, but your name and identity will never be revealed in these reports. Anonymising the data includes the removal of any contextual information that might lead to your identification.

These safeguards are in compliance with the University of Salford regulations on data protection. However, if the researcher suspects that you or someone else is at risk of harm, they will report this information (including names) to one of the School Designated Child Protection Officers for their safety. The matter will then be followed-up according to the school Safeguarding Procedures.

What will happen if I don't carry on with the study?
The programme of activities will be part of your regular PHSE lessons. The actual research requirements to fill in surveys, to be observed and be interviewed are voluntary. You will be given time to read and understand an information sheet before being asked if you will consent to take part in the study. If you have any questions during this time do not hesitate to contact the researcher (contact details below). If you do agree to take part there will be a number of points where you will have the opportunity to change your mind, if you wish. The latest time in which you can change your mind and withdraw from the research is one month after taking part in a survey or interview.

What will happen to the results of the research study?
The results of the research are planned to be made public in a number of ways: firstly, as part of a PhD thesis and also in the form of published articles in academic journals. At every stage, all efforts will be made to ensure that confidentiality is maintained and no identifiable information will be contained within any publications.

Who is organising or sponsoring the research?
The research is part of a PhD study, conducted by Joanna Bragg, Research Student at University of Salford and funded by the University of Salford.

Further information and contact details:
For any information regarding the study or your involvement in the research, please contact:
Joanna Bragg, Research Student at University of Salford
Email: j.bragg@edu.salford.ac.uk; tel: 07592 909123.

Research Participant Consent Form: Parents

Title of Project: It's My Life: staying in control

Ethics Ref No: HSR1617-12

Name of Researcher: Joanna Bragg

(delete as appropriate)

> I confirm that I have read and understood the information sheet (v4 06.12.16) for the above study and what my contribution will be

Yes	No

> I have been given the opportunity to ask questions (face to face, via telephone and/or email)

Yes	No

> I agree to take part in an interview

Yes	No

> I agree to the interview being tape recorded

Yes	No

> I understand that my participation is voluntary and that I can withdraw from the research at any time **without giving any reason**

Yes	No

> I understand how the researcher will use my responses, who will see them and how the data will be stored

Yes	No

> **I agree to take part in the above study**

Yes	No

Name of participant: --

Signature: --

Date: --

Name of researcher taking consent: Joanna Bragg

Researcher's e-mail address: j.bragg@edu.salford.ac.uk

University of Salford
MANCHESTER

Research Participant Assent Form: Pupils

Title of Project: It's My Life: staying in control

Ethics Ref No: HSR1617-12

Name of Researcher: Joanna Bragg

(delete as appropriate)

➢ I confirm that I have read and understood the information sheet (v4 06.12.16) for the above study and what my contribution will be	Yes	No
➢ I have been given the opportunity to ask questions (face to face, via telephone and/or email)	Yes	No
➢ I agree to take part in an interview	Yes	No
➢ I agree to the interview being tape recorded	Yes	No
➢ I understand that taking part is voluntary and that I can withdraw from the research at any time (including during the interview) **without giving any reason**	Yes	No
➢ I understand how the researcher will use my responses, who will see them and how the data will be stored	Yes	No
➢ I understand that all the information I provide will be confidential, which means that no one apart from the researcher will know what I said or what answers I gave	Yes	No
➢ I understand that if the researcher thinks I am at risk of harm or if I mention something criminal, they will have to report this information to the school	Yes	No
➢ **I agree to take part in the above study**	Yes	No

Name of
participant: --

Signature: --

Date: --

Name of researcher taking consent: Joanna Bragg

Researcher's e-mail address: j.bragg@edu.salford.ac.uk

362

University of Salford MANCHESTER

Research Participant Consent Form: Teachers

Title of Project: It's My Life: staying in control

Ethics Ref No: HSR1617-12

Name of Researcher: Joanna Bragg

(delete as appropriate)

	Yes	No
➢ I confirm that I have read and understood the information sheet (v1 7.12.16) for the above study and what my contribution will be	Yes	No
➢ I have been given the opportunity to ask questions (face to face, via telephone and/or email)	Yes	No
➢ I agree to complete surveys	Yes	No
➢ I agree to being observed delivering the intervention in class	Yes	No
➢ I agree to take part in an interview	Yes	No
➢ I agree to the interview being tape recorded	Yes	No
➢ I understand that my participation is voluntary and that I can withdraw from the research at any time **without giving any reason**	Yes	No
➢ I understand how the researcher will use my responses, who will see them and how the data will be stored	Yes	No
➢ **I agree to take part in the above study**	Yes	No

Name of
participant: --

Signature: --

Date: --

Name of researcher taking consent: Joanna Bragg

Researcher's e-mail address: j.bragg@edu.salford.ac.uk

Evaluation of 'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

Fidelity Survey

Session Number: ☐   Date of Session: _____

School Name: _____

Teacher Name: _____

Number of pupils present in class: ☐

General contextual notes
Contextual information that might be relevant to the conduct or delivery of the lesson (eg other things happening in the class or school)

