

Evaluating the implementation of IBA interventions with students in a university setting

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Declaration

I hereby declare that this thesis has not been and will not be, submitted in whole or in pa	art
to another University for the award of any other degree.	

Signature: Ashley Howard Date: 13/4/2022.

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Preface

This thesis is presented in a series of chapters that start with the introductory Chapter presenting a literature review of IBA with underlying theory. Following this Chapter 2, 3 and 4 comprise the studies that have been conducted as part of this thesis. Chapter 5 summarises the findings of the empirical work and relates back to previously mentioned research. Chapter 3 is currently being prepared to be submitted for publication in a qualitative research journal.

Journal articles

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Research report chapter

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Glossary of Acronyms and definitions

- ABI Alcohol Brief Intervention: A one off intervention designed to identify an individual's level of drinking and providing them with feedback and possible signposting to further support.
- ANOVA Analysis of Variance: A standard statistical method to compare the variances between the means of different groups.
- AUD Alcohol Use Disorder: A term describing the possible dependence and hazardous drinking that an individual can be engaged in that is recognised as a disorder.

AUDIT/AUDIT-C - Alcohol Use Disorders Identification Test (AUDIT): An alcohol screening test that comprises either three (AUDIT-C) questions or ten (full AUDIT) questions looking at all three factors of the scale, hazardous, dependence and harmful drinking practices only within the full AUDIT.

- BC Behaviour Change: A term used to describe the research into behavioural change that looks at agents, factors, and components of change in empirical research.
- BMI Brief Motivation Intervention: A term describing a short intervention that incorporates many of the tenets of Motivational Interviewing techniques, see MI.
- BI Brief Intervention: A short intervention of any type that involves an alcohol screening and structured feedback to an individual to identify their drinking level.

Calculated Hedonism: A term describing the practice of computing the requirements for increased intoxication based on adding standard alcohol units to increase greater alcohol fuelled states.

Choice Architecture: A term developed from economic theory to denote how elements of behaviour can be influenced through altering an individual's response to different choices.

- DDQ Daily Drinking Questionnaire: A questionnaire identifying frequency and amount of alcohol consumption on a typical week for individuals.
- DG Drinking Games: A term describing the activity of participating in games that involve rewards and penalties directly related to alcohol consumption levels.

- DMQ Drinking Motivations Questionnaire: A questionnaire comprised of four factors looking at social, enhancing, coping and conformity motives for alcohol usage.
- HED Heavy Episodic Drinking: A term that denotes the increased consumption of alcohol in a short time frame, brief alcohol episodes that include heavy drinking.
- IBA Identification and Brief Advice: a term denoting a brief intervention that is short in duration and comprises a screening test with some reflective statements relating to a person's identified alcohol consumption level.
- INEBRIA: An organisation that supports furthering empirical research in the study of alcohol usage and dependence.

Journey Juice: A term used to describe the practice of drinking alcohol on route to a venue or environment, can also be referred to as pre-partying in transit.

Kitchen Disco: A term used to describe the practice of drinking alone and listening to music in an individual's kitchen to enjoy a solitary alcohol fuelled experience.

- LSBU London South Bank University: the acronym for the university.
- MPDG Motivations Playing Drinking Games: A questionnaire comprised of seven factors, for identifying the motivations for playing drinking games.
- MI Motivational Interviewing: A term used to describe the therapeutic approach of based on Miller and Rollnick's work that is directive, client orientated and designed to elicit behaviour change through overcoming ambivalence.
- OBI Opportunistic Brief Intervention: A brief intervention given to individuals in settings that are necessary in the setting i.e., primary healthcare, accident and emergency and pharmacies.
- PBS Protective Behavioural Strategies: A term describing the use of regulation and reduction strategies when consuming alcohol as a way of reducing the possible consequences of increased consumption.
- PEP Post Event Processing: A term denoting the practice of discussion of previous night's alcohol consumption to alleviate anxiety and associated feelings.
- PMI Pre-partying Motivations Inventory: A questionnaire comprised of four factors that identify different motivations for pre-partying before social events.

Pre-partying: The term used to describe drinking before any social event, this term is also referred to as pre-drinking, pre-gaming, pre-loading, and pre-funking in the literature.

RCT – Randomised Controlled Trial: A standard measure of empirical research used to trial interventions and other forms of treatment with randomly assigned groups to reduce bias in the procedure and increase the rigor of the approach.

 $\mbox{SD}-\mbox{Standard}$ Deviation: A term denoting the measure of dispersion of data from the mean.

UEL – University of East London: the acronym for the university used in study 1.

Abstract

This programme of research reports a series of studies aimed at examining IBA interventions in university settings, among those delivering and receiving interventions. Three studies utilising both quantitative and qualitative methods investigated a) the motivations for alcohol use amongst students in two university settings, b) the views, opinions and reflections of interventionists and recipients of IBA, and c) the feasibility of implementing an IBA intervention and its effect on alcohol consumption amongst prepartiers and drinking gamers.

The first study used quantitative e-questionnaires to examine alcohol motivations using a cross-sectional design. The main findings demonstrated that motivations for prepartying and drinking games differed from general drinking motivations, with pre-partiers and drinking gamers reporting increased AUDIT-C measures.

Using a series of focus groups comprised of students, recipients of IBA and IBA interventionists, the second study provided a qualitative exploration of views, opinions, and reflections on IBA interventions. Recipients of IBA interventions reported more problematic usage compared to students and IBA interventionists. Thematic analysis highlighted two common themes across all focus groups. The first theme, Intervention Approach / Reflection, included evaluations on how interventions were constructed, developed, and implemented. The second theme, Social Convention of drinking included reflections on how alcohol experiences differ in social settings and the need to tailor interventions to groups specifically with the use of opportunistic methods.

The third study was a feasibility study implementing an IBA intervention with students. Findings demonstrated that IBA interventions were associated with lower AUDIT-C scores at a 2-month follow up.

Overall, the original contributions from this programme of research have been the sequence of research studies that have identified, evaluated, and feasibly implemented IBA initiatives. The evidence provided by the research has illustrated the need for intervention with pre-partiers and drinking gamers given the differing motivations and increased AUDIT-C measures. The research conducted in this thesis contributes to the alcohol motivations and IBA intervention implementation literature.

Chapter 1

Interventions in educational settings: Exploring IBA interventions with university students.

Introduction

The study of alcohol consumption and related harms is an area of research that has been expanding within student environments (Chaney et al., 2019; Davoren et al., 2016; Santos et al., 2021; Smit et al., 2021). The levels of harms vary amongst students with hazardous levels of alcohol usage leading to intervention. The development of brief interventions (BI) has provided an approach to identifying harms and offering feedback that can alter alcohol behaviours with non-alcohol dependent students. The approach has demonstrated efficacy at helping increase knowledge and support reductions in usage. However, implementation and engagement with cohorts can be challenging (Hall et al., 2019).

The aims and objectives of the programme of research in this thesis has been to identify alcohol behaviours at two university campuses and examine the level of prepartying and drinking games that are reported in each student setting. Secondary aims of the research have been to explore the barriers to and facilitators of IBA interventions with students, interventionists, and recipients of intervention to understand how IBA is understood and experienced on campus. Additionally, the final part of this research aimed to implement a feasibility study of an IBA in a university setting to test the differences in reported alcohol consumption over a 2 month follow up. The main objective of the research was to produce a series of studies that combine to show the type of alcohol behaviours that happen on campus. Using both students and interventionists opinions on IBA interventions could provide observations of how IBA is structured and implemented producing more understanding of the approach. Also, conducting a feasibility study of an IBA intervention with students in a university setting could reduce reported alcohol consumption. Essentially, the objectives of the programme of research were to identify, understand, and implement IBA with students to observe how the sequence studies inform the subject of IBA interventions.

Firstly, this chapter will explore the types of BI that are used within the research in different settings, secondly, Identification and Brief Advice (IBA) research will be

examined. The chapter will then identify implementation research and explore the role of behavioural change research in the context of intervention and how it relates to student environments.

Literature Review

Identification and Brief Advice

A brief intervention is defined as simple advice that is given to an individual to inform them of a behaviour that may need to be altered for better health (Thom et al., 2016). Brief interventions with alcohol consumption have been the subject of empirical study and have identified numerous factors involved in the process of intervening which include goal setting, personalised feedback, and advice (Gaume et al., 2014; Heather, 2014; McCambridge, 2013; McCambridge & Kypri, 2011). Many different classifications of brief intervention have been developed that have different modes of delivery or length of interactions. Brief interventions are comprised of four main categories: Identification and Brief Advice (IBA), Alcohol Brief Intervention (ABI), Opportunistic Brief Intervention (OBI), and Brief Intervention (BI). IBA consists of a 5 to 10-minute interaction with brief personalised advice. ABI is a longer interaction that includes subsequent follow-up sessions typically all lasting around 10 minutes with personalised feedback. Also, OBI interventions are delivered in primary healthcare settings or pharmacies. The length of interaction varies usually between 5 to 10 minutes with personalised feedback included. Further, BI's involve interactions with individuals that can last anywhere between 5 to 25 minutes and usually involve personalised feedback and advice. All these classifications can elicit different responses and have been shown to have varying levels of efficacy regarding the context and the content being provided (Cunningham et al., 2012; Donoghue et al., 2014; McClatchey, Boyce & Dombrowski, 2015). Research has examined the efficacy of brief alcohol interventions which have provided useful insights in finding the best approaches for delivery with students at many university campuses. Therefore, in this thesis, one question being addressed in the introductory studies is to identify the type of drinking behaviours that occur on a university campus, specifically in the context of LSBU and UEL university settings. Using a cross sectional design with an e-questionnaire to assess self-reported motivations to consume alcohol with pre-partying and drinking games, could provide an understanding of both campuses' alcohol consumption levels. Also, assessing the type of drinking behaviours and motivations could provide information on how best to target these drinkers at the university with IBA interventions.

IBA as an intervention tool

The nature of IBA consists of an alcohol screening and brief intervention, which is designed to educate, and disseminate messages around alcohol use. The widespread use and popularity of this technique has been used in primary healthcare settings, (Alvarez-Bueno et al., 2015; Mdege & Watson, 2013; Nilsen, Wahlin & Heather, 2011; Williams et al., 2005), university campuses, (Clarke, Field & Rose, 2015; Donoghue et al., 2014; Heather et al., 2011; Monk & Heim, 2013; Scott-Sheldon et al., 2012; Taylor et al., 2015), and community environments (Dhital et al., 2015; Hall et al., 2019; Platt et al., 2016). The proven efficacy of reducing alcohol consumption levels has been confirmed and replicated in numerous settings (Dhital et al., 2015; Hall et al., 2019; McClatchey, Boyce & Dombrowski, 2015; Platt et al., 2016; Thom, Herring & Bayley, 2015). Also, despite many theorists exploring the active components that constitute the efficacy (Gaume et al., 2014; Heather, 2014; McCambridge, 2013; McCambridge & Kypri, 2011), the area of delivery and implementation has limited empirical study within the student environment. Therefore, implementing a brief intervention with students in a university could provide evidence to support the efficacy of using IBA in student environments. Although, more recent research is emerging exploring different contexts for brief intervention (Hall et al., 2019).

IBA must be understood as a non-treatment tool, specifically as dependent alcohol drinkers require alcohol treatment. Additionally, IBA is designed to be used with hazardous drinkers and student campuses contain hazardous drinkers. One of the research questions in this thesis explores the feasibility of implementing an IBA with students in a university setting. The rationale for implementing IBA is to validate the approach and understand motivations for alcohol usage amongst students. The methodology for the first study will identify self-reported motivations for pre-partying, drinking games and general alcohol behaviours using an e-questionnaire with a cross sectional design for each campus (LSBU & UEL) population.

Student needs for intervention

Alcohol has been shown in the research to be a part of student culture or one of the requirements for acceptance into social life at university (Iwamoto et al., 2011; Tan, 2012) especially in the UK (Aurora & Klanecky, 2016; Gambles et al., 2021). Many individuals that embark upon higher education each year face the reality of a question to consume or not consume which could deliver social inclusion or exclusion. Depending upon the

answer to this question will determine the course of a student's social life, membership affiliations and overall acceptance into campus drinking culture (Aurora & Klanecky, 2016; Gambles et al., 2021; Iwamoto et al., 2011; Tan, 2012). However, the level of consumption is not necessarily the only part of social acceptance on campus, being perceived as fun and adventurous can add to the student's social credibility (Iwamoto et al., 2011; Schulenberg & Maggs, 2002). Research has explored both social acceptance and alcohol consumption as part of campus culture (Iwamoto et al., 2011; Schulenberg & Maggs, 2002; Tan, 2012). Reviews of the evidence in this area have examined the nature of drinking cultures as they relate to university campuses. Findings have demonstrated increased risky practices and greater negative consequences occurring for student populations despite some reductions in consumption (Davoren et al., 2016). Recently, Santos et al., (2021) examined the cross-cultural differences between UK and Brazilian students pre-drinking practices in university settings. Findings showed that UK students drank less on pre-drinking occasions although had greater odds of experiencing black outs, vomiting and comas because of pre-drinking. Similarly, Chaney et al., (2019) explored prepartying units with increased blood alcohol levels and showed that individuals tend to drink between 3-4 drinks when pre-partying and this results in higher identified blood alcohol concentrations which can increase risks associated with the behaviour.

Observing the type of drinking behaviours could add to the understanding of how the drinking culture in set up on campus. In the first study of this thesis, identifying the types of drinking activities (pre-partying & drinking games) and the motivations for these behaviours could inform research on how students drink in a university setting. Using a cross sectional design with e-questionnaires to look at students during their course of study could provide more insight into the nature of alcohol behaviours in university settings.

Alcohol-related risk

The levels of alcohol-related risk and subsequent harms are evident in the current climate of university life in the UK (Chaney et al., 2019; Davoren et al, 2016; Santos et al., 2021; Smit et al., 2021). In contrast, some evidence shows a recent decline in the levels of alcohol consumption in student populations found in the U.S. and Canada (Krupa et al., 2018; Lui, 2019; Stuart et al., 2018). The research on risks related to alcohol use in students has been considerable (Haas, Wickham & Gibbs, 2016; Kenney, Hummer, & LaBrie, 2010; LaBrie, & Pedersen, 2008; Miller et al., 2016; O'Rourke, Ferris & Devaney, 2016; Pedersen, & LaBrie, 2007; Radomski et al., 2016; Read et al., 2010) which shows

how different alcohol use behaviours add to the susceptibility of students to experience negative consequences. The level of blackouts, physical violence and cases of sexual assault have maintained high incidence rates, irrespective of the shifts in alcohol consumption with students (Krupa et al., 2018; Lui, 2019; Stuart et al., 2018). Also, the U.K. has high consumption levels with students which increase the risk and susceptibility with developing problematic usage behaviours later in life (Buckner & Schmidt, 2009; Russell & Arthur, 2015). Therefore, the need for intervention is important given the severity of alcohol consumption that contributes to increased risk behaviours with students in university.

Within the past few years, many approaches have been developed in clinical settings that have shown to have efficacy in getting individuals to consider how much they drink. The level of efficacy has been demonstrated in supermarkets and educational settings (Hall et al., 2019; Thom, Herring & Bayley, 2015; Thom et al., 2016), with more focus being given to educational environments. IBA as an approach has gained considerable attention in clinical, community and educational settings (Thom, Herring & Bayley, 2015; Thom et al., 2016). The use of IBA interventions is becoming the norm as it allows an interaction that can generate insight for the student or individual, to consider their alcohol consumption. Therefore, the use of an intervention tool that highlights the level of individual risk with drinking could increase awareness and lead to change with individuals on campus. However, many students may know the risks and be aware of their level of drinking and still choose to engage in the behaviour, like the research on calculated hedonism (Szmigin et al., 2008).

Heather, (1989) introduced a way of differentiating brief interventions from treatment. The focus of his discussion centred upon the observation that once alcohol usage had developed to dependency, brief interventions are relatively ineffective. Therefore, Heather, (1989) proposed that early identification and intervention are essential for understanding the requirements of treatment for individuals with high consumption rates. Heather, (1989) also proposed that excessive consumption and intoxication are not directly related to dependence as many drinkers have varying consumption habits and do not necessarily develop dependence. It could be argued that alcohol dependence is a separate development in behaviour and therefore would require separate identification and treatment accordingly. The implications of Heather's contribution provide a forum to discuss intervention and the types of individuals that would benefit given the varying

levels of consumption. Additionally, helping students to identify their level of consumption will determine the required level of intervention. Additionally, heavy consumption does not denote problematic usage as stated by Heather, (1989). Therefore, screening student's alcohol usage will be vital for differentiating levels of consumption when assigning interventions to university students. In the context of the thesis first study, the methodology will screen for consumption rates to determine which students require, no advice, brief advice, or further support/signposting for help in subsequent IBA implementation.

Intervention delivery

An exploration of the delivery of IBA in different contexts is a subject of importance within this thesis. Thom, Herring, and Bayley, (2015) examined the delivery of IBA as informed by previously published literature and an expert workshop. One of the most important aspects of the review posed the question of what components have efficacy in certain contexts for IBA to be influential. The researchers proposed that many different elements could be the causes of behaviour to change in the context of IBA and therefore examined each area in different settings. One of the main implications of Thom, Herring and Bayley's (2015) findings is the examination of different settings for delivering IBA and the approaches flexibility. Another finding from the workshop demonstrated that offering advice to an individual whose views are entrenched would be counterproductive and potentially increase the behaviour as noted previously with alcohol screening responses (Fazzino, Rose & Helzer, 2016). However, the research (Thom, Herring & Bayley, 2015) tended to focus on how interventions are being used in different contexts as opposed to running RCT (Randomized Control Trial) trials with IBA in each setting. In the context of this thesis, exploring participant views and experiences with intervention will form part of the research. One of the research questions is examining the feasibility of implementing an IBA with students in a university setting when considering their motivations for alcohol use.

One of the key areas within the study of IBA and other brief interventions is the context in which delivery takes place. Thom et al., (2016) further explored the concept of broadening the delivery of IBA in other settings beyond the focus on clinical environments. The researchers noted that many issues arise with delivery in housing, social work, and probation environments. The issues included understanding what IBA consisted of the barriers and challenges to implementing the intervention and what was considered

best practice for the approach. Findings from each of these environments showed reductions in alcohol consumption with the populations being sampled. Therefore, this evidence supports the use of IBA in different contexts which means the approach could be transferrable to different environments. However, much of the research was limited in sample sizes and it is difficult to verify how the populations experienced the impact of the interventions in the long term. Regarding this thesis, feasibly implementing IBA in a university setting is one area of focus for the current research to evaluate and extend empirical study in using IBA with student populations.

Another key factor with implementing interventions is the act of intervening to raise awareness can sometimes have the opposite effect and increase consumption levels (Rodriguez-Martos et al., 2007). This phenomenon of the iatrogenic effect must be considered in the context of intervention delivery as it can impact the level of consumption in some cases at post follow up (Rodriguez-Martos et al., 2007). The implications of this phenomenon must be considered when implementing interventions as part of the studies being conducted in this thesis involve delivering interventions to students. Therefore, ensuring that students are screened and advised according to their consumption level could help to mitigate this risk. Although, individual views and experiences of alcohol will vary in student environments. Therefore, feasibly implementing an IBA with university students could provide some insight within university settings, furthering research in this area.

University settings

One of the main approaches to implementing interventions in university settings comprise e-interventions. The format of e-interventions follows a similar construction to brief interventions whereby a student will fill out a screening online and receive feedback with alcohol advice. A benefit that has been the anonymity from providing information online has led to reported reductions in alcohol usage amongst student groups when using e-interventions, (Cunningham et al., 2012; Dedert et al., 2015; Hallett et al., 2009; Kypri et al., 2014; Leeman et al., 2015; Walters, Miller & Chiauzzi, 2005; Walters & Neighbors, 2005). Additionally, Hallett et al., (2009) used focus group discussions to help construct web-based interventions and they found a series of important elements that provided content for e-interventions. These elements for e-intervention included: keeping interventions brief, easy to complete, an incentive to participate, informal language, feedback should be targeted around peer norms and messages through university accounts rather than personal could help improve the treatment of e-interventions. However, one

area of e-intervention that can limit the efficacy of the approach would be the ability to support at-risk students as the perceived anonymity may limit their ability to come forward. Additionally, 12% of the sample (Hallett et al., 2009) rejected the information delivered on their identified level of personal risk. One possible way of mitigating this student response would be handled within the interaction which e-interventions may not provide unless a follow up is conducted in person (Murphy et al., 2015). The research in this thesis will incorporate the use of e-questionnaires and e-interventions and could examine the effect of using e-interventions with students. These methodological approaches could identify the types of reported alcohol behaviours that occur in student settings, which increases the need to target these students for interventions. These findings could yield information on the feasibility of implementing IBA and the possible observations of reducing consumption rates through follow-ups that use e-interventions. The possible significance of these findings could support the research question that is exploring the feasible implementation of IBA interventions with students.

Another e-intervention found a unique response to the simple act of administering an alcohol screening. Taking responses when providing students with an assessment, researchers found that how they received the intervention information and the personalised feedback influenced them (Fazzino, Rose & Helzer, 2016). Using the intervention program Electronic Check-Up to Go (e-CHUG) provided brief intervention feedback and information after an alcohol screening. The researchers showed that using a screening could be the place for change to occur given the response from the students, with many not accepting or feeling unsettled by the results they received (Fazzino, Rose & Helzer, 2016). The resulting behaviour of students at subsequent follow-ups showed reduced alcohol consumption. The implications of this finding demonstrated that focusing on the alcohol screening in conjunction with personalised feedback could be the elements that effect change. However, as these elements are consistent within brief interventions, this finding does not necessarily add to the literature as a unique finding; although, it could be argued to support the validation of empirical research that is using brief interventions in educational settings. Another factor that has been identified in the research is the level of over and underestimation of consumption levels amongst the student population.

Alcohol estimation of peers

A consistent area that has shown to influence alcohol consumption levels is the estimation of peer drinking. Kraus et al., (2005) measured the inconsistencies of estimated and actual blood alcohol concentrations in the student population. One of the main findings

from the study was the students' ability to overestimate their alcohol consumption. Amongst the population sampled, the self-reported levels (0.12%) of alcohol consumed mismatched with recorded Blood Alcohol Levels (BAL's) of (0.09%) in the male participants (Kraus et al., 2005). This implies that predominantly male students are not able to correctly evaluate the typical amount of alcohol their peers consume. In the context of IBA, this is important information as individuals tend to incorrectly assess their level of consumption (Bertholet et al., 2011; Kulesza et al., 2013) or perceive themselves to consume less than reported. When these individuals are provided with personalised feedback it can reveal to them the accurate picture of their usage.

The use of direct personalised feedback is an approach that allows self-awareness to be generated by individuals which is one component of the efficacy of brief interventions, particularly IBA (Clarke, Field & Rose, 2015; Gaume et al., 2014; Miller et al., 2016; Prince et al., 2014). Personalised feedback allows a comparison to be drawn for students to identify their drinking in the context of peers. Peer norms evaluations are often incorrect with over and under estimation of alcohol usage; personalised feedback offers a reflection for the student to identify their drinking in the student population. IBA uses personalised feedback to offer this reflection and allows the individual to evaluate their usage within the student population or amongst the general population. The impact of this reflection can inform an individual of how much they drink, and the harms associated with the level identified. The result shows that individuals reduce consumption levels or can be more aware of the hazards that are faced by drinking (Clarke, Field & Rose, 2015; Gaume et al., 2014).

Along with the use of personalised feedback, another important element of efficacy to IBA is how brief the approach is (Kraus et al., 2005). Research has been demonstrating that altering the duration of the brief interventions to less time can be as efficacious as any longer intervention strategies. Leeman et al., (2015) reviewed web-based interventions for reducing alcohol consumption amongst college students. The researchers assessed all interventions that consisted of less than 15minutes in duration to evaluate brief types for overall efficacy in reducing consumption. A key finding was the ability to elicit longer-term changes in alcohol consumption with the use of brief approaches that included personalised feedback. However, many other elements of influence were not considered to have affected students' consumption, as many students throughout the semester can naturally reduce consumption as parts of their lives change (McClatchey, Boyce & Dombrowski, 2015). The increase and decrease in consumption levels do not necessarily

determine if an individual has problematic usage or possible dependency. Additionally, their level of drinking may be a current picture of their consumption at university which does not account for the trajectory of their drinking throughout the life course (Buckner & Schmidt, 2009; Russell & Arthur, 2015). Essentially, knowing the consumption levels on campus could enhance the knowledge of students drinking from those sampled. In the context of this thesis, the empirical research is taking place in a university setting. Therefore, understanding the student's motivations to consume and the type of activities they engage in (pre-partying & drinking games) could provide unique information on university settings, especially when feasibly implementing IBA interventions with those students.

Behavioural change

Following on researchers have explored in greater depth many factors that may impact the efficacy of brief interventions, as noted by Foster, Neighbors, and Prokhorov, (2014). Ambivalence was explored as a moderator of drinking and alcohol problems amongst students. An important finding was the ability of the student to hold ambivalence about drinking despite numerous negative consequences that had happened because of drinking. Delivering an intervention that allows the ambivalence to be present, yet challenges the individual to modify behaviour, could have efficacy depending upon how it is received. The nature of IBA uses elements of Motivational Interviewing (MI) to generate conversation and reflection with anyone receiving the intervention. Ambivalence about change is an important area to be considered when influencing student alcohol consumption levels. In many cases, ambivalence could be part of contemplation before considering a path of action (Heather, 2014). The notion of contemplation is a psychological stage of change where an awareness of a problem exists without any commitment to taking future action. Many individuals at this stage could be ambivalent about knowing the issue and not being able to do anything about the issue. In the context of IBA when an individual is given personalised feedback, they may be ambivalent about their identified alcohol level, as noted by Hallet et al., (2009). Therefore, importance could be placed on understanding the stage of change that a student has before delivering an IBA and how much ambivalence they have towards their consumption level. The ability to create behavioural change is a considerable area of empirical study. In the context of this thesis, observing how individuals change their behaviour with alcohol consumption is an area of importance in the focus of the research; especially, as IBA intervention implementation can show reductions or escalation in consumption at follow up.

Theories of Behaviour Change (BC) have been developed and modified throughout empirical studies on elements that help individuals to change (Abraham & Michie, 2008; Datta & Petticrew, 2013; Davis et al., 2015; Michie et al., 2011; Michie & Prestwich, 2010). Abraham and Michie, (2008) developed an approach that included 93 different types of change theory incorporated from systematic reviews in the subject area. The taxonomy developed provides the necessary content, theory, and understanding that would help standardize behavioural change techniques as they apply to intervention. An argument against BC theory has been that research tends to propose more theory to explain behavioural change as opposed to trialling theory-informed approaches to evaluate the efficacy of the theories (Davis et al., 2015). To challenge these criticisms, BC research incorporated more approaches that include choice architecture and behavioural economics (Lockton, Harrison, & Stanton, 2009; Murphy et al., 2015). These approaches have incorporated more economic theory into the development of interventions. Specifically, behavioural economics identifies how reward systems function when individuals consume alcohol. Also, choice architecture has been developed for examining change with motivations that influence individuals' responses to choices. Further exploration of choice architecture has importance when identifying the mechanisms that tend to evoke change. This subject will be examined in greater detail to understand how choice architecture can influence behaviour in the context of intervention and how it might apply to university settings.

Choice Architecture

The literature on choice (Thaler, 1980) has shown how developing behaviours through creating new motivations can generate self-directed change. The concept of choice architecture has been developed within economic theory to explain how elements of behaviour can be influenced by altering the motivations to respond to different choices. Lockton, Harrison, and Stanton, (2009) moved beyond the concept of raising awareness of a problem to developing choice as a lever for change. Behavioural economics and design theory tend to evaluate the usability and certainty of an outcome when selecting a choice that could evoke lasting changes.

A concept developed from these theories was the five levers for change which simplified the delivery of promoting lasting changes with individuals. These five levers for intervention include: making it easy to implement, understanding as to why it is being used, constructing a habit with the behaviour, inducing rewards, and making it desirable

for the individual. In the context of change, regulating behaviour is an area that has gathered considerable development especially with strategies and approaches to limiting excessive alcohol consumption. Criticisms for behavioural economics and choice architecture has been like BC approaches with research lacking consistent implementation to evaluate theory fully. Within the thesis, behavioural change is an important area that will be assessed with questions in later e-interventions to identify types of strategies used to limit consumption in the past with students. Specifically, identifying these strategies will provide evidence on the choices that students make when reducing consumption. With reference to choice architecture, which strategies individuals employ to change behaviour reveal some of the best options for subsequent intervention. In some cases, limiting the number of drinks, having a designated driver, switching between soft drinks are all strategies that are linked to changing behaviour. These strategies relate directly to Protective Behavioural Strategies (PBS; Martens et al., 2005) that aim to help reduce harms associated with drinking. The use of PBS strategies will be evaluated in reference to intervention research and the efficacy of using different strategies to help students with reducing consumption. In this thesis, using PBS based questions could help with understanding the type of strategies that students tend to use when reducing consumption or limiting the number of harms when drinking.

Protective Behavioural Strategies (PBS)

The nature of reductions in alcohol consumption levels has required greater efforts and strategies to be devised which supports a student's ability to reduce. Protective Behavioural Strategies (PBS) are defined as a series of different behaviours that can be implemented to reduce alcohol-related negative consequences (Dvorak et al., 2015; Kenney et al., 2016; Kulesza et al., 2010; Martens et al., 2005). These different strategies include limiting the number of drinks or not exceeding a certain number, drinking slowly, alternating between alcohol and non-alcohol drinks, assigning designated drivers, avoiding drinking games and ensuring that people can get home by sticking together. Arguments against the variable efficacy of PBS strategies have been noted, that show high alcohol consumption rates remaining despite the use of PBS strategies with many students (Dvorak et al., 2015; Kenney et al., 2016; Kulesza et al., 2010). It has been found that many students still drink at adverse levels and incorporate PBS strategies on infrequent occasions irrespective of the level of risk and negative consequences experienced (Dvorak et al., 2015; Kenney et al., 2016; Kulesza et al., 2010). The relevancy of PBS strategies has been a subject of much empirical study in the U.S. In the U.K. context exploring these types of

strategies could provide information on how students can limit possible consequences and inform them of different approaches to limiting excessive consumption. The research is this thesis will incorporate PBS strategy questions in later e-interventions that will identify how many strategies students have used and ways that they can reduce consumption. One key area to consider is the way the intervention is delivered and the factors that may influence the feasible implementation of IBA.

The role of the interventionist

The interventionist is an important part of the structure of IBA as they may be a source of influence on the delivery of the information and the interaction with the student or other group, which has been noted in community pharmacies (Dhital., 2015; National Institute for Health and Care Excellence, [NICE, 2011]). Potential factors that could impact the outcome of the interaction include the perception of authority, perceived importance of information, attitude of the individual and belief in the IBA as noted in community pharmacies (Dhital., 2015; National Institute for Health and Care Excellence, [NICE, 2011]). Within the evaluation of the interventionist, researchers had used peer facilitators with Motivational Interviewing (MI) techniques to address student alcohol consumption as noted by Tollison et al., (2013). Findings from the study showed the role of an interventionist's empathy was unrelated to alcohol consumption levels after receiving an MI-based intervention. Therefore, perceiving those interventionists may influence the outcome is not supported when peers adopt the role of providing interventions (Tollison, et al., 2013). A further examination of other influences was conducted by Murphy et al., (2015) when using behavioural economics as predictors of intervention impact. Comparing different types of intervention from BMI (Brief Motivational Interviewing) and Electronic Check-Up to Go (e-CHUG; online interactive web-based program) showed how reductions in consumption were mediated by in-person approaches at follow up. The implications of this finding support behavioural economic theory which states alcohol reward value is dynamic and subject to environmental factors that influence participant responses to interventions. However, the role of the interventionist could influence interactions although may not impact reductions in alcohol consumption in student's post-intervention. This could be due to the level of individual autonomy that a student can exercise when receiving intervention information and how they attend to the information they receive. Additionally, as noted before ambivalence could be a factor in students receiving information (Foster, Neighbors, & Prokhorov, 2014). In the context of this thesis, understanding and being aware of the biases that influence the interventionist could be one way of limiting this level

of influence. However, the interventionist is an important part of the delivery in how IBA is presented to individuals, due specifically to the conversation and questions that form part of the dialogue. Regarding later research in this thesis, ensuring that a neutral and disarmed approach to delivering reflective questions to students could enhance the efficacy of the IBA intervention. Knowing the influence of the interventionist is an important area to consider in the context of implementation. However, understanding the factors that influence students' motivations and actions towards alcohol could inform best approaches for intervention. The Self Determination Theory (SDT; Ryan et al., 2008) is an established theory that presents autonomy as a main source of change in how individuals alter behaviours. This theory will be further discussed with how it can apply to students when identifying the role of autonomy for altering alcohol use behaviours.

Self Determination Theory

Ryan et al., (2008) reviewed the use of Self Determination Theory (SDT) with interventions focused on changing behaviour. The SDT proposes that behaviour is embedded and maintained within an individual's sense of autonomy, relatedness, and competence. The theory states that through uncovering and promoting these internalized states with an individual, the likelihood of maintaining and adapting behaviour is increased and strengthened. Thus, supporting a participant's sense of autonomy will help to strengthen and endorse the need to continue a behaviour post-intervention. The importance of developing interventions that support students' abilities to exercise autonomy and implement changes could improve the efficacy of the approach. However, many criticisms of the theory relate to the division between intrinsic and extrinsic motivations and values that can be diverse in different populations. Many theorists argue that SDT does not account for the individual differences with how individuals respond to interventions when they have either intrinsic or extrinsic motivation styles as most samples are not homogenous. Therefore, ensuring that students are assessed for their motivations and values and how they behave is important when delivering intervention material. Although, taking the view of empowerment could help students take ownership of their behaviours regarding alcohol consumption which could enhance the efficacy of the intervention. Theorists have argued that personal autonomy, a form of SDT motivation, plays a pivotal role in altering human behaviour. Furthermore, researchers believe that these specific individuals can regulate behaviour consciously through activation of self-determination. In the context of this thesis, motivations to engage in different alcohol behaviours (prepartying & drinking games) will be assessed to determine how students consume on

campus. The function of identifying alcohol behaviours on campus could inform how best to feasibly deliver IBA to these students given the type of behaviours evident in the populations.

The theoretical underpinnings of behavioural change research help inform the development and implementation of the interventions being explored in this literature review. The theories discussed offer much to understanding the factors that influence student behaviours in reference to motivations and choices being made about alcohol use behaviours. One of the main areas identified is the use of autonomy and choices around change that influence behaviour directly. A further consideration of this research is within the implementation literature that explores the delivery of interventions that will be reviewed in this chapter.

Factors affecting intervention delivery

While numerous factors can influence the outcome of interventions, one of the main areas that are important for consideration is the timing of when interventions are implemented on student campuses. In an examination of Alcohol Brief Intervention (ABI) McClatchey, Boyce and Dombrowski, (2015) studied the timing of intervention over a term with university students. The application of brief interventions was given to students who scored over five on the AUDIT-C (Alcohol Use Disorders Identification Test; Saunders et al., 1993). Students scoring 5 or more on the scale are deemed to be at-risk and are given an ABI (Saunders et al., 1993). Due to consumption levels fluctuating throughout the semester, with exams or fresher's week; other times of the year were assessed. From this study, both groups assigned to intervention demonstrated a reduction in AUDIT (Saunders et al., 1993) levels at the follow-up period. One of the findings showed that when minimal requirements from students are evident with no deadlines, drinking consumption levels represented an accurate picture of student usage. Some limitations in the design were evident with a lack of comparison to other periods that may not be typical of student drinking. Also, exploring how patterns of drinking change throughout the semester could be an area when targeted interventions may have more influence. It could be argued that delivering interventions post Fresher's week may allow students to appreciate the information as opposed to during that week. However, in many respects, the timing of interventions is one factor that can be impacted by how individuals respond to interventions (McClatchey, Boyce & Dombrowski, 2015). Examining how students'

responses to intervention change over a semester could be an area to further understand the efficacy of the approach on student campuses. In the context of this thesis, all academic years will be examined to understand how they respond to the feasible implementation of IBA interventions. Additionally, the duration of interventions has been shown to influence the outcomes of reduced drinking with students to varying levels (Kulesza et al., 2010).