1. Coverage of lesson objectives
Please indicate on a scale of 1-10, coverage of the lesson objectives? (please circle)

None   2   3   4   5   6   7   8   9   All

2. Lesson structure and sequence
Please indicate on a scale of 1-10, adherence to the lesson structure and sequence of activities? (please circle)

None   2   3   4   5   6   7   8   9   All

3. Were any activities omitted from the session? *(please circle)*   Yes   No
If so, please describe which ones were not included

4. Were there any adaptations to the session/activities? *(please circle)*   Yes   No
If so, please describe

5. How would you rate the quality of this session in terms of pupil learning? *(please circle)*

Poor   2   3   4   5   6   7   8   9   Excellent

6. If you feel any aspects of the session were particularly good, please specify and state your reasons

7. If you feel the session could be improved, please share your thoughts.

MANY THANKS FOR ALL YOUR HELP

Evaluation of 'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

Semi-Structured Interview Schedule: Parents

Thank you for agreeing to be interviewed.

Before we start, I just want to check that you understand what this interview is about. It is part of the evaluation of the ***It's My Life: staying in control*** programme that your child has taken part in as part of their PSHE lessons. The programme of activities aims to improve the wellbeing, self-esteem and aspiration of young people and encourage them to consider making healthy choices in the future, for example, in terms of not drinking too much alcohol. Have you read the participant information sheet? Do you have any questions?

I also want to stress that taking part in this interview is voluntary and that you are free to withdraw at any time if you are not happy, and no questions will be asked.

I would like to record the interview so that I don't have to write notes and I will be able to listen back to what you said afterwards and make sure I understand what you said. I will transcribe the interview and I might quote some of the things that you say in my reports, but you will never be identified in anything I publish (that means I won't ever use your name).

Finally, this interview is entirely confidential. The only time I will have to report what you say is if you tell me something that is criminal or raises concern about your personal safety or the safety of others.

If you are happy with all of these things, please complete the consent form.

Over the past six weeks your child has taken part in a series of classes as part of their PSHE lessons which have looked at aspects such as their personal strengths, their sense of wellbeing, their aspirations for the future, possible things that might help or hinder them in achieving their goals in life and ways in which they can avoid or get around potential barriers. I am interested in what you think about the programme.

Q1: Are you aware of what your child has been learning in the classes? *Have they mentioned anything about it at home? Has it prompted any discussions?*

Q2: What do you feel was their response to the programme? *Did they find the lessons enjoyable? which aspects in particular? Eg role play, discussions, were they keen/reluctant to engage with the lessons?*

Q3: Do you think the programme has had an impact on your child*? In what ways? Any of the following:*

- o *Wellbeing*
- o *Confidence*
- o *Attitudes towards risky behaviours*
- o *Aspirations*
- o *Decision making*
- o *Behaviour*

Q4: Do you think the programme has had a broader impact? *Perhaps on your child's friends, siblings, family, the school?* If so, please give examples.

Q5: What do you feel your child has learned? *(if anything)*

Q6: From your knowledge of the programme, do you think it could be improved? Which aspects in particular?

Evaluation of 'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

Semi-Structured Interview Schedule: Pupils

Before we start, I just want to check that you understand what this interview is about. It is part of the evaluation of the *It's My Life: staying in control* programme that you have taken part in as part of your PSHE lessons. The programme of activities aims to improve the wellbeing, self-esteem and aspiration of young people and encourage them to consider making healthy choices in the future, for example, in terms of not drinking too much alcohol. So, the evaluation – that is the surveys you completed before and after the programme of lessons and this interview – will help me to measure whether the work you have been doing in class over the last half term has made any difference to you. Have you read the participant information sheet? Do you have any questions?

I also want to stress that taking part in this interview is voluntary and that you are free to withdraw at any time if you are not happy, and no questions will be asked.

I would like to record the interview so that I don't have to write notes and I will be able to listen back to what you said afterwards and understand what you said. I will type-up the interview and I might quote some of the things that you say in my reports, but you will never be identified in anything I publish (that means I won't ever use your name).

Finally, this interview is entirely confidential. I will not tell anyone what you have told me, including your parents, teachers and friends. The only time I will have to report what you say is if you tell me something that is criminal or raises concern about your personal safety or the safety of others.

If you are happy with all of these things, please complete the consent form.

Over the past six weeks you have taken part in a series of classes as part of your PSHE lessons which have looked at aspects such as your personal strengths, your sense of wellbeing, your aspirations for the future, possible things that might help or hinder you in achieving your goals in life and ways in which you can avoid or get around potential barriers. I am interested in how you have found the programme.

Q1: Have you found the programme enjoyable? *which aspects in particular? Eg role play, discussions*

Q2: Has the programme had an impact on you*? In what ways? Any of the following:*

- o *Wellbeing*
- o *Confidence*
- o *Attitudes towards risky behaviours*
- o *Aspirations*
- o *Decision making*
- o *Behaviour*

Q3: What do you feel you have learned? *(if anything)*

Q4: Could the programme be improved? Which

Evaluation of 'It's My Life: staying in control'
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

Semi-Structured Interview Schedule: Teachers

Thank you for agreeing to be interviewed.