Length of intervention

The length of interventions is an important area as it relates to efficacy and the impact on individuals receiving interventions. Kulesza et al., (2010) explored brief alcohol interventions with college students in the U.S. attempting to answer the question of how brief is an alcohol BI. The research compared a 10minute, 50 minute and assessment only control group with follow-ups at 4 weeks. The research sample was female, Caucasian, psychology students. The study showed reductions in the 10-minute Brief Motivational Interview (BMI) group compared to the control. However, the 50-minute BMI group did not show any difference in reduction rates compared to the 10-minute group. The implications of this finding show that the longer duration of intervention did not influence reductions in alcohol consumption any better than shorter interventions. Despite the longer intervention group being given more focused advice and information on PBS strategies, it showed no differences in reduction rates. At follow-ups, each group had reduced the level of reported negative consequences resulting from their alcohol use. Criticisms for the study have focused on the lack of adequate time for follow-ups with the groups which makes it difficult to show reductions in the long-term alcohol consumption. An important observation in the findings was the ability of the 10-minute brief intervention to disseminate information to the sample and to be most influential at reducing alcohol consumption. The implications of these findings support the use of shorter interventions that can elicit reductions in consumption rates compared to longer interventions. As IBA is structured as a brief intervention tool, trialling this could provide information on the observations of the approach in this thesis, especially as the research takes place in a university setting.

Understanding how interventions are structured is essential when evaluating differing approaches as it relates to brief interventions. The nature of efficacy must be given adequate focus when examining what makes an intervention successful. Heather, (2010), following the INEBRIA organization, looked at the preoccupation with effectiveness and efficacy for Screening and Brief Interventions (SBI's) in many settings. The question remains when the Brief Intervention (BI) is ceasing to be influential when

targeting individuals with lower alcohol use. Heather, (2014) argues that understanding the principle that different types of intervention will be more influential with certain types of drinkers helps to inform treatment. It is important to understand how intervention outcomes are influenced by the structure of the approach. Some of the criticisms of this approach has been the ability to identify which parts make an intervention successful and how to replicate that efficacy. Much research has shown that IBA can generate awareness of alcohol consumption across many populations and contexts (Alvarez-Bueno et al., 2015; Clarke, Field & Rose, 2015; Dhital et al., 2015; Donoghue et al., 2014; Gaume et al., 2014; Hall et al, 2019; Heather et al., 2011; McCambridge, 2013; McCambridge & Kypri, 2011; McClatchey, Boyce & Dombrowski, 2015; Mdege & Watson, 2013; Monk & Heim, 2013; Nilsen, Wahlin & Heather, 2011; Platt et al., 2016; Scott-Sheldon et al., 2012; Taylor et al., 2015; Thom, Herring & Bayley, 2015; Williams et al., 2005). Therefore, in the context of this thesis, observing the feasibly of implementing an IBA with students could reduce alcohol consumption in the populations being sampled.

Summary and conclusions

Within the discussion of delivery with brief interventions, many factors have been evaluated that comprise the wealth of knowledge on the subject. The literature reviewed in this chapter demonstrates that many factors must be considered when evaluating alcohol usage in university settings. The use of behavioural change techniques can be influential in altering behaviours and the role of the interventionist can evoke change. Identifying alcohol usage behaviours in a student population indicates the level of hazardous drinking. With this identification the necessity for providing interventions can be assessed along with the types of drinking behaviours. This information can produce evidence to support the use of IBA with student drinkers that have different levels of usage. Also, the length of intervention and type of approach used can determine the influence in reducing alcohol consumption with students. Part of the first study in this thesis will be the identification of student motivations for drinking. Also, identifying how alcohol-related behaviour (prepartying & drinking games) motivations differ to general drinking motivations in a university setting. The methods used will comprise e-questionnaires to gather self-reported data on alcohol usage and motivations for consumption. The rationale for using equestionnaires is that the method can gather information quickly, easily with large populations and is commonly used in university settings. Which creates an ease of implementation for the method to gather self-reported consumption levels and motivations for consumption from students. Gathering information on the types of drinking behaviours

in student populations could provide greater knowledge on motivated behaviour and the need for delivering IBA with these groups.

Research question

The purpose of this research is to build upon the literature on IBA research and its implementation in a university setting to identify changes in alcohol consumption with students. This will be answered through exploring student drinking behaviours and the motivations that are part of the practices with pre-partying and drinking games.

Additionally, the observation of feasibly implementing an IBA in a university setting will be examined in a subsequent intervention.

Chapter 2

Drinking motivation and behaviour among university students.

Study 1

Aims of study 1

The first study aimed to explore how student drinking behaviours can be understood in the context of a university setting. Firstly, assessing students' frequencies, quantities, and motivations for alcohol related activity (pre-partying & drinking games), can provide information that can be used when feasibly implementing IBA interventions with these populations later in the research. One of the central aims of the first study in this thesis is to establish if drinking behaviours - specifically, pre-partying and drinking games - are common practices amongst the drinking population at both universities being sampled.

Rationale

The rationale for using university students is that IBA techniques have been proven to have efficacy with student populations (Clarke, Field & Rose, 2015; Donoghue et al., 2014; Heather et al., 2011; Monk & Heim, 2013; Scott-Sheldon et al., 2012; Taylor et al., 2015). However, while the amount of research in IBA implementation in university settings is building, more research is required. Therefore, exploring the drinking behaviours in a university setting could potentially inform the delivery of IBA interventions with at-risk students that engage in pre-partying and drinking games. Additionally, the research could add support to the literature on IBA implementation in university settings.

Introduction

The research on interventions mentioned in the previous chapter highlights the necessity of brief alcohol interventions, namely IBA, to be implemented in a university setting. A large majority of university campuses have high rates of alcohol consumption which increases at certain time points, i.e., Fresher's week or examination periods (McClatchey, Boyce & Dombrowski, 2015). Also, consumption rates increase and decrease during the semester with some reported periods of problematic drinking

(McClatchey, Boyce & Dombrowski, 2015). Pre-partiers and drinking gamers are two populations that have shown to be associated with increased incidents of risky practices and negative consequences because of the behaviour (Zamboanga & Olthuis, 2016; Haas, Wickham & Gibbs, 2016; Zamboanga et al., 2017). The nature of pre-partying and drinking games can affect students' wellbeing and potentially leads to the establishment of drinking behaviours that can persist and develop into Alcohol Use Disorder (AUD) (Buckner & Schmidt, 2009). Therefore, examining the motivations for pre-partying and drinking games (LaBrie et al., 2012; Zamboanga et al., 2014) could inform best practice on how to approach these types of drinkers with an intervention. In this thesis, part of the first study will comprise an evaluation of the drinking habits of pre-partiers and drinking gamers to understand how their motivations and behaviours are different from hazardous drinkers. Examining these motivations could provide information on many of the reasons for these behaviours. Also, more knowledge could be gained on how students drink in educational settings and the needs of interventions with at-risk students that pre-party and play drinking games.

Alcohol motivations

A series of theoretical models have been produced to explain the dynamics of motivations and how different psychological states contribute to varied expressions of behaviour that can be applied to the student drinking population, (Gollwitzer, 1999; Sheeran et al., 2005; Sheeran, Gollwitzer & Bargh, 2013; Webb et al., 2012). In a study conducted by Cox and Klinger, (1988; 2011) they proposed the Motivational Model for Alcohol Use, which defined the motivations that drive behaviour. It was theorised that motivation involves the internal states of a person that lead to the initiation, energy, persistence, and behaviour directed towards goals. The role of goal directed behaviour was the person's ability to focus on a specific motivated task according to Cox and Klinger (1988; 2011). It was believed that the decision to initiate and maintain drinking was driven by rational and emotive processes that were directed by the goal to achieve a different affect state (feeling). The nature of goal directed pursuits is that it can lead an individual to be motivated by a positive outcome or associated good feeling because of the behaviour. Minimal criticism was given for the original theory as it examined alcohol use in the context of motivation and emotion. However, the theory was compared to Miller's, (1983) research on motivational interviewing approaches that explored the technique of engaging drinkers in treatment. Although, this was not the focus for the original research with Cox and Klinger, (1988) as they explored motivations for alcohol use amongst drinkers.

Learning the different underlying motivations for alcohol consumption can provide greater scope in how students consume in university contexts. Cooper, (1994) developed a measure for assessing the motivations to drink alcohol with numerous populations, The Drinking Motivations Questionnaire (DMQ) was influenced by Cox and Klinger's, (1988) original model. The four factors that were identified involved: social, coping, enhancement and conformity motives that are some of the motivations for alcohol consumption.

Cooper's, (1994) main finding showed that enhancement, social and coping motives were positively related to frequency and quantity of alcohol use. Conformity motives were linked to alcohol related consequences and the increased risk of problems due to alcohol use. The four-factor model has been replicated several times and has demonstrated consistent reliability and can provide insight for the factors that can be identified for drinking motives in many cohorts. However, criticisms have been suggested that enhancement has been found to be a greater measure of hazardous alcohol consumption cross culturally in contrast to conformity motives that are not associated with hazardous drinking (Nehlin & Oster, 2019).

The role of emotion regulation in alcohol motivations has shown that different psychological states can influence consumption in students (Aurora & Klanecky, 2016). In exploring a gap in the literature, Aurora and Klanecky, (2016) examined the mediation of drinking motives within the relationship between emotional regulation challenges and increased alcohol consumption with US college students. Findings demonstrated that drinking to cope and drinking for enhancement motives increased the level of reported alcohol consumption and was related to decreasing negative affect (depression, anxiety) situations because of the level of alcohol involved. The role of emotional regulation difficulties related directly to students' motives for drinking to enhance environments when compared to conformity or social motives.

With respect to the DMQ measure, incorporating further drinking motivations could enhance the scope of the measure. However, the DMQ measure has been validated in subsequent research cross culturally (Fernandes-Jesus et al., 2016) and throughout research with student motivations for alcohol consumption, DMQ-R (Kuntsche et al., 2006; Kuntsche & Kuntsche, 2009).

Pre-partying & drinking games

Pre-partying as a motivated behaviour has been the subject of empirical study in both the U.S. and now in the U.K (Foster & Ferguson, 2013; Haas, Wickham & Gibbs,

2016; Kenney, Hummer & LaBrie, 2010; LaBrie, & Pedersen, 2008; Miller et al., 2016; O'Rourke, Ferris & Devaney, 2016; Pedersen, & LaBrie, 2007; Radomski et al., 2016; Read et al., 2010). Many factors have now become associated with the motivations for prepartying with saving money and making events more fun being highly endorsed (Read et al., 2010; Smit et al., 2021). Santos et al., (2021) found that UK students endorsed more financial motivations for pre-partying (pre-drinking) compared to Brazilian students sampled in the study. The context of financial motives is an important area to consider in the UK context particularly with university students and the financial impacts of increased fees together with rising living costs. This could be argued to provide a source of need for cheaper alcohol fuelled experiences that could be included within pre-partying practices. The Pre-partying Motivations Inventory (PMI; LaBrie et al., 2012) was developed as a measure through exploring the motivations that were most common for pre-partying in U.S. campuses. The use of this measure could yield important information that identifies the motivations for the behaviour amongst the UK sample being tested in this thesis.

Another important factor in alcohol motivations is the activity of drinking games and how much they can influence consumption with students. In this thesis, alcohol related activities (pre-partying & drinking games) and the motivations that form part of these behaviours are being assessed in the research. Johnson and Sheets, (2004) developed a measure for assessing the motives for playing drinking games amongst the student population. The role of drinking in the games is usually synonymous with an error occurring and as a punishment a person is required to drink an alcohol beverage. Johnson and Sheets, (2004) findings were that students identified as playing drinking games for eight motivating factors and increased consumption was a result of these motivations. These factors included: Competition/thrills, conformity, fun/celebration, social lubrication, coping, novelty, boredom, and sexual manipulation. The total sample (N=287) endorsed the motives for playing drinking games, with novelty and coping motives for playing being associated with less negative outcomes e.g., getting into a fight, experiencing a black out or not being able to consent to have sex. However, both coping ("drink to forget problems") and novelty factors ("to try something different") were found to have increased consumption levels for students that reported these motivations. Differences between genders were noticeable from the analyses, with male participants endorsing sexual manipulation motives that increased negative consequences for those students. One of the central findings was the use of coping motives that reduced negative consequences when students were motivated by this factor. It could be seen that coping motivations are a

protective factor that can help support reductions in problematic consumption and related consequences, when explored in the context of drinking consumption generally. A criticism of the research is the reliance of motivation for behaviour to be driven by certain factors, when culture, gender and ethnicity could be considered in the context of drinking games (Zamboanga et al., 2014).

Additionally, the original psychometric measure was not replicated widely and therefore further research by Zamboanga et al., (2017) validated the use of the Motivations for Playing Drinking Games (MPDG) scale with a diverse population of students. In adapting the research Zamboanga et al., (2017) identified seven factors with a new sample against the original eight factors used. Also, 6 main items from the original factors were removed and many items were reformed into other factors with enhancement/thrills being used instead of competition/thrills. Overall, the findings from the study showed that sexual pursuit (formerly sexual manipulation), and enhancement/thrills motivations were associated with negative gaming consequences along with conformity motives. Coping and novelty were shown to increase alcohol consumption levels following the original findings of Johnson and Sheets, (2004). A criticism of Zamboanga et al., (2017) replication is that determining which factors caused drinking game behaviours is difficult to identify due to the variability with each student's motivation to consume. Therefore, assessing drinkers' motivations for pre-partying and drinking games (LaBrie et al., 2012; Zamboanga et al., 2014) could provide insight into these motivated behaviours and the type of interventions required.

IBA as an approach has been applied to those who drink at increasing risk levels, when individuals score 5 or more on the AUDIT-C (Saunders et al., 1993) and 8 or above on the AUDIT (Saunders et al., 1993) this prompts the need to deliver an IBA. Although, pre-partiers and drinking gamers represent students that are sometimes at high risk with varying consumption levels. High risk on the AUDIT (Saunders et al., 1993) scale is between 16-19 and requires further intervention. Therefore, identifying the motivations for pre-partiers and drinking gamers in a university setting could provide the rationale for feasibly implementing an IBA with these at-risk students in subsequent studies in this thesis. A key aspect of the first study in the thesis is to investigate the differing motivations for alcohol related activity (pre-partying & drinking games) with students in a university setting.

This study involved identifying both pre-partiers and drinking gamers and other students that drink on campus. The reason for using this approach was to identify the consumption levels and motivations for drinking related to alcohol activities (pre-partying

& drinking games) from students taking part in the questionnaire. Full ethical approval was received from the university ethics committee before the commencement of data collection (please see appendix A).

Research question

The purpose of this research study is to identify the motivations for alcohol consumption with students in a university setting. This will be answered through identifying student drinking behaviours and examining how the motivations differ to prepartying and drinking games. Additionally, testing the observation on reducing alcohol consumption with students when feasibly implementing an IBA in a university setting will be examined in later study.

Hypotheses

Hypotheses that were devised from the current research question explore alcohol related activity with pre-partying and drinking games and the motivations for these behaviours with students.

- (1) It is hypothesised that pre-partying endorsed motivations will be significantly related to higher reported alcohol consumption amongst the student populations sampled.
- (2) It is hypothesised that drinking game participation will be significantly related to higher reported alcohol consumption levels amongst the student populations sampled.
- (3) It is hypothesized that all motivations as measured by the PMI scale will be correlated with pre-partying consumption rates amongst the student populations.
- (4) It is hypothesized that all motivations as measured by the MPDG scale will be correlated with drinking game consumption rates amongst the student populations.

Method

Participants

A total of 388 students were recruited through opportunity sampling methods at two London-based modern university campuses that had diverse populations. All levels of education were included with undergraduates and postgraduate students sampled, of which 296 students completed the study - finished all questions and submitted responses on the equestionnaire. The sample were comprised of 78% female (n = 231) and 22% male (n = 65) participants, aged 18 to 40 years (M age = 22.14, SD = 4.28), the age of participants

was capped at 40 due to older age participants were not the focus of this study. Also, the research was focusing on undergraduate alcohol usage with younger demographics to observe trends with young adult populations similar to many US based studies (Haas, Wickham & Gibbs, 2016; Kenney, Hummer, & LaBrie, 2010; LaBrie, & Pedersen, 2008; Miller et al., 2016; O'Rourke, Ferris & Devaney, 2016; Pedersen, & LaBrie, 2007; Radomski et al., 2016; Read et al., 2010). Therefore, all participants over the age of 40 (n = 20) and all empty responses (n = 43), where participants had quit before completing the scales in the questionnaire, were excluded from analyses. Additionally, all responses missing data were analysed against the sample for demographic comparison (n = 39). The incomplete sample (n = 39) had an average AUDIT-C score of M = 4.36, (SD = 2.37) compared to the main sample (n = 296) M = 4.81, (SD = 2.49) and there was no significant difference in these score, t(197) = 1.02, p > .05, n.s. Also, incomplete responses were similar with 51% aged between 18-20 compared to 48% in main sample. The only difference was the level of White/English/Welsh/Scottish/Northern Irish ethnic groups in the incomplete sample 38% compared to 27% in the main sample. All Ethnic origin differences can be seen in Table 1a.

Differences in demographic data between London South Bank University (LSBU) and University of East London (UEL) were evident between both campuses as shown in Table 1.

Table 1 – Demographic Differences between London South Bank University (LSBU) & University of East London (UEL) campuses

Demographic	AUDIT-C	Pre-partiers	Drinking
differences	scores (M, SD)	(N=)	Gamers (N=)
LSBU	M= 5.20, *	N=65	N=53
(N=187)	SD=2.43		
UEL	M=3.90,	N=19	N=13
(N=109)	SD=2.43		

^{*} *Note:* AUDIT-C = Alcohol Use Disorders Identification Test-C; Statistical significance between campuses shown as *p<.05; **p<.01

Of the total sample selected from both campuses, 54% (n = 160) had drunk alcohol in the past. Of those sampled 28% (n = 84) identified as pre-partiers, having drunk alcohol before a social event recently. Another 22% (n = 66) were identified as drinking gamers having recently participated in drinking games. From the total sample selected 46% (n = 136) of participants identified as non-drinkers and were removed from the analysis as they

were not part of the focus of the study. All non-drinkers that were sampled were not given any of the e-questionnaire measures for drinking and were excluded from the analysis. Table 1a shows the ethnic origin breakdown of the participants from the study.

Table 1a – Ethnic Origin breakdown of student samples from LSBU and UEL campuses.

Ethnic Origin	LSBU –	UEL -%
	% (N = 187)	(N = 109)
White English/Welsh/ Scottish/ Northern Irish / British	46%	23.9%
/ Other white background		
Black - Black British African / Black African / Black	16.6%	32.1%
Caribbean / Other Black background		
Mixed groups – White & Black Caribbean / White &	6.4%	6.4%
Black African / White & Asian / Other mixed		
background		
Asian – British Indian / Pakistani / Bangladeshi /	23.5%	32%
Chinese / Other Asian background		
Arab	3.2%	2.8%
Other Ethnic origin	4.3%	2.8%

Measures

The e-questionnaire included questions on frequency of pre-partying and drinking games and the number of drinks consumed when doing these activities. These questions were presented before each scale was given to the participants. Scores that exceeded a maximum clinical cut-off were not included as noted by LaBrie at al., (2012). A total of (n = 5) participant scores exceeded 40 on the scale for frequency of pre-partying in the previous month. They were deemed to exceed the clinical cut off and therefore the scores were removed from the analysis.

The alcohol use disorders identification test

The AUDIT (Alcohol Use Disorders Identification Test; Saunders et al., 1993) is a brief diagnostic tool designed to find levels of hazardous, harmful and dependence drinking. A set of 10 standardised questions were used to assess the levels of drinking. The first three questions are the short version AUDIT-C which is the hazardous drinking measure. An example question from the scale is: "How often have you had 6 or more drinks in one session of drinking?" responses are rated as 'Never = 0', 'Less than Monthly = 1', 'Monthly = 2', 'Weekly = 3', 'Daily or almost daily = 4'. Each score has a zone to indicate the relevant level of intervention required for each participant based on the reported drinking. The level of intervention varies based on the score, with those scoring between 0-7 are considered at low risk and are given alcohol health leaflets. A score between 8-15 is considered risky or hazardous which a standard brief advice intervention (IBA) is given. Scores of 16-19 are given brief interventions and assessment for more intensive interventions, with follow up and referrals in some cases. Those individuals scoring 20 or more is indicative of dependence drinking and would be offered a comprehensive assessment for a specialist alcohol service, the assessment should include multiple areas of need in a clinical interview (National Institute for Health and Care Excellence [NICE],2011). The maximum score that was received in the study was 25, higher scores are indicative of dependence drinking. The AUDIT is a comprehensive tool that is used throughout most healthcare settings in the UK and yields excellent reliability and results (Heather et al., 2011).

The drinking motivations questionnaire

The Drinking Motives Questionnaire (DMQ; Cooper, 1994) is a 20-item measure assessing the reasons why individuals drink alcohol. Four subscales are reflecting social motives for alcohol use, coping motives for alcohol use, enhancement motives for alcohol use and conformity. An example question from the scale is: "How often would you say you drink for the following reasons?". Each participant indicates their response to the statements that include: "Because it helps you enjoy a party", "To be sociable". Responses are scored on a four-point Likert scale ranging from 'Almost Never = 0', 'Some of the time = 1', 'Half of the time = 2', 'Most of the time = 3', 'Almost always = 4'. The questionnaire has demonstrated strong reliability when used in many different environments and has been particularly significant with testing the student population (Fernandes-Jesus et al., 2016; Kuntsche et al., 2006; Kuntsche & Kuntsche, 2009).

The pre-partying motivations inventory

The Pre-partying Motivations Inventory, (PMI; LaBrie et al., 2012) is a tool used to assess the motivations to engage in pre-partying behaviour (drinking before attending a social event). Four main criteria are assessed with Interpersonal Enhancement (IE), Situational Control (SC), Intimate Pursuit (IP) and Barriers to Consumption (BC) being the main motivations to engage in drinking before social events. An example question from the scale is: "Please indicate the relevancy of each statement as it applies to your drinking?". A series of 16 statements are presented on a Likert scale ranging from 'Not like me' to 'Most like me' to identify the level of motivation for pre-partying. An example of the statements includes: "I drink alcohol before a social event because I feel more energized before going out". The questionnaire has been proven to be effective with student populations in many settings (Foster & Ferguson, 2013; Howard et al., 2019).

The motives for playing drinking games

The Motives for Playing Drinking Games, (MPDG; Johnson & Sheets, 2004; Zamboanga et al., 2017) was devised for measuring the reasons and motives for playing drinking games. The measure assesses motivations that include Conformity, competition / thrills, social lubrication, fun / celebration, coping, boredom, and novelty. The questions are produced in statement form to answer the question "Please rate how important each of the following statements are when it comes to your personal decision to play drinking games". An example of a statement: "As a way of getting to know other people" with responses ranging from 'Not at all important = 1', 'Somewhat important = 2', 'Moderately important = 3', 'Very important = 4'. The motivation for sexual manipulation was removed from the questionnaire after piloting testing due to the ethical considerations of participants when asking sensitive questions. The MPDG scale was replicated by Zamboanga et al., (2017) and shown to be reliable and valid as a measure. The original factors from Johnson and Sheets, (2004) were used for the questionnaire to maintain fidelity of the measure.

Design

The design of the current study was cross-sectional. The identified drinkers from the sample were administered questions on number of drinks, frequency of drinking consequences, all non-drinkers' responses were recorded and then removed from the study as they were not a focus of the research.

The set of predictor variables tested were DMQ motivations, PMI motivations, MPDG motivations, Pre-partying frequency and drinking game frequency for drinkers and MAAQ motivations for non-drinkers. The criterion variables being measured were AUDIT-C drinking consumption levels. Participants were sampled through simple random sampling methods at both universities, which meant that all participants were eligible to be included as no exclusion criteria were required as both drinkers and non-drinkers were assessed from the populations sampled.

Procedure

All participants were given the e-questionnaire or a link to the questionnaire (please see appendix B for e-questionnaire). All participants could enter the prize draw as an incentive for completing the study if they wished (please see appendix C for terms and conditions). Informed consent was introduced at the beginning of the survey with all participants being informed of their right to complete the study (please see appendix C for information sheet & consent form). The right to withdraw from the study was presented to the participant and explicitly stated at both the beginning and end of the survey.

All students eligible to participate were enrolled on a higher education course at London South Bank University (LSBU) or the University of East London (UEL). The inclusion criteria were for students that had consumed alcohol in the past 30 days. Non-drinkers were sampled and removed from the study due to not being a focus of the research. All demographic information: Age, gender, student status, residential status, education level was structured with multiple choice answers with ethnic origin not being a forced response question (Please see Table 1a for breakdown of ethnic origins). The ethnic origin classifications were based on those utilised by the UK ONS (Office of National Statistics, 2016) (please see appendix F for ONS list).

In the first stage of the study students were given demographic questions as noted above before the AUDIT (Saunders et al., 1993) that focuses on measures of alcohol consumption was given. In the second stage, students were given the first AUDIT-C question as the source for selecting participants that drink. Students that responded with 'never' to the question of drinking were deemed non-drinkers and then exited the e-

questionnaire. Once the questionnaire was completed all participants were given a debrief (please see appendix D for debrief sheet).

In the third stage, students were then given the rest of the AUDIT questions. Each participant answered questions on their motivations for drinking consumption on the DMQ (Cooper, 1994). In the fourth stage students were given a question for identifying prepartying behaviour and those that selected 'Yes' completed the PMI (LaBrie et al., 2012). Participants that answered no were then given the MPDG scale (Johnson & Sheets, 2004; Zamboanga et al., 2017) that asked questions on drinking game participation. In the final stage students that completed the PMI were then given the MPDG scale. All participants that did not engage in drinking games were given a debrief and had completed the equestionnaire.

Ethical issues were considered when conducting the study; all participants confidentiality and anonymity was maintained throughout testing (please see appendix C for information sheet & consent form). All data from the e-questionnaires were safely stored on university computers that were password protected. All participants had the right to withdraw at any time without prejudice, although after data collection was completed, all participants were informed that their responses could not be removed.

Results

Sample characteristics for Gender, Residential status and Ethnic origin of drinkers and non-drinkers.

A series of Chi-Square analyses were run to determine if there was a significant association between student drinking status (yes, no) and gender, residential status, or ethnic origin. Ethnic Origin, χ^2 (4, N = 296) = 117.13, p <.001, and Residential Status, χ^2 (1, N = 296) = 21.60, p <.001, were shown to be significantly associated with student drinking status. However, gender was not associated significantly with student drinking status, χ^2 (1, N = 296) = .28, p >.05, *n.s.*, although it was observed that a greater proportion of the sample were female (n = 231) compared to male (n = 65). Non-drinkers were shown to be more likely to live on campus as opposed to at home, with a greater percentage of drinkers living at home compared to on campus, as shown in table 2. A majority of Asian and Black ethnic origins were more likely to be non-drinkers as opposed to White ethnic origins being drinkers as shown in table 3.

 $\begin{tabular}{ll} \textbf{Table 2} - \textbf{Observed and expected frequencies of drinking status with residential status.} \end{tabular}$

χ^2	Drinking Status							
	Drinker	Non-Drinker	Totals (n =)					
Residential Status	Count							
At home	109 (125)	123 (107)	232 (232)					
At University	13 (29)	51 (35)	64 (64)					
Totals (n =)	160 (160)	136 (136)	296 (296) *					

^{*}(Numbers in Parenthesis are Expected frequencies)

 $\begin{table} \textbf{Table 3}-\textbf{Observed} \ and \ expected \ frequencies \ of \ drinking \ status \ with \ ethnic \ origin \ breakdown \end{table}$

χ^2		Drinking Status						
	Drinker	Non-Drinker	Totals (n =)					
Ethnic Origin	Count							
White – All backgrounds	101 (60)	11 (52)	112 (112)					
Black – All backgrounds	26 (36)	40 (30)	66 (66)					
Asian – All backgrounds	13 (43)	66 (36)	79 (79)					
Mixed – All backgrounds	14 (10)	5 (9)	19 (19)					

Other – Any other	6 (11)	14 (9)	20 (20)
background			
Totals (n =)	160 (160)	136 (136)	296 (296) *

^{*(}Numbers in Parenthesis are Expected frequencies)

Exploring the differences between AUDIT-C with drinkers that pre-party and play drinking games and non-pre-partiers/drinking gamers.

To explore differences in mean AUDIT-C scores between those drinkers who engage with Pre-partying and drinking games (n = 93) or those who do neither (n = 67), an independent sample t test was used. Results showed that AUDIT-C levels were higher in the pre-partying and drinking game consumption group (M = 5.70, SD = 2.43) as opposed to general drinkers (M = 3.57, SD = 1.99), t (158) = 5.88, p < .001, 95% CI [2.85, 1.42].

Predicting AUDIT-C scores from DMQ, Pre-partying and Drinking games.

Pearson's r correlation coefficients between DMQ, Pre-partying, and drinking game consumption levels were analysed to determine the significance of the relationship for further regression analyses (See Table 4). Bonferroni corrections were used to determine the significance value for acceptable predictors with Pearson's correlations that were less than p <. 0.008 were considered candidate predictors. Analyses involved hierarchical regression analyses with AUDIT-C scores as the criterion and DMQ motivations, prepartying and drinking games (see Table 4) as predictors. Regarding assumptions, a sample size of n = 57 was adequate given a maximum of 6 predictor variables included per regression performed and was sufficient to detect an effect size of $f^2 > = .19$. Cohen's (1992; Cohen, 1988; Cited in Bakeman, 2005) criteria for the magnitude of effects sizes showed these correlations effect sizes ranged from r = .16 (low) to r = .51 (large effect sizes). Also, Pearson r correlation coefficients between predictor variables were < .80 and collinearity statistics were within acceptable limits showing low multicollinearity (Tolerances > .10; VIFs < 10). An inspection of the ranges of the Tolerance Index and the Variance Inflation Factor for all predictor variables supported the absence of multicollinearity. Histograms and normality plots showed that all the residuals were normally distributed. Plots of the regression standardized residuals against the regression standardized predicted values

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¹ Effect Sizes- when r = .10 is a small effect, r = .30 is a medium effect, and r = .50 is a large effect.

suggested that the assumptions of linearity and homoscedasticity were met. Additionally, the Durbin-Watson tests suggested that the assumption of independent errors were met (Durbin-Watson value = 1.73). All correlations between the predictor variables are displayed in Table 4 and 5. No significant multivariate outliers and residual and scatterplots showed that normality, linearity, and homoscedasticity assumptions were met. (For a breakdown of predictors see table 4).

Table 4 - Correlations and reliability of DMQ motivations, PMI Motivations with AUDIT-C.

Pearson's Correlations	α	2	3	4	5	6	7	8	9	10	1
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4											
1. AUDIT-											
С	.83	0.44**	0.51**	0.35**	0.16*	0.43**	0.25*	0.32**	0.09	0.38**	0.35
2. DMQ –	.63	0.44	0.51	0.33	0.10	0.43	0.23	0.32	0.09	0.36	0.5.
Social	.90	~	0.68**	0.53**	0.24**	0.62**	0.42**	0.46**	0.21	0.10	0.0
3. DMQ –	.70		0.00	0.55	0.24	0.02	0.42	0.40	0.21	0.10	0.
Enhan											
2	.88	~	~	0.48**	0.14	0.59**	0.43**	0.57**	0.31**	0.17	0.2
4. DMQ –											
Cop	.90	~	~	~	0.10	0.41**	0.17	0.28**	0.14	0.04	0.
5. DMQ –											
Conf	.78	~	~	~	~	0.32**	0.34**	0.30**	0.29**	0.14	0.
6. PMI – IE	.91	~	~	~	~	~	0.64**	0.73**	0.48**	0.31**	0.
7. PMI –											
SC	.77	~	~	~	~	~	~	0.62**	0.53**	0.26*	0.
8. $PMI - IP$.92	~	~	~	~	~	~	~	0.53**	0.15	0.
9. PMI –											
BC	.76	~	~	~	~	~	~	~	~	0.07	0
10. Pre-party										~	0.2
- CQ	~	~	~	~	~	~	~	~	~		
11. DG - CQ	~	~	~	~	~	~	~	~	~	~	

Note: AUDIT-C = Alcohol Use Disorders Identification Test-C; PMI-IE=Pre-partying Motivations Inventory-Interpersonal Enhancement; PMI-SC=Pre-partying Motivations Inventory-Situational Control; PMI-IP=Pre-partying Motivations Inventory-Intimate Pursuit; PMI-BC=Pre-partying Motivations Inventory-Barriers to Consumption; Preparty-CQ = Pre-partying consumption quantity; DG-CQ = Drinking Games consumption Quantity; α =Cronbach's alpha reliability values for each subscale (Cronbach, 1951; Taber, 2018). *p<-0.05; *p<-0.01.

Pearson's Correlations										
	α	2	3	4	5	6	7	8	9	10
1. AUDIT-C	.83	0.31*	0.34**	0.30*	0.59**	0.21	0.12	0.34**	0.38**	0.35*
2. MPDG – Con	.87	~	0.41**	0.45**	0.32**	0.33**	0.36**	0.45**	0.15	0.14
3. $MPDG - C/T$.78	~	~	0.60**	0.31*	0.09	0.37**	0.42**	0.22	0.21
4. MPDG– SocL	.88	~	~	~	0.48**	0.22	0.28*	0.43**	0.01	0.18
5. $MPDG - F/C$.87	~	~	~	~	0.40**	0.26*	0.51**	0.20	0.27*
6. MPDG – Cop	.76	~	~	~	~	~	0.42**	0.20	0.18	0.03

7. MPDG – Bord	.81	~	~	~	~	~	~	0.49**	0.03	0.13
8. MPDG –Nov	.83	~	~	~	~	~	~	~	0.17	0.17
9. Preparty-CQ	~	~	~	~	~	~	~	~	~	0.28*
10. DG-CQ	~	~	~	~	~	~	~	~	~	~

Table 5 - Correlations and reliabilities with Motivations for playing drinking games (MPDG) with pre-partying and drinking game consumption units with AUDIT-C.

Note: AUDIT-C =Alcohol Use Disorders Identification Test-C; MPDG-Con=Motivations for Playing Dinking Games Conformity, MPDG-C/T = Competition/Thrills, MPDG-SocL = Social Lubrication, MPDG-F/C = Fun/Celebration, MPDG-Cop = Coping, MPDG-Bord= Boredom, MPDG-Nov = Novelty; Preparty-CQ = Pre-partying consumption quantity; DG-CQ = Drinking Games consumption Quantity; α =Cronbach's alpha reliability values for each subscale (Cronbach, 1951; Taber, 2018). *p<.01:

To examine the effects of general drinking motivations, amount (units) consumed whilst pre-partying and the amount (units) consumed during drinking games on drinking patterns (AUDIT), a hierarchical multiple linear regression analysis was undertaken. Predictor's variables were DMQ Social, enhancement and coping motivations, prepartying units and drinking game units with the criterion factor AUDIT-C. Each DMQ motivation was entered into the first stage of the regression model with Pre-partying consumption and drinking game consumption entered in the second stage. In the first stage DMQ motivations were found to significantly predict AUDIT-C levels ($R^2 = .19$, Adj. R^2 =.15, F (3,53) = 4.22, p <.05, 95% CI [3.06, 6.131]). In the second stage of the regression Pre-partying consumption and drinking game consumption were added to DMQ motivations and together found to be significantly predictive of AUDIT-C levels ($R^2 = .39$, Adj. $R^2 = .33$, F(5,51) = 6.46, p < .001, 95% CI [1.04, 4.55]). Pre-partying consumption and drinking game consumption were shown to add significant variance in the prediction of AUDIT-C over and above DMQ motivations, $F_{change}(2,51) = 8.13$, p = .001. Together Prepartying consumption and drinking game consumption explained a further 19.5% of the variance in AUDIT.

The only two independent predictors that were statistically significant were DMQ Enhancement motives on the first stage (β =.344, p <.05) and pre-partying consumption on the second stage (β =.380, p =.002). This shows that pre-partying as a factor increases the variance in the predictive value of AUDIT-C. All other effects ps > .05.