Before we start, I just want to check that you understand what this interview is about. It is part of the evaluation of the *It's My Life: staying in control* programme that your child has taken part in as part of their PSHE lessons. The programme of activities aims to improve the wellbeing, self-esteem and aspiration of young people and encourage them to consider making healthy choices in the future, for example, in terms of not drinking too much alcohol. Have you read the participant information sheet? Do you have any questions?

I also want to stress that taking part in this interview is voluntary and that you are free to withdraw at any time if you are not happy, and no questions will be asked.

I would like to record the interview so that I don't have to write notes and I will be able to listen back to what you said afterwards and make sure I understand what you said. I will transcribe the interview and I might quote some of the things that you say in my reports, but you will never be identified in anything I publish (that means I won't ever use your name).

Finally, this interview is entirely confidential. The only time I will have to report what you say is if you tell me something that is criminal or raises concern about your personal safety or the safety of others.

If you are happy with all of these things, please complete the consent form.

Over the past six weeks your class has taken part in the Adolescent wellbeing, self-esteem and aspiration programme as part of their PSHE lessons. I am interested in what you think about the programme.

Q1: What is your response to the intervention?

Q2: Why do you believe there is a need for this type of intervention in your school? *Is alcohol misuse an issue? Is pupil wellbeing, aspiration, self-esteem need addressing?*

Q3: How does the intervention fit with the existing curriculum in your school? Are there already aspects of the school curriculum that address these types of issues? If so, please describe *eg any initiatives in school, PSHE curriculum content, school ethos etc*

Q4: (if they delivered the intervention) How did you find delivery of the intervention? *Adequacy of training, quality of materials, ease of delivery*

Q5: Did you feel there were any particular aspects of the programme that were particularly useful?

Q6: Were there any aspects of the programme that you felt weren't really necessary or weren't particularly effective?

Q7: How did your pupils respond to the programme? *Did they find the lessons enjoyable? which aspects in particular? Eg role play, discussions, were they keen/reluctant to engage with the lessons?*

Q8: Do you think the programme has had an impact on the pupils in your class*? In what ways? Any of the following:*

- o *Wellbeing*
- o *Confidence*
- o *Attitudes towards risky behaviours*
- o *Aspirations*
- o *Decision making*
- o *Behaviour*

Q9: Were there any particular groups of pupils who responded well to the programme? Or particularly benefitted from it? *More or less able students, confident/shy, ethnic groups, boys/girls*

Q10: Do you think the programme has had a broader impact? *Perhaps on other children in the school?* If so, please give examples.

Q11: What do you feel the pupils have learned? *(if anything)*

Q12: Do you think the programme could be improved at all? Which aspects in particular?

Appendix VI: Attitudes and Experiences Survey

It's My Life: staying in control
A programme to improve adolescent wellbeing, self-esteem and aspiration to facilitate attitude and behaviour change regarding alcohol

Name: --

Date of birth: --

Class: --------------------

Are you male or female? *(please tick)*

Female   ☐   Male   ☐

How would you describe your ethic origin *(tick only one)*

White British	☐	Black/Black British	☐	Mixed White and Black	☐
White Irish	☐	Asian/Asian British	☐	Other	☐
White European	☐	Mixed White and Asian	☐		

1. In the last three months have you ever used any of the following *(tick one box in each row)*

	Never	**Once or twice**	**Once a month**	**Once a week**	**More than once a week**
Alcohol (full drink not just a sip)					
Cigarettes					
E-cigarettes					
Recreational drugs (any drugs legal or illegal that are not taken for medical reasons) *state which one(s)*					

2. Have you ever drunk alcohol (a full drink, not just a sip)?   Yes ☐   No ☐

If you have answered 'No', please go to Q7

3. If so, when did you last drink alcohol?

    During the last week ☐   One to four weeks ago ☐

    One to six months ago ☐   More than six months ago ☐

4. How often do you usually drink alcohol?

    Almost every day ☐   About twice a week ☐

    About once a week ☐   At least once a week ☐

    About once a fortnight ☐   About once a month ☐

    Only a few times a year ☐   I don't drink now ☐

5. Who do you drink with?

    On my own ☐   With my parents ☐

    With older siblings ☐   With friends ☐

    Other *(please specify)*

6. Where do you drink?

	Never	Sometimes	Often
I drink at home			
I drink if I go to a party			
I drink in public places (park, street, beach)			
I drink in bars/pubs			
I drink at a friend's house			
I drink at a family member's house			
Other *(please specify)*			

7. Have you ever experienced any alcohol-related problems? *Please indicate if it happened to you or to someone you know by ticking the relevant box for each line*

	Myself	Friend	Sibling	Parent	Other *(please specify)*
Got drunk and couldn't remember what happened					
Got into a fight or was injured after drinking					
Got into trouble with the police after drinking					
Got grounded by parents for drinking				n/a	
Other *(please specify)*					