Examining the predictors of general drinking motivations and PMI Prepartying motivations on AUDIT-C

Pearson's r correlation coefficients between DMQ, PMI motivations for pre-partying on AUDIT-C scores, were analysed to determine the significance of the relationship for

further regression analyses (See Table 4). Bonferroni corrections were used to determine the significance value for acceptable predictors with Pearson's correlations that were less than p <. 0.006 were considered candidate predictors. Analyses involved hierarchical regression analyses with AUDIT-C scores as the criterion and DMQ motivations, PMI motivations for pre-partying (see Table 4) as predictors. Regarding assumptions, a sample size of n = 84 was adequate given a maximum of 8 predictor variables included per regression performed and was sufficient to detect an effect size of $f^2 > = .07$. Cohen's (1992; Cohen, 1988; Cited in Bakeman, 2005) criteria was used to assess the effect sizes, PMI variables ranged from r = .25 low to r = .43 medium effect size. Also, Pearson r correlation coefficients between predictor variables were < .80 and collinearity statistics were within acceptable limits showing low multicollinearity (Tolerances > .10; VIFs < 10). An inspection of the ranges of the Tolerance Index and the Variance Inflation Factor for all predictor variables supported the absence of multicollinearity. Histograms and normality plots showed that all the residuals were normally distributed. Plots of the regression standardized residuals against the regression standardized predicted values suggested that the assumptions of linearity and homoscedasticity were met. Additionally, the Durbin-Watson tests suggested that the assumption of independent errors were met (Durbin-Watson value = 1.74). All correlations between the predictor variables are displayed in Table 4 and 5. No significant multivariate outliers and residual and scatterplots showed that normality, linearity, and homoscedasticity assumptions were met. (For a breakdown of predictors see table 4).

To examine the effects of general drinking motivations and pre-partying motivations on drinking patterns (AUDIT) a hierarchical multiple linear regression analysis was undertaken. Predictor's variable were DMQ Social, enhancement, and coping motivations, PMI motivations, Interpersonal Enhancement, and Intimate Pursuit with the criterion factor AUDIT-C. Each DMQ motivation was entered into the first stage of the regression model with PMI motivations entered at the second stage. In the first stage DMQ motivations were found to be significantly predict AUDIT-C levels, (R^2 =.12, Adj. R^2 =.09, F (3,80) = 3.60, p <.05, 95% CI [2.95, 5.62]). In the second stage of the regression PMI motivations were added to DMQ motivations and together found to be significantly predictive of AUDIT-C levels, (R^2 =.21, Adj. R^2 =.16, F (5,78) = 4.10, p =.002, 95% CI [2.83, 5.47]. PMI motivations were not shown to add variance in the prediction of AUDIT-C over and above DMQ motivations, F_{change} (2,78) = 4.36, p < .05. PMI motivations explained a further 7% of the variance in AUDIT.

The only independent predictor that was statistically significant was PMI Interpersonal Enhancement Motivation on the second stage (β =.410, p <.05). This shows

that Interpersonal Enhancement as a factor increases the variance in the predictive value of AUDIT-C. All other effects ps > .05.

$\begin{tabular}{ll} Examining the predictors of general drinking motivations and MPDG \\ drinking game motivations on AUDIT-C \\ \end{tabular}$

Pearson's r correlation coefficients between DMQ Motivations, MPDG Motivations for drinking games on AUDIT-C scores, were analysed to determine the significance of the relationship for further regression analyses (See Table 5). Bonferroni corrections were used to determine the significance value for acceptable predictors with Pearson's correlations that were less than p < 0.004 were considered candidate predictors. Analyses involved hierarchical regression analyses with AUDIT-C scores as the criterion and DMQ Enhancement, MPDG Motivations for drinking games (see Table 5) as predictors. Regarding assumptions, a sample size of n = 66 was adequate given a maximum of 11 predictor variables included per regression performed and was sufficient to detect an effect size of $f^2 > = .19$. Cohen's (1992; Cohen, 1988; Cited in Bakeman, 2005) criteria was used to assess the effect sizes, MPDG variables ranged from r = .30medium to r = .59 large effect size. Also, Pearson r correlation coefficients between predictor variables were < .80 and collinearity statistics were within acceptable limits showing low multicollinearity (Tolerances > .10; VIFs < 10). An inspection of the ranges of the Tolerance Index and the Variance Inflation Factor for all predictor variables supported the absence of multicollinearity. Histograms and normality plots showed that all the residuals were normally distributed. Plots of the regression standardized residuals against the regression standardized predicted values suggested that the assumptions of linearity and homoscedasticity were met. Additionally, the Durbin-Watson tests suggested that the assumption of independent errors were met with (Durbin-Watson value = 1.70). All correlations between the predictor variables are displayed in Table 4 and 5. No significant multivariate outliers and residual and scatterplots showed that normality, linearity, and homoscedasticity assumptions were met. (For a breakdown of predictors see table 5).

To examine the effects of general drinking motivations and drinking game motivations on drinking patterns (AUDIT) a hierarchical multiple linear regression analysis was undertaken. Predictor's variable were DMQ Social, enhancement, and coping motivations, MPDG motivations were Fun/Celebration with the criterion factor AUDIT-C.

Each DMQ motivation was entered into the first stage of the regression model with MPDG Motivation entered at the second stage. In the first stage DMQ motivations were found to be significantly predict AUDIT-C levels (R^2 =.23, Adj. R^2 =.19, F (3,62) = 6.10, p <.05, 95% CI [2.72, 5.63]). In the second stage of the regression MPDG Motivation was added to DMQ motivations and together found to be significantly predictive of AUDIT-C levels (R^2 =.38, Adj. R^2 =.34, F (4,61) = 9.40, p <.001, 95% CI [-.249, 3.47]). MPDG motivation was shown to add significant variance in the prediction of AUDIT-C over and above DMQ motivations, F_{change} (1,61) = 15.14, p < .001. MPDG motivation explained a further 15% of the variance in AUDIT.

The only two independent predictors that were statistically significant were DMQ Enhancement motives on the first stage (β =.391, p <.05) and MPDG Motivation, Fun/Celebration on the second stage (β =.500, p <.001). This shows that Fun/Celebration as a factor increases the variance in the predictive value of AUDIT-C. All other effects ps > .05.

Exploring the predictors of pre-partying consumption quantity with PMI motivations

After establishing the relationships between specific motivations that exist for prepartying, a simple linear regression analysis was run. The predictor variables were PMI motivations for Interpersonal Enhancement and Intimate Pursuit with pre-partying consumption quantity being the criterion. The overall regression was statistically significant showing that both Interpersonal Enhancement and Intimate Pursuit were predictive of pre-partying consumption ($R^2 = .11$, Adj. $R^2 = .09$, F (2,81) = 4.93, p < .05, 95% CI [.94, 2.96]). PMI motivations show significant variance in the prediction of pre-partying consumption quantity. PMI Interpersonal enhancement was shown to be a statistically significant independent predictor ($\beta = .423$, p = .007).

Examining the predictors of DMQ Enhancement Motivations and Prepartying 5 plus drinks with PMI motivations on AUDIT-C

Pearson's r correlation coefficients between DMQ Enhancement, PMI motivations, Pre-partying 5 plus for pre-partying on AUDIT-C scores, were analysed to determine the significance of the relationship for further regression analyses (See Table 4). Bonferroni

corrections were used to determine the significance value for acceptable predictors with Pearson's correlations that were less than p < 0.005 were considered candidate predictors. Analyses involved hierarchical regression analyses with AUDIT-C scores as the criterion and DMQ Enhancement, PMI motivations, and Pre-partying 5 plus (see Table 4) as predictors. Regarding assumptions, a sample size of n = 84 was adequate given a maximum of 9 predictor variables included per regression performed and was sufficient to detect an effect size of $f^2 > = .06$. Cohen's (1992; Cohen, 1988; Cited in Bakeman, 2005) criteria was used to assess the effect sizes, PMI 5plus drinks variables ranged from r = .23low to r = .33 medium effect size. Also, Pearson r correlation coefficients between predictor variables were < .80 and collinearity statistics were within acceptable limits showing low multicollinearity (Tolerances > .10; VIFs < 10). An inspection of the ranges of the Tolerance Index and the Variance Inflation Factor for all predictor variables supported the absence of multicollinearity. Histograms and normality plots showed that all the residuals were normally distributed. Plots of the regression standardized residuals against the regression standardized predicted values suggested that the assumptions of linearity and homoscedasticity were met. Additionally, the Durbin-Watson tests suggested that the assumption of independent errors were met with (Durbin-Watson value = 1.72). All correlations between the predictor variables are displayed in Table 4. No significant multivariate outliers and residual and scatterplots showed that normality, linearity, and homoscedasticity assumptions were met. (For a breakdown of predictors see table 4).

To examine the effects of DMQ Enhancement motivations and pre-partying motivations when consuming 5 or more drinks on subsequent drinking patterns (AUDIT) a hierarchical multiple linear regression analysis was undertaken. Predictor's variable were DMQ enhancement, PMI motivations: Interpersonal enhancement, Intimate Pursuit, and Pre-partying 5 plus drinks with the criterion factor AUDIT-C. DMQ Enhancement motivation was entered into the first stage of the regression model with Pre-partying 5 plus drinks and PMI motivations entered at the second stage. In the first stage DMQ Enhancement was found significantly predict AUDIT-C (R^2 =.09, Adj. R^2 =.09, F (1,82) = 8.92, p <.05, 95% CI [3.26, 5.44]). In the second stage of the regression, Pre-partying 5 plus drinks and PMI motivations were added to DMQ motivations and together were found to be significantly predictive of AUDIT-C levels (R^2 =.23, Adj. R^2 =.19, F (4,79) = 5.86, p <.05, 95% CI [2.51, 4.79]). Pre-partying 5 plus drinks and PMI motivations were shown to add variance in the prediction of AUDIT-C over and above DMQ motivations, F_{change} (3,79) = 4.47, p < .05. Pre-partying 5 plus drinks and PMI motivations explained a further 13% of the variance in AUDIT.

The independent predictors that were statistically significant were DMQ Enhancement motives on the first stage (β =.233, p <.05). PMI Interpersonal Enhancement (β =.316, p <.05) on the second stage. This shows that when students pre-party they are motivated by Interpersonal Enhancement, which as a factor increases the variance in the predictive value of AUDIT-C. All other effects ps > .05.

Discussion

The findings of the current study showed that levels of pre-partying and drinking game activity were evident amongst the students sampled from both universities. The alcohol-related activity was correlated with general drinking motivations with both pre-partying and drinking games being predictive of alcohol consumption. A series of hierarchical regression analyses demonstrated the motivations that are related to pre-partying and drinking games were significantly different from general motivations and demonstrated higher scores on AUDIT-C.

The first analysis revealed that AUDIT-C (Saunders et al., 1993) measures were positively correlated with pre-partying and drinking game consumption with higher Mean AUDIT-C scores amongst drinking gamers. Correlations also revealed that drinking motivations measured by the DMQ (Cooper, 1994) were positively correlated with AUDIT-C, which is a consistent finding in student alcohol research (Heather et al., 2011). This shows that drinking consumption in students was motivated by enhancement, coping, and social motives amongst the sample (Cooper, 1994). The regression analysis revealed that enhancement motives measured by the DMQ were predictive of pre-partying and drinking game consumption levels. This shows that students will engage in drinking games and pre-partying activities for enhancement reasons in the context of general alcohol consumption. Enhancement is akin to furthering the social environment and being more interpersonal within interactions and to increase the level of social cohesion (LaBrie et al., 2012). Both pre-partying and drinking game predictors were assessed against DMQ motivations. Findings showed that pre-partying was independently predictive of AUDIT-C over and above general motivations. This means that pre-partying behaviour is a behaviour that is motivated differently than other drinking behaviours.

Pre-partying was examined for the motivations that contribute to the practice; the analysis revealed that positive correlations were evident between PMI (LaBrie et al., 2012) enhancement motives, situational control, and intimate pursuit motivations with alcohol consumption levels in students (Zamboanga & Olthuis, 2016). Although, it could be

argued that many other motivations, that were not part of the original measures, (LaBrie et al., 2012) contribute to pre-partying i.e., financial reasons, social anxiety, and being banned for social spaces (Santos et al., 2021; Smit et al., 2021).

A simple linear regression analysis was conducted for pre-partying consumption levels and PMI motivations and revealed that Interpersonal Enhancement and Intimate pursuit motives were significantly predictive of pre-partying consumption quantity. This means that students who pre-party tend to be motivated by Interpersonal Enhancement and Intimate pursuit factors. Intimate pursuit is focused on how to engage with other individuals in an intimate fashion for sexual contact or relationships. Interpersonal enhancement is focused on enhancing the social environment through greater interactions.

A subsequent analysis was run with students that endorsed consuming five or more drinks on one occasion when pre-partying. The correlations revealed that students consuming five or more drinks when pre-partying was positively correlated with AUDIT-C measures, DMQ enhancement, PMI interpersonal enhancement, intimate pursuit factors. This demonstrates that students that pre-party tend to be motivated by PMI factors when consuming five plus drinks. The regression was significant that indicated pre-partying five plus drinks would be motivated differently than general drinking motivations with AUDIT-C scores.

Another set of correlations between DMQ motivations and MPDG motives revealed that AUDIT-C measures were positively correlated with five MPDG motives that included: Conformity, competition/thrills, social lubrication, fun/celebration, and novelty. This meant that drinking game motivations are related to alcohol consumption in students as measured by AUDIT-C. However, due to the number of predictors and the adjusted Bonferroni value only 1 predictor could be used. The regression analysis revealed that MPDG motivation for fun/celebration was significantly predictive of motivations for drinking over and above AUDIT-C scores.

The regression analyses showed that drinking game motivations of fun/celebration on the MPDG scale were significantly predictive of drinking game consumption. This shows that drinking game behaviour is associated with consumption that exceeds general drinking levels amongst students.

All findings demonstrate that alcohol-related activity for pre-partying and drinking games are motivated by specific factors that exceed general drinking levels in students. This supports some of the established research conducted in this area (LaBrie et al., 2012; Zamboanga et al., 2014; 2017) which found students alcohol levels to be increased with pre-partying or drinking games. Findings from this first study showed that fun/celebration

was one of the most significant predictors of motivation for engaging in drinking games. Also, interpersonal enhancement was found to be one of the most significant predictors of motivation in pre-partying. Additionally, small samples of pre-partiers and drinking gamers were found at both universities showing that alcohol-related activity (pre-partying & drinking games) is present in these settings.

Hypotheses tested

The first research hypothesis that pre-partying endorsed motivations will be significantly related to higher reported alcohol consumption amongst the student population sampled was supported by the findings. The second hypothesis that drinking game participation will be significantly related to higher reported alcohol consumption levels amongst the population sampled was also supported by the findings. Partial support for hypotheses three and four was found with some PMI and MPDG motivating factors being related to pre-partying and drinking game consumption with MPDG fun/celebration being a significant independent predictor and PMI interpersonal enhancement being another significant independent predictor. However, overall hypotheses three and four were not fully supported by the findings.

These findings support the research of Cooper, (1994) LaBrie et al., (2012) Johnson and Sheets, (2004) and Zamboanga et al., (2017) and provide validity to the measures used in this study amongst a UK sample of students. The findings from this study support the research that has found similar increasing levels of alcohol consumption at less intensive periods in the academic year (McClatchey, Boyce, & Dombrowski, 2015). Regarding this thesis, most of the sampling happened between October to December 2017 for the first study. Therefore, examining this period, which did not include exams, may have given a clear picture of how students drink alcohol during the first semester at these universities. However, one factor that may have influenced these findings was the sampling of different year groups that may have had established patterns of drinking in comparison to first-year students. All types of students from undergraduate, postgraduate, and doctoral students were sampled for this study which showed variation in the levels of consumption recorded across each level of education.

The findings that certain motivations determine pre-partying and drinking game consumption supports established research on alcohol motivations with students (Cox & Klinger, 1988; 2011; Sheeran et al., 2005; Sheeran, Gollwitzer & Bargh, 2013; Webb et al., 2012). However, knowing the motivations is only part of the narrative in this thesis, further research exploring the role of interventions in university settings is required. The

knowledge gained from study 1 has implications for study 2 in the series of research as it demonstrates that pre-partiers and drinking gamers could benefit from an IBA intervention due to the level of consumption and risks involved from students identified in study 1. Also, study 1 was able to identify the groups present on campus that could provide unique insights into how to feasibly implement IBA interventions with these groups.

The contribution of these findings provides evidence to support the understanding that student alcohol consumption is motivated depending upon the behaviours in the population. Therefore, screening for pre-partying and drinking game consumption can be a factor when assessing the delivery of interventions with at-risk students that engage in these behaviours. Overall, a key implication for IBA delivery is related to the levels of alcohol use identified in pre-partiers and drinking gamers in study 1 as it shows the level of risk associated with the behaviours. This demonstrates support for the use of IBA being used as a tool to engage the conversation around alcohol usage and possible reductions in risk for these students.

Limitations

The main limitation of the current study was the use of self-report measures which were subject to recall bias, social desirability, inaccurate reporting, and demand characteristics. Also, the possibility of over-saturation with e-questionnaires was probable with the amount of research that examines student's behaviour through online questionnaires. This could be argued to have impacted the legitimacy of the responses given. Additionally, the length of time that individuals spent completing the questions may have influenced the responses due to reducing the honesty and authenticity of what was endorsed for each question.

Also, excluding the factor of sexual manipulation from the MPDG may have been a factor that was relevant to the population sampled as much research has explored incidents of sexual harassment and assault within student environments. Another limitation of the study was the use of two separate campuses, despite the similarity in demographics, both settings are different which reduces the representativeness of the findings. Also, these populations in UK university settings are more diverse than US population studies therefore it would be challenging to relate the findings to established research in different contexts. Additionally, the modern universities sampled in this study are more diverse than other UK based institutions which further reduces the applicability of the findings to UK institutions.

Future directions

To improve upon the research conducted, examining a different research question that focuses on experiences of interventions with students and how this influenced drinking levels. Incorporating questions on student's experiences of intervention and tracking alcohol usage in retrospective journals could provide insight into the influence of IBA. Additionally, ensuring that each measure of pre-partying and drinking game consumption has a designated time frame for participants to select responses for i.e., on a typical week how many days do you drink before social events (pre-party). Additionally, accessing a larger sample of students could add greater insight into larger populations of drinkers. Plus, assessing both modern universities against traditional red brick institutions could provide knowledge on the factors that relate to these specific environments.

Feasibly implementing IBA interventions with both pre-partiers and drinking gamers could be an area of future development to test the effect of the brief intervention with these cohorts. Also, providing a forum for individuals to discuss their own lived experiences of pre-partying and drinking games in a qualitative one to one interview could provide unique insights into the dynamics of the behaviour.

Conclusion

The first study in this thesis demonstrated that different motivations define alcohol-related activity (pre-partying & drinking games) amongst the populations sampled. The student environments yielded small percentages of pre-partiers and drinking gamers although these sub-groups produced insights into the nature of the behaviour. Along with alcohol consumption levels, drinking games and pre-partying were shown to be factors that have different motivations within the context that they occur. Therefore, understanding alcohol-related activity (pre-partying & drinking games) is essential when preparing to intervene with IBA for students. By knowing the population and the factors that motivate different practices (pre-partying & drinking games) can inform how IBA could be tailored and directed to at-risk students that engage in these behaviours. Also, through exploring student's views, opinions, and experiences with alcohol consumption and IBA interventions; these further discussions could provide more insights into the interactions with IBA implementation with pre-partiers and drinking gamers. However, limited implications can be drawn from these further discussions due to the content focusing more on individuals' experiences, understanding and opinions on IBA.

Overall, greater understanding is required for how the campus feasibly implements IBA interventions that could influence the effect on consumption in educational settings. The first study has identified the drinking behaviours of students in two university settings and shows that the need for intervention is prominent. The implications of this finding point towards the need to understand the risks associated with the behaviours from students' views, opinions, and experiences, when considering IBA implementation with pre-partiers and drinking gamers. The second study will build upon this research with exploring how students, interventionists, and recipients of intervention view IBA. This thesis is designed as a programme of research that involves identification of alcohol usage, discussion of the intervention, before a feasibility study of IBA implementation with students. The first study represented a quantitative study observing alcohol usage levels, pre-partying and drinking game behaviour. The second study is qualitative and uses focus groups to explore views, opinions, and understandings of IBA and interventions for alcohol usage. The exploration of the barriers to and facilitators of IBA implementation has been conducted in the second study in this thesis detailed in Chapter 3.

Chapter 3

A qualitative exploration of the barriers to and facilitators of IBA implementation:

A thematic analysis.

Study 2

Aims of Study 2

The second study aimed to understand both students and professionals' experiences with alcohol and IBA interventions. In this thesis, one of the central aims of the second study was to understand the barriers to and facilitators of IBA implementation with students on campus. Furthermore, gaining insight from each participant and their level of interaction with IBA interventions could help to inform best practice for implementing IBA with students.

Introduction

Intervention research is a wide and encompassing area that includes both quantitative and qualitative research that offers much to theory and implementation as previously noted (Clarke, Field & Rose, 2015; Donoghue et al., 2014; Heather et al., 2011; Monk & Heim, 2013; Scott-Sheldon et al., 2012; Taylor et al., 2015). Capturing student views, experiences, and opinions on IBA interventions is an important area of this thesis. The richness of qualitative data is that it can provide unique insights on interventions and the relevancy of IBA in student settings.

This chapter will explore the qualitative research on alcohol interventions focusing on young adult and student populations. The chapter will demonstrate the efficacy of qualitative research in capturing the views, experiences and understanding around alcohol interventions. The rationale for this study was to gain participants views, experiences, and opinions on IBA interventions through structured discussions. Furthermore, as noted in previous studies in this thesis, drinking related activities (Pre-partying & Drinking games) will form part of the discussions on students' alcohol behaviours to advance knowledge on these activities.

Alcohol experiences

The subject of alcohol experiences has been a widely explored area within qualitative research (Davies, 2016; Davies et al., 2017; De Visser et al., 2015; Graber et al., 2016). One of the central areas of research in alcohol experiences has been with young adult and youth alcohol groups as their development provides insight into the trajectory of usage in later years. Also, many youth groups have varied alcohol experiences that incorporate risky practices that involve intoxication as a primary motivation. A prominent theme within the research on youth alcohol experiences has been the identification of intoxication culture. This concept of intoxication as a cultural phenomenon was developed from the findings of research on how young adults are motivated to drink. In a study exploring the views on excessive consumption Fry, (2011) identified how young adults viewed intoxication culture and excessive consumption as a necessary pleasure that produced either happiness or annihilation. The narrative on consumption sees pleasure as a rare part within drinking behaviours of young adults. One of the main findings was the reporting of high-risk pre-drinking levels. Most female and male participants self-reported consuming 7 beers for a man and 1 whole bottle of wine for a woman before going out. Within the study it emerged that participants knew the differences between 'annihilation intoxication' and 'pleasurable intoxication' as two distinct social outcomes from alcohol consumption. Contrastingly, many participants reported excessive consumption being a phase that would inevitably transition. Many of the criticisms for the study include the lack of adequate comparison between age groups with the focus being on young adults in the study. Also, the culture of intoxication within adult populations may be constructed differently. The implications of this study provide insights into how youth groups are motivated to consume alcohol and the outcomes of intoxication with these individuals. One of the main themes in the focus groups within this second study in the thesis, was to explore how alcohol experiences vary amongst students and professionals. Therefore, examining how adult students report consuming alcohol on campus can inform the subject of alcohol experiences and contribute to understanding the groups being targeted with IBA interventions.

An important element on the discourse around alcohol experiences is the understanding of different alcohol narratives. A study by Griffin et al., (2009) examined intoxication with young people from a narrative perspective. The researchers used focus group discussions to understand the experiences and views surrounding consumption. A clear statement of loss of consciousness and memory was found to be a consistent

narrative. Another key element within the construction of drinking stories was the use of 'Banter' that provided commentary on behaviour that occurred in the previous night's consumption. This was reflected in the endorsement of individuals 'passing out' and being ridiculed the next day as part of the ritual of banter. One important finding was the statement of pre-mediation regarding annihilating themselves with alcohol consistently. This statement was deemed to be 'determined drunkenness' which could account for much of the motivation for intoxication with young people. The deeper underlying issues that prompt such consumption were not explicitly shared in the discussions although could be questioned with the outcomes of drinking behaviour. Discussions on alcohol consumption can be subject to shame in one sense with sharing the extent of the behaviour. Also, another viewpoint could be the competition amongst individuals trying to demonstrate who can drink the most or take most risks. One of the criticisms of the study has been the consistency with identifying common themes, as everyone presented different accounts of their experience. Additionally, many of the younger people did not have an established sense of self when reporting their behaviours. Therefore, it is important to consider the role of the individual in how they present the information which can be subject to exaggeration or minimisation. The second study in this thesis sampled adults and older individuals for the discussions; Therefore, some of the narratives being identified contained different themes related to experiences. Also, alcohol experiences with older groups tend to produce commentary and discussion of negative consequences and risks related to alcohol consumption particularly in student groups.

Negative consequences

Research examining negative consequences in college students drinking behaviour has shown how many negative consequences can produce iatrogenic effects. Merrill et al., (2018) identified seven central themes from 12 focus groups that demonstrated a connection to the overarching global theme of 'subjective evaluations of negative consequences'. This theme had polarising views with participants identifying negative experiences from a negative viewpoint. Conversely, some individuals were able to normalise their negative experiences and downplay the severity of the consequences they experienced despite high consumption levels. A key theme identified in the analysis was 'discussions with friends the next day' this convention of a review of the previous night's experiences has become a phenomenon. The behaviour is similar to Post-Event Processing (PEP; Lundh & Sperling, 2002) that is a defined concept within the literature for alcohol consumption and social anxiety in students. The theory states that individuals gather to

discuss the previous night's experiences to alleviate anxiety and reduce shame associated with out-of-control behaviour. Also, PEP showed that many individuals did not discuss certain instances with drinking friends that would provide possible negative feedback.

Another key theme that was identified in the data (Merrill et al., 2018) was 'alcohol as an excuse' whereby individuals use the level of intoxication as a justification for the behaviour or consequences that occurred. The concept of 'blame alcohol' emerged as a rationale for behaviour and was observed to be discussed more in the female only focus group as opposed to the male only focus groups. Overall, the findings offer insight into how negative consequences are subjectively evaluated by drinkers in the cohorts sampled. Although, a limitation identified in the design was the lack of focus given to positive alcohol experiences during the discussion to show a balance between positive and negative alcohol experiences. A criticism of this study has been the tendency to explore the negative aspects of alcohol consumption and the impact on young populations rather than identifying older age groups. The implications of the study offer a further understanding as to how individuals construct their experiences with drinking especially when considering negative consequences and behaviour. Additionally, many of the focus groups consisted of both drinkers and abstainers that have distinct views and experiences with alcohol consumption. The second study in this thesis, examined interventionists and recipients of intervention to understand how interventions are designed and delivered to individuals, especially with those involved in recovery communities (Humphreys & Moos, 2007).

Intervention design and development

The nature of intervention design is an important area of development within the research literature as it explores many of the factors that influence consumption levels. De Visser et al., (2015) utilised numerous qualitative and quantitative methods to identify the key components of intervention design when assessing harmful drinking in young people. The researchers empowered the students to consider themselves as experts in safe and responsible drinking practices. Their approach was attempting to produce unique perspectives on how to implement safer drinking practices. The study aimed to identify common factors of harmful drinking in youth groups when applying interventions. Within the design the researchers used focus groups to inform the construction of interventions with moderate and non-drinkers. A concept being developed in subsequent literature examined how many young adults identified a zone of optimum drinking. This zone was referred to as the 'sweet spot' (Graber et al., 2016) which is between a few drinks and

intoxication. The focus groups discussions in De Visser et al., (2015) research helped to illuminate the concept of the 'sweet spot' (Graber et al., 2016) which was later developed. A further part of the study (De Visser et al., 2015) was delivering a video-based intervention that enhanced the ability to implement an intervention with the younger cohort. The responses to the video-based intervention were positive. One of the key criticisms is the lack of the proof of concept and transferability of the ideas with other populations. Some further criticism has been presented as the concepts are population specific and do not transfer to other older groups. Many other factors form part of the drinking culture in younger adults which could be different in adult groups with norms, attitudes and practices having different motivations. Within the second study of this thesis, learning how students experience intervention in focus group discussions could inform how IBA is understood and implemented with student groups.

Within the construction of interventions initiating a conversation around alcohol use is an important part of the delivery of intervention material. De Visser et al., (2017) explored the use of a unit-marked glass as an intervention tool that allows individuals to monitor their intake. The motivation for the research stemmed from the public consensus of individuals having limited knowledge of the government guidelines on alcohol use. De Visser et al., (2017) focused on reducing alcohol intake, improving knowledge, and instilling the habit of counting units. The intervention demonstrated a strong effect of increasing knowledge and attitudes towards alcohol consumption given the unit-marked glasses. However, one criticism of the research is that despite the improvements in understanding and disseminating information on units, the unit-marked glass did not mediate consumption levels amongst the cohorts sampled. Findings showed that the effectiveness of the intervention was dependent upon the motivation levels of the drinkers that are receiving the intervention. This supports established research on Behavioural Change (BC) approaches (Abraham & Michie, 2008; Datta & Petticrew, 2013; Davis et al., 2015; Michie et al., 2011; Michie & Prestwich, 2010) that identifies the motivation of the drinker being a key element in changing behaviour. An important finding was that those with entrenched views will not necessarily alter behaviour irrespective of any level of heightened awareness. Therefore, understanding the broader needs of students and young people can impact the outcomes of intervention when designing interventions.

Along with the needs of students, how they view themselves and construct their identities around drinking could inform best approaches for delivering IBA. Having a profile of different types of drinkers could inform how the design of interventions are constructed to support reduction and stability in different drinkers particularly with pre-

partiers and drinking gamers (LaBrie et al., 2012; Ridout, Campbell & Ellis, 2012; Zamboanga et al., 2014). In addition to understanding the profile of drinkers; the mode of intervention delivery has been an expanding area of research with web-based interventions taking more focus (Cunningham et al., 2012; Dedert et al., 2015; Hallett et al., 2009; Kypri et al., 2014; Leeman et al., 2015; Walters, Miller & Chiauzzi, 2005; Walters & Neighbors, 2005).

The use of web-based interventions that target students in different ways demonstrates the efficacy and limited barriers to implementation with the approach. Hallett et al., (2009) in focus groups looked to gain an understanding of the construction of webbased interventions for reducing alcohol consumption amongst the student population. The development of intervention content emerged from the study; Specifically, the main themes were identified. These included: interventions are best kept brief, easy to complete, informal language, incentive to participate, messages sent through generic rather than personal accounts and feedback at the end would be useful. These themes presented when students were put into intervention groups and given structured support on reducing alcohol consumption. The findings supported reductions in consumption with peer norms regulating drinking practices. However, an interesting finding was the personal risk feedback, where 12% of participants with higher scores were unhappy with the results of perceived risk they were identified with. This phenomenon has been documented in the literature where students have resistance to the nature of an alcohol screening with personalised feedback (Fazzino, Rose & Helzer, 2016). A criticism of the study has been that the composition of different student campuses had varied needs for intervention and some identified suggestions may not be relevant with certain students. However, creating research designed to incorporate the views of students which can influence the construction of intervention could be an influential measure for future research. This is especially relevant with youth populations as they can provide lived experience of ways to engage individuals when considering interventions.

A notable strategy in the research has been the use of humour and embarrassment as ways to engage students with interventions. Davies et al., (2017) developed an intervention approach for targeting young adults called 'OneTooMany' focusing on challenging embarrassing consequences and altering social norms. Adopting a think aloud interview approach the findings identified three central themes that related to the normalisation of embarrassment with students. From the data the theme, 'embarrassment goes hand in hand with drinking' shows how normalising negative experiences can reduce some of the effect. The researchers used this theme by targeting embarrassment within the design of

interventions as opposed to focusing on health-related messages. The secondary theme identified as 'humour can promote as well as undermine message content' was also identified as a tool that could be used to engage students, although it could impact the efficacy of the approach depending upon the delivery. The researchers used a screening tool to identify rates of alcohol embarrassment to understand how students view themselves and their behaviour. The Alcohol-Related Social Embarrassment (ARSE) score enabled students to be deprecating and view themselves in a humorous and human way when considering their behaviour. Further, the use of humour and embarrassment within intervention content had an effect of increasing the length of time students spent on alcohol related websites. The implications of these findings add to the literature on behavioural change (Abraham & Michie, 2008; Datta & Petticrew, 2013; Davis et al, 2015; Michie et al., 2011; Michie & Prestwich, 2010). The final theme 'Reflecting on past drinking behaviour influences perception of current behaviour' showed how students tend to view the targets of interventions as heavy drinkers and not identify themselves in the same way. This distancing of themselves from other people that consume more alcohol could create a personal reflection which allows space for insight and possible change in behaviour. Conversely, personal reflection could create increased levels of denial or personal negotiation on their own problems. Also, the subject of discussing an individual's own personal use of alcohol within the interview setting may have inhibited students' responses leading to exaggeration or minimisation of drinking behaviour. Despite some of these possible limitations, the scope of understanding embarrassment as a function with behaviour change is an important contribution to the literature on developing interventions. Therefore, exploring the use of embarrassment and humour could enhance the understanding of these concepts with older student groups that receive interventions.

The focus of the second study in this thesis was to explore how students, interventionists and recipients of intervention view, experience and understand IBA interventions. Also, asking these informed cohorts how they would structure IBA differently and any experiences that they have had with the intervention can provide unique reflections. The main aims of study 2 were to provide a forum for students and interventionists to discuss IBA and interventions whilst evaluating the applicability of the approach in university settings. Also, this study forms part of the programme of research being conducted in the thesis, which identifies the problem, the discussion of the problem and solution from informed audiences to the feasible implementation of the solution. Therefore, study 2 is part of a logical sequence of research that provides rich data about IBA interventions that can be used to enhance the feasible implementation of IBA in

university settings. Regarding the research covered in this chapter, a majority of studies have identified the best ways to improve interventions from both student and young adult populations (Davies et al., 2017; De Visser et al., 2015: 2017; Graber et al., 2016; Griffin et al., 2009; Hallett et al., 2009). Additionally, most of the students and young adults in the research studies have provided insights and feedback that have altered and improved intervention design and delivery.

Method

Methods used and data collection

Qualitative methods were employed to explore barriers to and facilitators of IBA implementation from student drinkers' and interventionists' perspectives. The main areas being explored in the focus groups were thoughts on IBA as an intervention tool. Participants experiences of receiving intervention and messages around alcohol that students and interventionists had received. The rationale for choosing these areas was to cover a wide range of views, opinions and experiences that could contribute to the research on IBA in university settings. The main aims of the focus groups were to generate insights from each separate group with views and experiences in alcohol consumption and interactions with intervention. The sample consisted of a group of student drinkers, professional interventionists, recipients of interventions, students and staff that were recipients of an IBA and IBA interventionists that had delivered interventions to students. The rationale for selecting these groups was to examine a cross section of the campus that had interactions with IBA interventions and assess how each cohort related to the discussions and shared experiences of receiving or delivering IBA. Each focus group allowed a sample of individuals to be selected that would generate multiple views, opinions and experiences with both alcohol consumption and interventions. The use of this methodology allowed feedback and insights to be generated that could inform IBA interventions due to focus group members sharing their reflections on IBA implementation and design. Also, the differences between each group produced information on alcohol consumption that varied between the focus groups with high-risk drinking and moderate consumption behaviours being self-reported.

The use of focus group discussions provided an interactive space for collecting data that generated information and insights on numerous topics set by the experimenter. The environment was designed to support individual views, expressions, and experiences, with the use of structured questions to encourage discussion (Kitzinger, 1994; Rabiee,

2004). The qualitative method of using focus groups provided valuable information that explored the complexity of perspective, opinion, and experience. This contrasts with in depth one to one interviews that provide enhanced reflection with an opportunity for individuals to go into greater depth (Wilkinson, 1998). The main aim of the present investigation was to explore how different groups experience the IBA and their interactions with the intervention.