8. How often do the following happen? *(please tick one box on each line)*

	Most days	More than once a week	Less than once a week	Hardly ever
I argue with my mother/female guardian				
I argue with my father/male guardian				
I talk to my mother/female guardian about things that matter				
I talk to my father/male guardian about things that matter				
My mother/female guardian talks to me about risky behaviours eg drinking, smoking and their related harms				
My father/male guardian talks to me about risky behaviours eg drinking, smoking and their related harms				

9. In the past 7 days, how many times have you eaten an evening meal together with your family?

None ☐ 1-2 times ☐

3-5 times ☐ 6-7 times ☐

375

10. What do you think about school? *(please tick one box on each line)*

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I enjoy going to school					
My teachers treat me fairly at school					
Our school is a nice place to be					
Teachers expect too much of me					

11. How often do you get bullied at school, either physically or in other ways? *(please tick one box in each column)*

	Physically	in other ways
Never	☐	☐
not much (1-3 times in the last 6 months)	☐	☐
quite a lot (more than 4 times in the last 6 months)	☐	☐
a lot (a few times every week)	☐	☐

Section B: Feelings

12. The following question is about how you have been feeling **OVER THE LAST WEEK**.
Please read each statement carefully. Think how often you have felt like that in the last week and then tick the box that you think fits best for each one. *(please tick one box for each line)*

	0 = Not at all	1 = Only occasionally	2 = Sometimes	3 = Often	4 = Most or all of the time
I've felt edgy or nervous					
I haven't felt like talking to anyone					
I've felt able to cope when things go wrong					
I've thought of hurting myself					
There's been someone I felt able to ask for help					
My thoughts and feelings distressed me					
My problems have felt too much for me					
It's been hard to go to sleep or stay asleep					
I've felt unhappy					
I've done all the things I wanted to do					

Section C: Characteristics

13. Tell us about yourself: *(tick one box for each statement)*

	Strongly agree	**Agree**	**Neither agree nor disagree**	**Disagree**	**Strongly disagree**
I have confidence in myself					
I can state my own views to my friends					
I have a happy home life					
I find it difficult to say 'no'					
I don't feel I have to do what my friends are doing					

14. Please indicate how much you agree or disagree with each of the following statements *(tick one box for each statement)*

	Strongly agree	**Agree**	**Neither agree nor disagree**	**Disagree**	**Strongly disagree**
I would like to explore strange places					
I would like to take off on a trip with no pre-planned routes or timetables					
I get restless when I spend too much time at home					
I prefer friends who are excitingly unpredictable					
I like to do frightening things					
I would like to try bungee jumping					
I like wild parties					
I would love to have new and exciting experiences, even if they are illegal					

Section D: Attitudes

15. Please indicate how much you agree or disagree with each of the following statements *(tick one box for each statement)*

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Teenagers who drink alcohol are more mature					
Teenagers who drink alcohol usually get poor exam results					
Teenagers who drink alcohol don't think about their health					
My friends look down on alcohol use					
I don't like being around people who use alcohol					
Most people in this school look down on those who use alcohol					
My parents disapprove of teenagers using alcohol					

THANK YOU FOR YOUR HELP IN COMPLETING THIS SURVEY

Appendix VII: YP-CORE

YP-CORE

Assistance given? ☐
(If yes, please tick)