Situating the sample

A series of five focus groups (N = 24) were conducted amongst five separate cohorts that had experience with interventions. Each separate group of participants within the focus groups had different relationships with alcohol. The main reason for selecting these groups was to gain different feedback and insights on the IBA and identify the varied experiences with alcohol consumption. The groups that contained drinkers (focus groups 1, 2, 4 & 5) had a range of scores (1-18) on the AUDIT screening test (Mean = 8.67, SD =5.91). Many participants in the drinking groups reported pre-partying, taking part in drinking games and different motivations for consumption. The interventionist group (focus group 2) consisted of predominantly non-drinkers or light drinkers as the participants were part of a postgraduate qualification (MSc addiction psychology). The intervention recipients' group (focus group 3) were another cohort sampled from the postgraduate qualification except these individuals had experienced many interventions themselves personally. Most of this group were non-drinkers and disclosed being in recovery from addiction. The IBA intervention recipients' group (focus group 4) were comprised of both students and staff that had received an IBA intervention on campus. The final group (focus group 5) consisted of IBA trained interventionists that had delivered IBA to students on campus. The participants were gained through stratified sampling methods and the range of ages were from 24-65 years of age, (Mean = 39.84, SD = 13.12) breakdown of genders which included: 13 females 5 males and 1 transgender female from those that recorded responses on the e-questionnaire. Most participants had completed a modified e-questionnaire with drinking motivations, pre-partying and drinking game frequencies (please see appendix H for the preliminary e-questionnaire). Some participants did not complete the e-questionnaires and therefore demographic details were missing from 5 participants. Some ages of participants were recorded on enhanced consent forms (please see appendix I for enhanced consent form) despite participants not completing the e-questionnaire.

Reflexivity

Reflections on the research experience

The use of the term 'reflexivity' refers to an individual's philosophical positioning in relation to their approach to their research. The assessment of my own reflexivity will be defined as a critical attitude to my own subjectivity as a researcher and how I locate the impact I have in the collection, analysis, and presentation of my data (Finlay & Gough, 2003).

Along with understanding biases and influences of the researcher that may impact on the assessment of the data, reflexivity also relates to how the researcher's own nature influences the research process itself. As the epistemological positioning that underpinned the research was a realist perspective it states that value free research is unobtainable due to the influences of prior knowledge, experience, emotions, expectations, and culture affect the orientation of the researcher. It is important that taking ownership and accountability of my own influence on the research is vital when presenting information gained from the studies in this thesis. An initial step in the assessment of my own reflexive position is to ask the question of how relevant or important is the subject area to myself as a researcher. What does IBA interventions and the impact they have on student's alcohol experience have to do with myself? Upon addressing this question, I must reflect on the relevance of intervention in my own life.

Having received minimal intervention in my personal life, I have experiences of being introduced to intervention in my professional life. Also, having spent many years studying and working in the addiction sector I have been exposed to numerous interventions working with many different individuals. My own personal beliefs around autonomy, self-efficacy and moving beyond a person's own narrative have influenced how I view interventions in many different settings. When I consider the starting of this research programme and the course of study involving the assessment and delivery of IBA interventions. I did have some preconceived ideas about the nature of how IBA was designed and the typical target audience for the intervention. However, throughout the research process I have had to challenge these preconceived ideas and learn in greater depth the dynamics of the intervention and how it is delivered in different settings. Also, being aware of my own personal beliefs and understanding about the nature of intervention, has allowed me to reflexively question my own position throughout the process of conducting the research. Additionally, being a Caucasian male, with post-graduate qualifications in my late thirties who is married and from a lower middle-class

background, may have influenced my perception on how I view interventions and the importance of them in educational environments.

Conducting the focus groups

From the construction of the question list to conducting the groups themselves my position to lead and direct the discussion may have impacted on the findings of each group. Additionally, I tended to restate and clarify what an individual had said in each of the transcripts, this was a way for me to ensure that the response I felt I heard matched the participant's view or experience on the subject being discussed. However, some of my interpretations could have been incorrect which is aligned with Braun and Clarke, (2006; 2013) in response to adopting a participant's world view and interpreting the sentiment during analysis as opposed to during the discussion itself.

Since I was conducting five separate focus groups with five distinct cohorts, I had to consider my positioning in all instances in relation to the outputs from each of the group discussions. The level of reflexive positioning extended to the participants, to me as the experimenter and the separation between these two roles may have influenced the freedom of discussion in all groups. Adopting a position with expertise could have impacted the honesty and openness of the responses of the participants due to a power differential with the experimenter. Also, the nature of the discussions started with conversations that focused on personal alcohol experiences with each group which may have inhibited some participants given some individuals lacked response in some of the focus groups.

After the first initial focus group, which was conducted by an external moderator, I learnt about the process of conducting the discussions and how to approach the subsequent groups. Throughout the discussions I was able to reflect on when the groups flowed and when some of the content broke down. During the initial review of the transcripts, it was apparent at certain points in different groups that individuals tended to take turns in discussing topics which limited the free flow of open discussion amongst the group participants. My response to this in certain instances was to move the discussion on with the use of the word 'so' which acted as a Segway to a new topic or question to the group. I also, aimed to bring in other participants by opening the discussion to them with a question "what are your experiences?". Overall, I did find the experience of conducting the focus groups both exciting and challenging in equal measure when trying to hold the different

group dynamics and allow the discussions to not be monopolised by one or two participants. However, in one focus group (focus group 2 – professional interventionists) this was not possible with two main participants dominating the discussion with their own experiences. The reason for this could be inexperience on my part with not actively challenging the two individuals to open out the discussion to the whole group and the individuals occupying the space when the other participants were not confident in offering much to the discussion. This was sometimes happening in focus group two itself. My ability to relate to the participants in the group during the discussions was different with each cohort as many individuals were open and happy to discuss their experiences at length. However, in many groups the quieter participants I found difficult to engage with or invite into the discussions. This was a distinct learning point from conducting the groups which related to my experiences with holding and running psychotherapy groups in my professional life. Ensuring that all participants have an equal voice is one of the difficulties when managing diverse psychotherapy groups. My experience with aiming to invite all participants and respecting the right for many participants to just simply 'hold the boundary' in the discussion was measured with each group discussion.

Process of data analysis

The data analysis was conducted and completed following the pre-defined steps set out by Braun and Clarke, (2006; 2013) to ensure that each focus group was analysed uniformly. My preconceived ideas in relation to interventions and how they are designed and the target audience for them was shelved when approaching each group as I had to remain unbiased when moderating each focus group discussion. Each focus group was given equal and separate focus to ensure that I did not bias the analysis by mapping a template of themes to another transcript. Similarity in themes was noticeable in the focus groups, however, each theme was evaluated against the coding and analysis to ensure that it matched the data. Similar to the hybrid approach for inductive and deductive coding proposed by Fereday and Muir-Cochrane, (2006).

After considerable analysis of all focus groups the data was subjected to construct validation from the supervisory group to ensure that all themes identified matched the data and produced a coherent thematic analysis. A further step of member checking was conducted to enable some participants from each group to validate the discussion content and provide consensus on what was discussed and the findings. This supports the notion of transparency in relation to qualitative research which was one of the aims of the second study in the thesis.

Analysis

All transcribed data was subjected to thematic analysis under the guidance of Braun and Clarke, (2006; 2013) six stages of analysis. The main aim was to identify the views and experiences of a group of drinker's interactions with alcohol and interventions. The orientation of the focus group was based around a realist perspective from a standpoint of theoretical freedom to ensure the material was not tied to any certain positioning. A mix of inductive and deductive reasoning was applied to the coding of both semantic and latent codes with a further development of themes that resulted in a clear thematic analysis. This approach supports the methodology of a hybrid approach to thematic analysis by Fereday and Muir-Cochrane, (2006) that also used inductive and deductive coding.

The epistemology concentrated on the realist perspective of the individuals in the focus group with an idealist ontology that allowed views, expressions and experiences with alcohol and intervention to be the predominant form of analysis to the data. Generating nomothetic information from what was shared between participants was one of the motivations in the focus group discussions. To generate consensus of the initial coding and development of related themes, all coding was subject to construct validity amongst the senior researchers from their supervisory capacity. Following initial coding and identification of themes, many sub-themes were combined to generate an overarching theme that depicted the extracts. As each theme was reviewed across the entire data set, which led to a refinement in the themes identified. After which themes were assigned to organising themes before the development of global themes were identified using the approach from thematic networks (Attride-Stirling, 2001).

Participants

The participants of the focus groups were comprised of student drinkers, professional interventionists, recipients of intervention that included IBA and IBA interventionists. The criteria for participation stated: individuals currently involved with receiving or delivering interventions and aged between 18-40. All levels of education were invited to attend the focus groups with a preference for undergraduates as the rationale deemed that undergraduates sometimes have varied consumption habits for drinking (Forsyth, 2010). The population was gathered through stratified sampling methods. Recruitment of participants to the focus group was difficult due to attrition rates from study

1 and unavailability of participants. A representative sample was sought. Although, the final group sizes reflected the difficulty of gaining participants willing to take part. See Table 6 for breakdown of participants in each focus group.

Table 6 – Number of focus group participants in each group

Focus Group	Number of Participants (n)
1 – Student Drinkers	5
2 – Professional Interventionists	5
3 – Intervention Recipients	6
4 – IBA intervention recipients	3
5 – IBA interventionists	5
Total (n =)	24

Design

The focus groups were set to assess the barriers to and facilitators of IBA interventions on campus with students. Having a broad range of experiences with the IBA generated information that was informative of how different individuals interact with the intervention. Analysing IBA implementation provided feedback on both the delivery and design of the intervention.

In accordance with Kitzinger, (1994) the methodology that underpins focus groups can elicit a wider scope of conversation. Most of the material gathered can include jokes, deprecating humour, anecdotes, analogies, and other forms of communication that operate in groups as opposed to one-on-one interviews (Wilkinson, 1998). Similarly, Rabiee, (2004) also supports the ability of focus groups to provide honest and open communication which simplifies the analysis with novice researchers.

The structure of the focus groups included questions on four main areas: alcohol experiences, promotion and advertising of alcohol, experiences of IBA interventions and intervention generally, and best ways to deliver IBA interventions to students. The set of initial topics provided the structure to the questions being asked of the participants. The research questions being explored with each focus group varied due to the different levels of experience with intervention of each group. However, the main research questions focused on:

What are individuals' views and experiences with the IBA intervention and how would you construct it differently for students. Another central question was asking about the varied alcohol experiences and how these inform the need for interventions with students. Specifically, in groups 2 and 5 where interventionists were being sampled another question was explored: What are interventionists views and experiences with intervention and how have different environments influenced delivery? Each of these questions were answered by the groups and have been explored within the thematic analysis.

Most of the content was focused on individual's views and thoughts on IBA and how it relates to their own alcohol usage. Some prompt questions were prepared for moments of silence, or a lack of response from participants in the groups. Participants were informed of confidentiality and the provision for protecting anonymity during and post focus group discussion. Each participant was offered a pseudonym to protect their identity which was maintained throughout all stages of the research process. The total time of the focus groups lasted around 1 hour for each group. The focus groups were audio recorded and transcribed verbatim prior to analysis. Participants were offered monetary incentive to participate of which no participants from the focus groups took up the offer.

Table 7 – All outputs from the Thematic Analysis of all focus groups.

Focus group	Themes	Sub Themes	Codes	Transcribed Lines
1 – Student	5	13	261	900
drinkers				
2 – Professional	4	13	369	788
Interventionists				
3 – Intervention	6	8	483	794
Recipients				
4 - IBA	6	16	423	798
recipients				
5 - IBA	6	11	352	679
interventionists				

Results

The analysis of the focus groups identified seven main themes that spanned across all the groups which included: Intervention Approach / Reflection, Drinker / Addict Identity, Social Convention of Drinking, Personal Experiences, Alcohol Motivations, Drinking Culture and Alcohol Promotions. Each theme was explored regarding the data obtained from each of the focus groups.

Supporting evidence for each theme and sub-theme are included to illustrate what has been found from the analysis. Quotations have been taken from the transcripts to support all statements being made. Pseudonyms have been maintained throughout.

Drinker/ Addict identity

The construction and depiction of an individual's identity was a consistent theme that was illustrated with many of the participants personal reflections on how they viewed themselves across all five focus groups. The theme itself showed the way individuals construct their own sense of identity and define it within alcohol related behaviour. Each depiction revealed more about the type of drinker and what that means to the individual sharing different thoughts, emotions and behaviours related to consumption of alcohol in numerous contexts. In focus group 2 and 3 the incorporation of the addict identity was formulated that explored the full range of the theme itself in the context of addiction and recovery. An excerpt taken from Focus group 1 demonstrates this transitioning from different modes and then "ah yeah" becomes the drinking mode where the individual can derive a sense of switching from one mindset to another. Also, the participant is stating the difficulty in switching between many modes each with varying levels of responsibility.

"#144-146 - Red: maybe not the end of the week, probably the end of you know oh god its Tuesday [Laughter=all] and...then it's like...it does enable me then to kind of switch from mummy mode, work mode and stress mode into oh ah yeah" – Female, 38 focus group 1.

"#47-48 - Red: Ah well, yes and I should stress as well that was almost 20 years ago not that I've maybe matured that much "– Female, 38 focus group 1.

The statement looks to reinforce the notion of the individual's sense of self with the use of self-deprecating humour that signifies the development in personality over time. The

use of deprecating humour could be argued as a deflection strategy from facing the reality of themselves (Kitzinger, 1994). This was contrasted with one participant's introspective thought about their own behaviour when it came to consumption. The self-reflection shows awareness of how they view themselves in relation to alcohol usage as demonstrated:

"#596-598 Orange: Yeah, for me it's not so much being judged by someone else...you sort of judge yourself for it, don't you...kind of think...is that sort of on the sick spectrum now? [Laughter],"—Female, 30, focus group 1.

This notion of the 'sick spectrum' provides commentary on the impact of drinking that a person may be facing. This comment points towards the role of self-realisation in the development of awareness where an individual can identify where they fall within the spectrum of unhealthy use of alcohol. This theme related to the need to identify where drinkers fall regarding the student population and how to screen for varied usage levels similar to the IBA intervention (Donoghue et al., 2014).

As the theme developed 'addict identity' was incorporated which showed how different characteristics that define behaviour relate to the constructed label of 'addict'. In contrast to personality and the establishment of different personality traits. The behaviour of the individual can become a definition point that reinforces their sense of identity from an addiction viewpoint. This was exemplified by the excerpt from focus group 2:

"#459-460 Epsilon: Um and you do get labelled, and you do react to that sort of label you are an alcoholic so if I'm an alcoholic that means I must drink" – Male, 53, focus group 2.

The identity of the addict or alcoholic presents an opportunity for the individual to merge with the behaviour and sustain the identity through strategies involving denial, justification, and other cognitive distortions. This statement presents evidence to support what an alcoholic does 'I must drink' which provides meaning for the alcoholic's own behaviour. Excessive consumption becomes the behaviour that defines the alcoholic when they assign the label to themselves (McIntosh & McKeganey, 2000). It could be argued that the evaluation of the label is being explored for its use regarding treatment identification. This theme is further explored through one participant's view of their addictive behaviour being present in all things.

"#510-515 Kappa:...I kind of the opinion that If I start looking back as an addict at my behaviour throughout my life I'm an addict, in not in everything I do...there's a big

a...debate on what it is but...I was born with this...it it's just something that...I have whether it's going to the gym or everything that I do its all or nothing" – Female, 58 focus group 2.

The identity of addict in this instance provides the individual with a sense of personal self, a way of identifying and classifying problematic behaviour or activities that can become compulsive in nature. The dialogue contains some inconsistencies and offers more to the debate around addiction being a predisposition or having an element of a genetic component (Volkow, Koob & McLellan, 2016). Overall, the participant is making comment to a concept of being an addict in all things, whereby many things can be engaged compulsively without any level of regulation. A comment that challenges this assumption is made by another participant in the group.

"#556-557 Lambda: I'm not for example I'm an addict absolutely I'm not an alcoholic, if someone tried to early intervention me around that" - Female, 33 focus group 2.

This statement provides an alternative view to the conception that all behaviour can be addictive and that an individual can identify as an addict of many things. The participant's own discernment over themselves questions the philosophy of being an addict in all areas. This raises the debate over the understanding of addiction and the origin of the addict identity itself (Humphreys & Moos, 2007).

A further identification of the theme was explored in the reflections from participants in focus group 3. The participants detailed many instances of extreme traits that involved being classified as addictive. The formulation of the identity was signified in many participants personal accounts when they realised who they were from their own behaviours. This is demonstrated in the excerpt from focus group 3:

"#170-171 Birch: so, god I was having people say to me yeah that's because I'm an addict like you and that kind of just worked for me forever, cause what you gonna say to that" – Male, 53 focus group 3.

This connection to the sense of identity provided a place to distance themselves from others. By detailing how the individual had acted they could differentiate between themselves and how others that were not addicts. A sense of justification for the identity of the addict could be argued to create a licence to use alternative and sometimes extreme behaviour with others.

"#194-195 Birch: and yeah, I think I mean I got to the point where I had...a therapist say I'm not sure your addict I think you might just be a crazy hedonist" – Male, 53 focus group 3.

This insight into the nature of the individual's identity is challenging this classification that they have assigned to themselves. The concept of identity can be fluid and take on other characteristics that change the definition of the identity itself (Ridout, Campbell & Ellis, 2012). This comparison with their behaviour being likened to a 'crazy hedonist' as opposed to an 'addict' provides discussion on how extreme behaviour may not be considered addictive.

"#336-337 Olive: I kind of believe in that and all that stuff but I think for me a lot of it was down to I mean obviously by the end of my drinking I was very much a classic addict you know" – Female, 40 focus group 3.

Conversely, the participant identifies with the idea of being a 'classic addict' which can have many connotations in the meaning when the individual applies it to their identity (McIntosh & McKeganey, 2000). Also, it adds to the personal account of how person can view themselves from the position of an addicted individual. Along with many of the experiences that were recounted in the discussion a subtheme was identified that explored how treatment initiatives could influence intervention efficacy.

Treatment initiative

This subtheme shows the responses from the participants in focus group 2 and 3 that review the use of different types of interventions for treatment. Numerous approaches are explored and the essential elements that are deemed effective are evaluated in the respect to those with addictive behaviours. The discussion provided the forum to examine therapeutic techniques and share experiences of using different interventions in individual's practices.

"#277-278 Epsilon: spend more time on the therapeutic relationship than we do very rarely talk about the drug of choice" – Male, 53 focus group 2.

This reflection demonstrates one of the most important parts of the interaction between clients and counsellors, the therapeutic relationship. Noting the importance with rapport as a component of the interaction was described by omega:

"#150-152 Omega: Yeah, we use some of that just to get them to the point of acknowledging that there is an issue...that's what building that rapport is important because once they trust you, they take the time to try" – Male, 28 focus group 2.