Site ID						Male ☐

Site ID ☐☐☐☐☐

Male ☐
Female ☐

Client ID ☐☐☐☐☐☐☐
Letters only   Numbers only

Age ☐☐

Therapist ID ☐☐☐

Subcodes
Numbers only (1)   Numbers only (2)
☐☐☐   ☐☐☐

Date form given
d d / m m / y y y y
☐☐ / ☐☐ / ☐☐☐☐

Stage Completed
S Screening
R Referral
A Assessment
F First Therapy Session
P Pre-therapy (unspecified)
D During Therapy
L Last Therapy Session
X Follow up 1
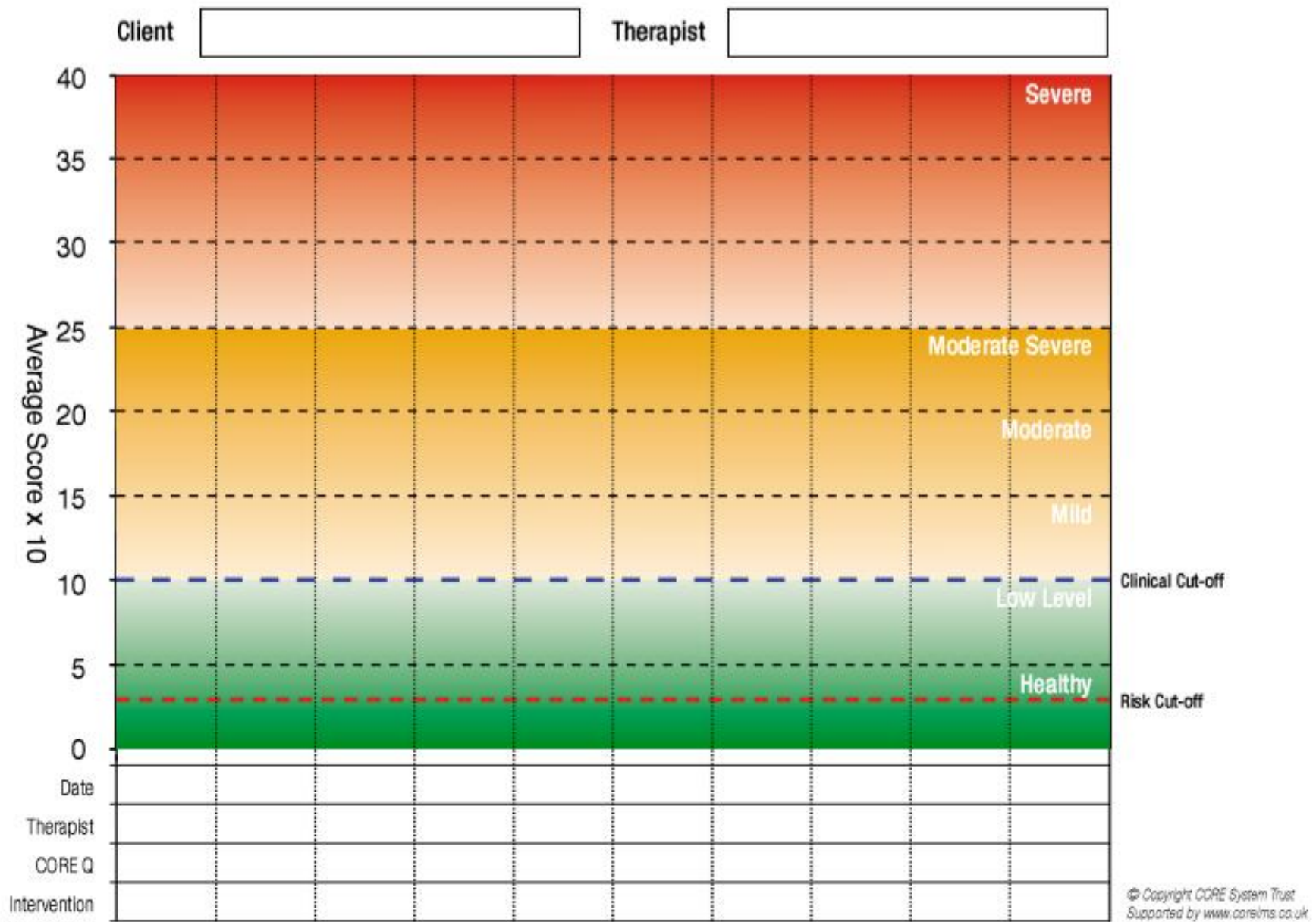Y Follow up 2

Stage ☐

Episode ☐

These questions are about how you have been feeling OVER THE LAST WEEK.
Please read each question carefully. Think how often you have felt like that in
the last week and then put a cross in the box you think fits best.
Please use a dark pen (not pencil) and mark clearly within the boxes.

OVER THE LAST WEEK...

Column headers: Not at all | Only occasionally | Sometimes | Often | Most or all of the time

#	Question	Not at all	Only occasionally	Sometimes	Often	Most or all of the time
1.	I've felt edgy or nervous	0	1	2	3	4
2.	I haven't felt like talking to anyone	0	1	2	3	4
3.	I've felt able to cope when things go wrong	4	3	2	1	0
4.	I've thought of hurting myself	0	1	2	3	4
5.	There's been someone I felt able to ask for help	4	3	2	1	0
6.	My thoughts and feelings distressed me	0	1	2	3	4
7.	My problems have felt too much for me	0	1	2	3	4
8.	It's been hard to go to sleep or stay asleep	0	1	2	3	4
9.	I've felt unhappy	0	1	2	3	4
10.	I've done all the things I wanted to	4	3	2	1	0

Thank you for answering these questions

Appendix VIII: Thematic Coding by School

Figure VIII i School Ai - themes and sub-themes

Theme A: Context	→	Home context/family issues Peer influence (social media) Specific pupil needs/needy groups (vulnerabilities) Relevance/worthiness of programme

Theme B: Engagement	→	Appropriateness of intervention Practical activities Role play

Theme C: Implementation	→	Planning Support Timing Teacher Training

Theme D: Impact	→	Positive experience Gender Pupil bonding/group support Confidence Awareness raising

Theme E: Adaptation	→	Peer mentoring

Figure VIII ii School Ai - themes diagram
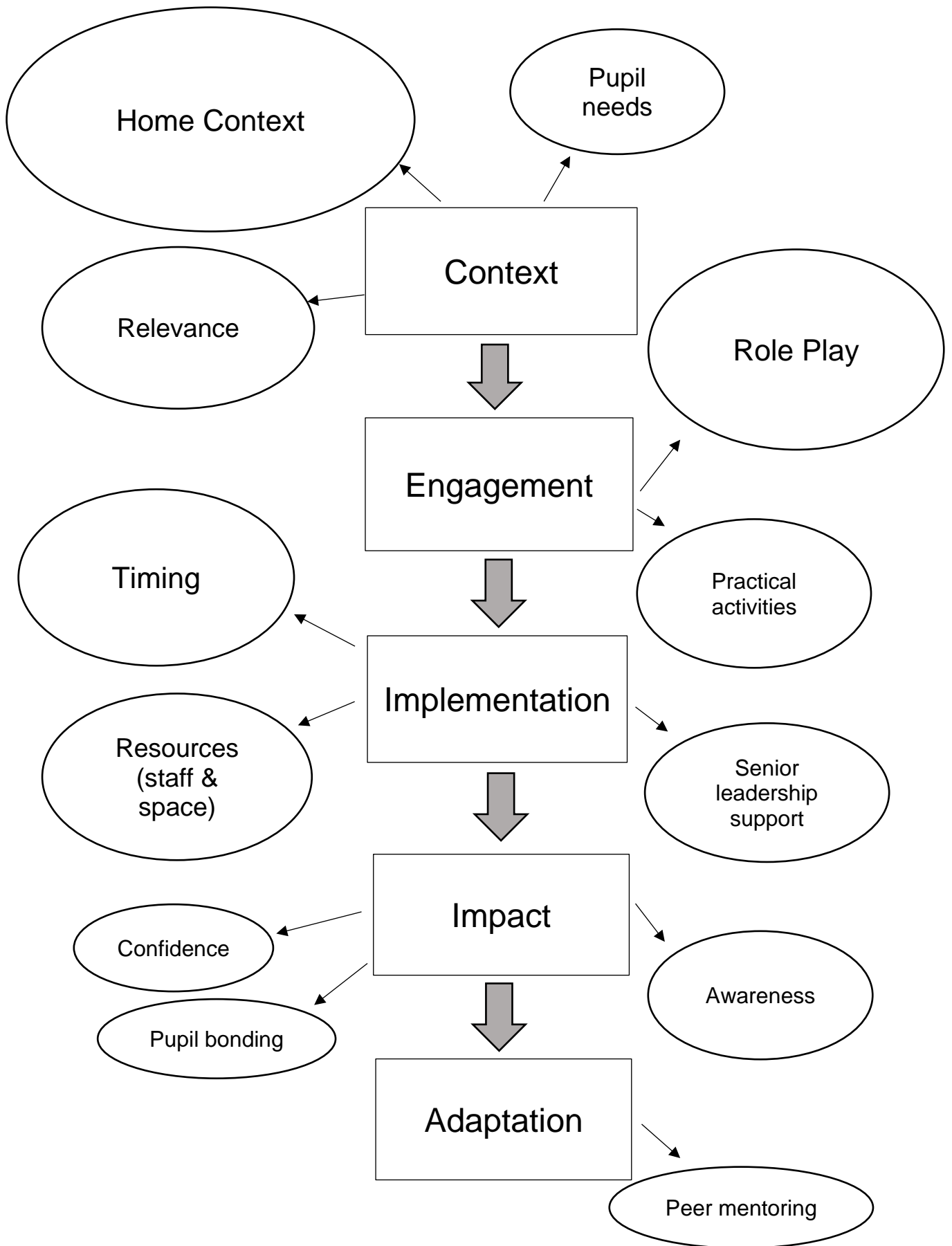
Figure VIII iii School B - themes and sub-themes

Theme A: Engagement →	Enjoyment Novelty Positive/useful learning experience

Theme B: Activities →	Role play Drawing Teamwork

Theme C: Impact →	Information acquisition Greater awareness Risk awareness Confidence building

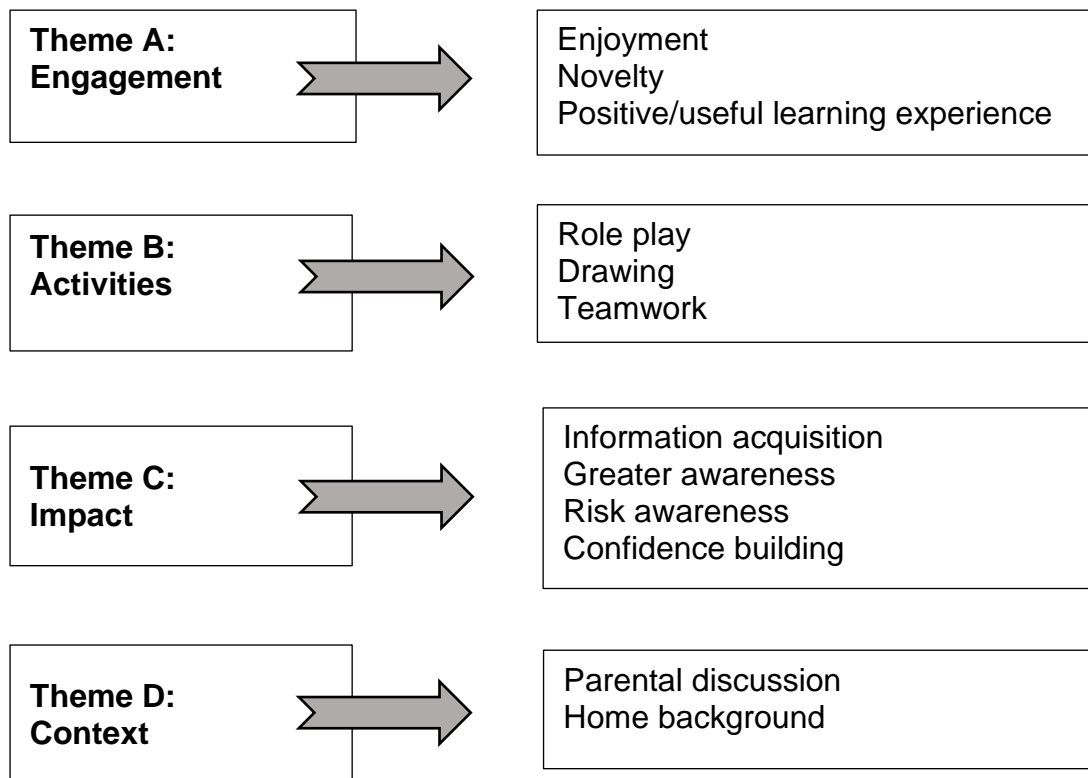|	
Theme D: Context →	Parental discussion Home background

Figure VIII iv School B - themes diagram
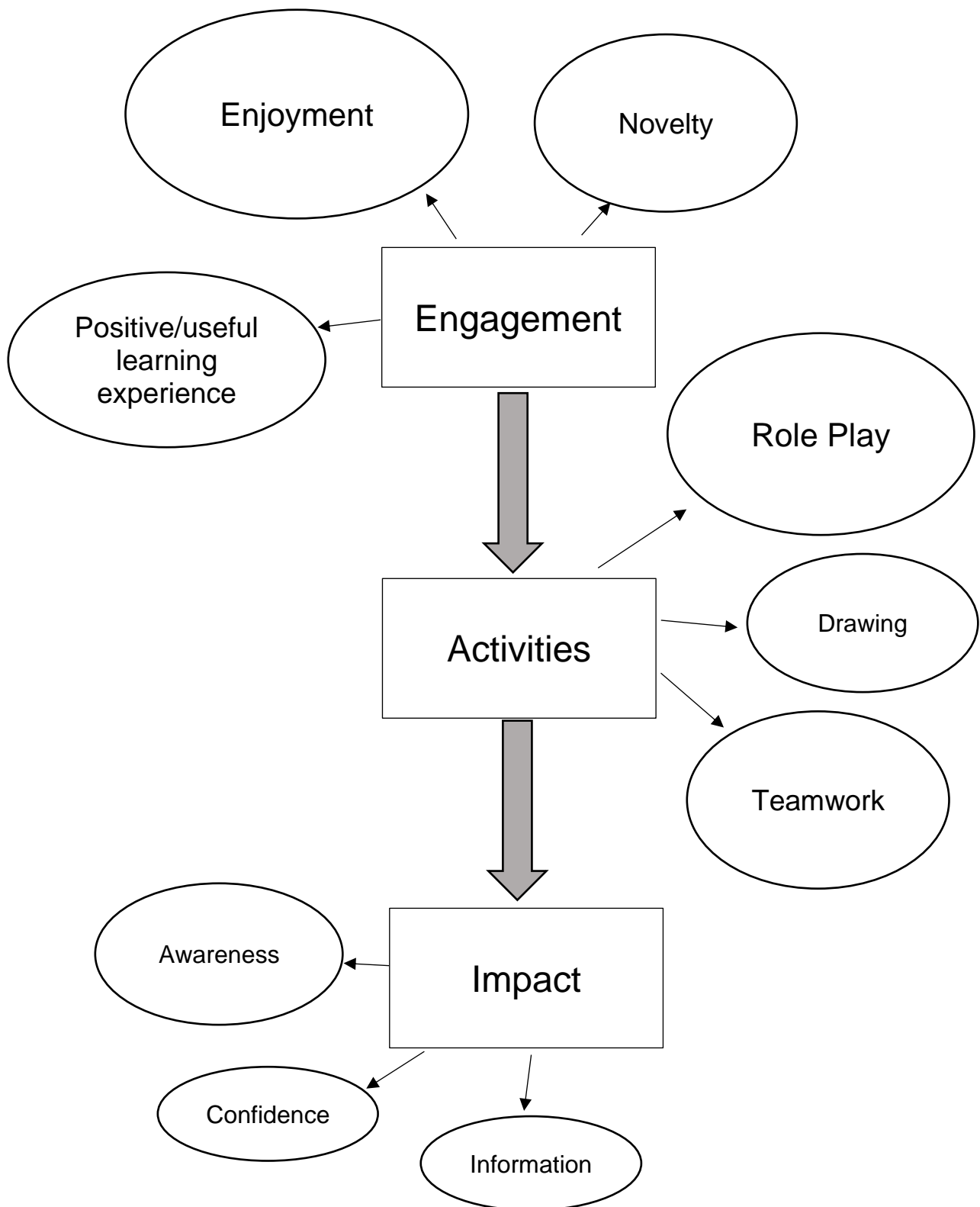
Figure VIII v School C - themes and sub-themes

Theme A: Context	→	Cultural perceptions Social media Peer influence Vulnerability Relevance

Theme B: Engagement	→	Enjoyment Appropriateness of intervention Practical activities Role play Establishing trust Peer learning/group work

Theme C: Implementation	→	Timing Training Resources (including staffing and room space)

Theme D: Impact	→	Positive experience Strategies Awareness raising Confidence

Theme E: Adaptation	→	Alternative models of delivery

Figure VIII vi School C - themes diagram

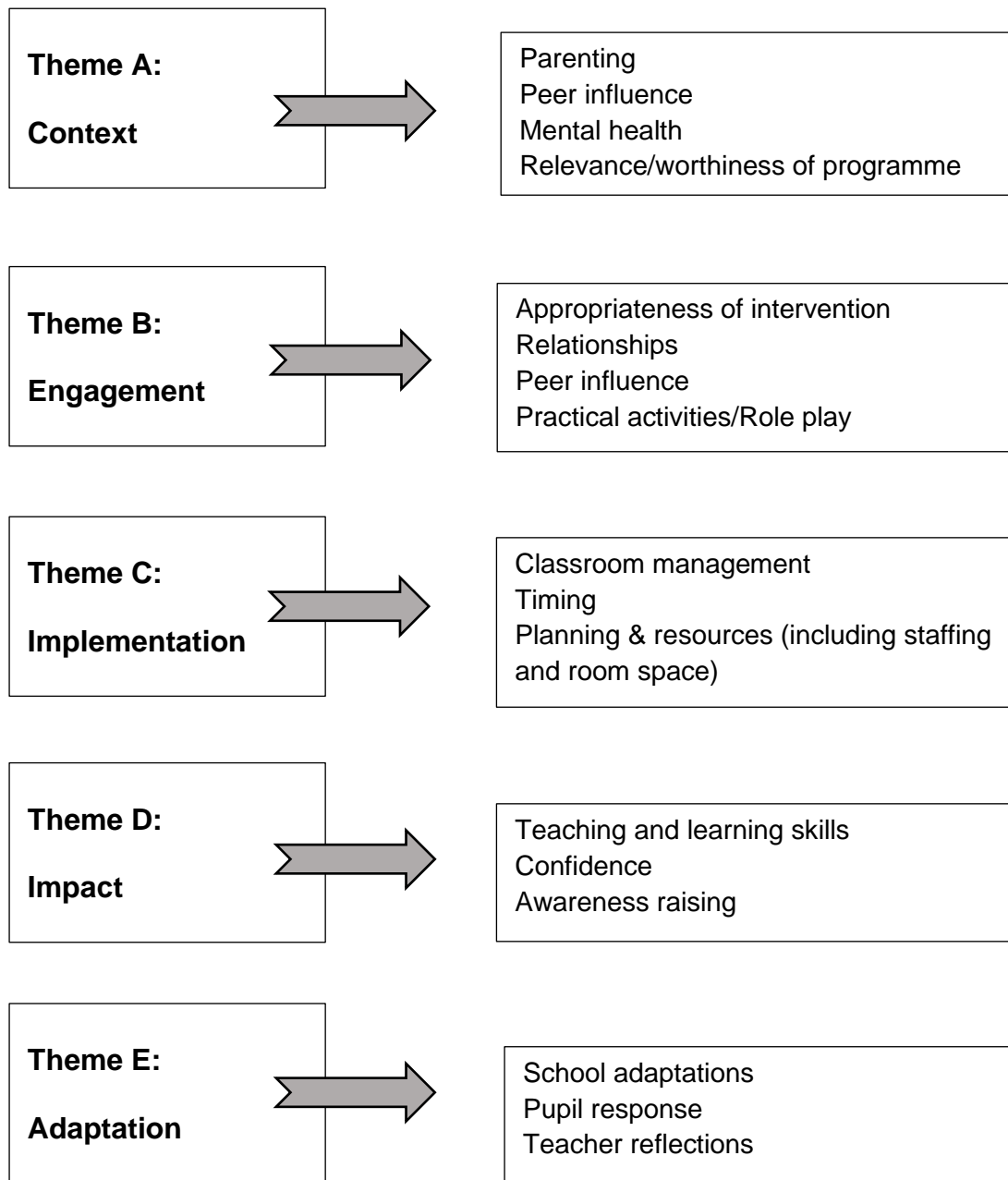| Theme A: Context	→	Parenting Peer influence Mental health Relevance/worthiness of programme
Theme B: Engagement	→	Appropriateness of intervention Relationships Peer influence Practical activities/Role play
Theme C: Implementation	→	Classroom management Timing Planning & resources (including staffing and room space)
Theme D: Impact	→	Teaching and learning skills Confidence Awareness raising
Theme E: Adaptation	→	School adaptations Pupil response Teacher reflections

Figure VIII viii School Aii - themes diagram