The building of rapport as a part of the intervention created a space for the central issues to be discussed based on mutual trust. This connection can set the tone for the effectiveness of treatment as it allows the individual to acknowledge and work through the issues (Prochaska, Di Clemente, & Norcross, 1992). This approach requires more time and commitment in contrast to brief interventions that look to generate rapport for a short period of time. One brief commentary on 'substance of choice' looked to dispel any misconceptions of the true nature of addictive behaviour. The participant provided a theory to support their evaluation of alcoholic behaviour.

#437-440 Kappa:...with alcoholics with...alcoholism...for example you know it's not about alcohol um it's about the addiction...that it's my substance of choice...given whatever their situation or...environment...some choose drugs some choose alcohol or both or sex..." – Female, 58 focus group 2.

The concept of substance of choice is a common interpretation given to the role those different substances play with maintaining habitual or addictive behaviours. However, it is constructed on the concept of preference for certain feelings or experiences associated with the substance (Payne, Govorun, & Arbuckle, 2008). Additionally, the use of choice demonstrates that an individual can decide upon the consumption which contrasts with the main philosophy that choice is alleviated by the compulsion to consume.

This participant in focus group 3 viewed moving beyond the discussion of past experiences is a healthy step towards recovery itself. The recounting of the experience of working with a non-addiction focused treatment provider demonstrated an alternative mind-set to the treatment of addictive behaviour.

"#249-252 Sycamore: I want to do other things...I wouldn't be talking about alcohol, it's in the past...and once the addiction...once the excessive consumption of alcohol had stopped, I then found one to one therapy with a non-addiction counsellor really beneficial" – Transgender Female 65 focus group 3.

This statement shows a difference in opinion for how recovery is constructed. In the traditional sense the concept of recovery is defined by an individual's story and reliving the experiences with substances or processes. Additionally, it adds emphasis to the debate around where the focus could be when treating individuals with addictive behaviours. Many approaches were examined to determine which treatment initiatives had efficacy for treating addicted populations. The content of the discussions focused on referrals to specialist services and how changes in approach can potentially generate transformative changes interpersonally. This topic of discussion focused more on treatment approaches than interventions in general. The level of experience with intervention provided a critical evaluation of intervention itself from the participant discussions within the subtheme of treatment initiatives.

One of the central themes from all the focus groups explored the feedback and evaluation of IBA and interventions generally, focusing on how interventions are approached.

Intervention Approach / Reflection

The theme was identified through the personal sharing of experiences, views, and opinions of the participants on interventions and how they are delivered. The critical evaluation was evident throughout each focus group with intervention reflections forming part of the theme itself and one subtheme identified which included: IBA specifics that explored more of the detail with participants expressions.

"#788-791 Rainbow: I don't know what would work but the two things that come to mind are you either inspire positive drinking or you really expose bad drinking like the woman on the toilet floors covered in her own vomit or you know like pictures of...Stella now have a thing that says enjoy responsibly oh It don't make any difference" – Female, 30 focus group 1.

The participants expression focused on future directions for intervention with suggestions being made. An identification of conflict within alcohol related messages was understood through the participant's commentary. This statement highlighted the paradoxical nature of alcohol messages that are sometimes in conflict to the wider culture's alcohol consumption levels (Moss et al., 2015). The evaluation of the approach to intervention messages was felt to be ineffective given the summation made by the participant in their views. Due to the nature of the questions being asked on intervention during the discussion it created a structured evaluation of intervention techniques and a space for providing suggestions.

"#799-801 Red: I wonder if those...pop-up NHS vans...like come and see what the chances of you having a stroke are" – Female, 38 focus group 1.

The participants views evoked the feeling that different levels of engagement with the student body may provide an opportunity for intervention. The 'van' suggestion was echoed by others in the group to be an idea that derived some humour with also a genuine feeling that it may generate interactions with students. This theme clearly explored how interventions can be adaptable in different settings and the flexibility required with the design and implementation of the approaches. The level of experience with interventions provided some insight into how IBA was delivered and its affect.

"#475-477 Adeptio: there's this big issue going on...I think we should either we can't stop anyone from doing something but we should educate people about what to do..." – Female, 20 focus group 4.

This comment reflected the need to use teachable moments and education tools to enhance the interventions being delivered and ensure that messages are communicated (Gaume, et al., 2014). The participant also stated the necessity to raise awareness and inform individuals of the risks and associated complications that can occur as a result.

"#647-648 Capio:...I think people learn from these experiences, but you wanna make sure somebody doesn't ruin their life in one night, because that can happen with alcohol can't it" – Male, 24 focus group 4.

This note of caution is an important part when considering the construction of intervention with students as elements of at-risk behaviour can develop into problematic usage or even extreme dire consequences (Buckner & Schmidt, 2009). The participant offers commentary on the individuals learning from their experiences.

This theme of intervention approach was further explored regarding implementation in university settings and the sensitivity required when presenting the information to students. The level of experience with delivering IBA interventions was considerable in focus group 5 as they formed part of the Health and Wellbeing Team at LSBU. Most of the participants had been trained to implement them and had conducted several interventions with students. However, in some cases many of the interventions that the team delivered required a greater level of interaction than the IBA. Therefore, a different level of perspective was given when participants considered interventions.

"#422-425 Avondale:...our appointments are usually around an hour long so there's definitely...we're getting somewhere, scratched the surface, using the resources, and actually now we've opened up a different type of conversation we have got the beauty of having the time explore that than...sort of pop up...situation" – Female, 32 focus group 5.

The statements reflect the working environment that the participants operate in and how they provide structured sessions for students to explore issues. It could be argued that providing a resource with interventions allows the individual to open out discussions on the relevant topics. The observation on the different types of conversation provided insight into the levels of interaction that can be achieved with intervention (Lopez-Vergara, Merrill & Carey, 2018). This concept is reflected in the following statement made by the participant Florence:

"#477-480 Florence: There's something about it being...people being more able...to kind of fess up in January to having an...indulgent December, in the middle of December, if you're like don't eat too much, people this Christmas you know, I think there's something about, there are windows where people are more open to change" – Female, 33 focus group 5.

The notion of 'windows of change' allows for individuals to meet themselves within the intervention space. This comment extended to more in-depth long-term interventions that aim to get to the root of the issues. Also, the concept is established in the literature around therapeutic techniques that aim to create windows of change to alter behaviour for individuals' (Williams et al., 2005).

"#566-570 Avondale:...there are things that we do that students is to remind...that when we feel like breaking that habit, you feel quite like actually no I want to drink all the wine, is to have something...maybe a little card that you can have with you saying all the little reasons why you tried not to drink to remind yourself in those tough moments, actually no, come on, because I'm skint, and saving for a house..." – Female, 32 focus group 5.

This suggestion for an intervention produces a reflection for the recipients to consider when they are delivering an intervention. Adding in a focus point for individuals when drinking could instil some contemplation to consider other aspects of their life during the night. Additionally, it could create an external focus to the behaviour by considering something that is greater than the drinking situation. Some of the content was individuals providing commentary on intervention design and delivery, although most involved a level of personal insight.

"#575-576 Red: well, I've had a really awful negative experience once when I told the truth...and that's maybe part the reason now why I kind of modify my answers" – Female, 38 focus group 1.

The individuals negative experience guided their responses to future intervention in the way of employing more dishonesty or being economical with their truth. This view clearly demonstrated that the participant took the experience personally. As a result, the individual modified their own behaviour to be more circumspect with revealing the truth of the situation and themselves. The modification of their own behaviour and their actions illustrates the potential power of intimate, personal interactions, especially given the nature of the subject (Cialdini & Goldstein, 2004).

"#749-750 Rainbow: And you can drink two units a week but be self-harming so there's like that number alone doesn't really say much" – Female, 30 Focus group 1.

The reflection that the numbers do not signify the whole picture adds to the emphasis that the intervention requires further development of seeing beyond the scope of the screening. Within focus group 2 each participant took a subjective account of their own position as interventionists and how they have delivered interventions in their respective settings. The complexity around behaviour change techniques and how many different approaches are used for interventions was reviewed in detail and illustrated by many of the participants.

"#53-55 Epsilon: and that's the way I've found if they appreciate you and your knowledge and accept that in a certain way, they are more likely to alter their behaviour" – Male, 53 focus group 2.

The view that accepting an individual's own credentials as an interventionist could produce an outcome to the intervention is a reflection that demonstrates the level of influence that the interventionist may have. The interaction in an intervention depending upon the context, provides the opportunity for instilling change (Murphy et al., 2015). Viewing the intervention from a conceptual perspective allowed the participants to discuss the intervention within an addiction treatment context.

"#260-263 Lambda: because they'll be treated for alcohol but...its treating the whole problem rather than the substance which is...what um trying to do is to treat the person not the substance it's the person and what's going on is what we try and do" – Female, 33 focus group 2.

It could be argued that the participant is pointing towards viewing individuals with addictive or compulsive behaviours as more than the presenting issue (McIntosh & McKeganey, 2000). A common consideration was echoed within the discussion when other participants reflected similar statements in relation to their own work environments. Viewing the addiction as opposed to the person with an addiction was a common assumption. This is depicted in the following statement:

"#194-195 Lambda: about well actually your experience tells us, and your history shows that really you need to be abstinent for alcohol and drugs and they look at you and go yeah but I'm 19" – Female, 33 focus group 2.

This suggestion for intervention presents a problem when applying treatment with a younger individual; Partly due to the difficulty of younger individuals to accept the reality of the situation. This difficulty in a treatment setting is presented by lambda in the comment where what is prescribed to the client does not meet the circumstances. This statement challenges the philosophy of 12-step recovery and its overall effectiveness: specifically, when applying the principle to a younger person (McIntosh & McKeganey, 2000).

Along with many reflections on the participants experiences of delivering intervention they also contributed evaluations on many different intervention approaches. The timing and approach were two of the main parts when presenting interventions to students. The enrolment process was an opportune time for delivering interventions when students are open and can be considered a captive audience.

"#678-680 Lambda: why there is not something around there that's on enrolment, the amount of stuff you have to do and queue and wait in corridors for photos and blah blah, why not when you do it on enrolment, why they can't stick you in front of screen and go early intervention" – Female, 33 focus group 2.

This theme shows many of the challenges and suggestions that are necessary when considering students interventions. Evaluating intervention design and delivery was one of the key areas examined by participants in focus group 3 during the discussion.

Additionally, identifying the challenges that student-based interventions face was evident from some of the excerpts.

"#727-729 Maple:...I think particularly from a university it...is...the difference

between someone who is just having a really good time and experimenting and someone who really has a problem" – Male, 42 focus group 3.

The clear line between experimentation and problematic usage is not well defined within university culture especially with the heavy consumption of substances (Buckner & Schmidt, 2009). The comment highlights the need for greater provision of intervention to screen and identify those with greater issues surrounding use. Similarly, the examination of the notion for planting seeds with individuals must be clarified as to its meaning as shown by participant maple:

"#734 Maple: okay you can plant a seed but then, what is the seed you are planting?" – Male, 42 focus group 3.

This comment refers to a common dialogue within addiction focused communities that emphasise the importance of instilling hope in others. Many recovery communities including 12-step organisations have incorporated this comment into the language used.

A further development of the theme was explored in focus group 5 when participants reflected on how to improve interventions and different components to incorporate for changes to occur. Additionally, identifying the challenges that student-based interventions face was evident from some of the excerpts.

"#443-445 Florence: students we've seen...Five to six hundred students a year...but some of those students will have incredibly complex challenging relationships with alcohol" – Female, 33 focus group 5.

The identification of the complexity surrounding different relationships with alcohol produced a commentary on the nature of wellbeing and how it is perceived with students. Also, personal reflections around the context of intervention delivery provided insights about the campus. Additionally, suggestions for identifying how to help individuals change or alter behaviour was identified within the data.

"#543-544 Yuma:...put that action plan to practice, it's all very well us for us doing a plan you know in isolation from people social networks" – Female, 34 focus group 5.

The development of action plans and behaviors to implement provided a level of attention to the greater needs within intervention as a practice (Sheeran, Webb & Gollwitzer, 2006). It could be argued that instilling personally motivated behaviours could contribute to changes that may be sustainable in the long term. This theme was further

explored in the context of IBA when discussing the nature of the intervention being delivered at LSBU.

IBA Specifics

A further subtheme was identified through all five focus groups that reviewed the experiences of IBA with the participants in the group, feedback was produced on improvements that could be incorporated to generate change. The IBA was examined with participants sharing how they felt about the alcohol screening and their thoughts on the nature of disclosing information. The emergence of a consistent commentary of dishonesty and the acceptance of lying was shown from the participants:

"#564 Red: I always, I don't actually always tell the truth" – Female, 38 focus group 1.

"#568 Rainbow: I think it's acceptable to lie" – Female, 30 focus group 1.

"#570 Rainbow: I don't know why I just think, all the others I'll tell you the truth, this not so much" – Female, 30 focus group 1.

These statements showed reactions to the intervention screening with the possible need to lie about the specifics of their own drinking. It could be argued that these statements represented a clear denial of possible alcohol usage problems or a protection over their own privacy. The possible inhibition because of discussing alcohol levels in a screening could be mitigated through dishonesty or avoidance of the issue, some individual may pay lip service to the intervention. This subtheme related directly to the views and expressions being given on intervention reflections that constituted many statements evaluating interventions. The efficacy of the approach was evaluated when presented with the information on how IBA works. Also, the relative success with the intervention for individuals in primary care settings and some educational environments was mentioned by the experimenter (Cunningham et al., 2012; Donoghue et al., 2014; McClatchey, Boyce & Dombrowski, 2015). A picture of the intervention was presented to the participants that was considered as a viable strategy for engaging students.

"#716-718 violet: then maybe it's quite effective to have someone say something to you, okay have you looked at this, have you considered that maybe that's a bit too much" – Female, 25 focus group 1.

The feedback provided comment on the nature of the IBA with its 'unarmed' approach to a general discussion of alcohol use. The participant validated the efficacy of

having an interventionist discussing what is happening with alcohol consumption as opposed to instructing someone to reduce. The view supports the consensus on IBA as a recognised approach to intervention (Clarke, Field & Rose, 2015; Donoghue et al., 2014; Heather et al., 2011).

A personal account from one participant demonstrated a way of using a different design within the implementation.

"#680-682 willow: and you'd develop pathways and through those pathways you would provide the appropriate information...or methods of being able to help people to sort of take them through that process of getting support" – Male, 46 focus group 3.

This suggestion for the possible improvements to the IBA showed how the discussion moved towards more critical evaluation and formulation of strategies for interventions when the participants in the group self-reflected. This was demonstrated by a participant from focus group 4 offering insights from their own perspective on the nature of the IBA intervention that they received.

"#526-527 Disco: so then actually I was like well I know that it's not good, but I don't want that lesson from doctors I don't want to" – Female, 24 focus group 4.

This participants resistance to the intervention and perceived lecture creates a window for the individual to be deceptive and not tell the truth about their drinking. The difficulties in sharing with their doctor and talking about what is happening can be an inhibitory process for students. This was further explored with participants in focus group 5 when they shared about their work context when delivering IBA interventions.

"#364-366 Avondale: I just found my moment [laughter=all] cor, I've got the perfect form to fill in! [laughter]...and the student actually...was one who was really shocked and I...found the resources...and also...I didn't feel like I was making any judgement" – Female, 32 focus group 5.

Evidence of the participants enthusiasm for delivering IBA interventions was noticeable; the feedback demonstrated a consistent reflection that related to the lack of judgement with IBA interventions. As the participant promoted the approach it was clear that a spontaneous discussion with support from resources can alter the delivery of brief interventions with students. Additionally, the nature of the discussion seemed to prompt the interventionist to deliver an opportunistic IBA.

"#498-500 Avondale: but I felt the information on there its almost is a little bit too much as if you had a problem...and I think, it would have been I would have really liked, actually with both students it was really helpful to just talk about swapping things out" – Female, 32 focus group 5.

The feedback on the strength of the intervention language is a considerable point of reflection as it highlights the difficulties with presenting alcohol related information to students. Also, the use of increasing risk language and signposting dependent drinkers is a sensitive area for students. This level of assessing themselves needs to be handled in a sensitive and open manner which allows an individual to come to their own conclusions. Overall, this feedback on IBA generated greater insights into the dynamics of delivering interventions with students, and how to develop and implement techniques that can support change.

The second part of the focus groups explored different levels of experience with alcohol and included many participants personal stories and insights with identification of how social conventions exist around drinking behaviours.

Social Convention of drinking

The theme of 'social convention of drinking' was identified throughout the data with clear messages on how fun and enjoyment are constructed with alcohol consumption. This was demonstrated within social environments that increased the need to consume to be part of a collective experience (Taylor et al., 2015). The notion of convention is supported with how each participant feels about the underlying motivations of alcohol use.

"#164-167 Orange: and you kind of lose track and there's just more people to encourage you to drink...because everybody's having such fun so I think...that's really a factor with me and if I was really on my own, I would almost never drink. It has a lot to do with other people" – Female, 30 focus group 1.

The sense of normalisation of alcohol usage throughout social engagements was illustrated in the example given, whereby a person views their own alcohol usage in a social environment. The tendency for social environments to determine their level of alcohol usage leads back to external factors having an influence on consumption. Which could be argued to lead on to the potential loss of their own identity within the social environment.

"#193-194 Violet: yeah, the decision is made, this isn't cheese and wine anymore this is drinks and then drinks happen" – Female, 25 focus group 1.

In contrast to this, other social conventions are constructed whereby a pretence is set up with the appearance of a social engagement that contains a sub text that is explored as a new activity. The statement that 'this is drinks and then drinks happen' creates a shift in the social environment with the need for increased alcohol consumption which contrasts with the original pretence. The theme further explored the nature of conventions and how they operate with drinkers in social environments that are present on campuses.

"#14-16 Disco:...I felt that alcohol was a real key part of your social life...and myself and my...housemates my friends that was the key way we socialised that's everything revolved around alcohol and it was very much accepted and encouraged by the various societies we were part of' – Female, 24 focus group 4.

This statement reflects how an individual's own life is suffused with alcohol especially in social environments and becomes part of the university lifestyle (Davoren et al., 2016). The encouragement of the behaviour from even university societies, reflects this idea that an individual cannot escape drinking experiences. Also, the comment evokes a confinement, that this is how university life is and all things revolve around the experiences with alcohol.

"#26-29 Disco:...I think it creates that especially when you join...it's a social lubricant, so it's how everyone's meeting and kind of getting to know each other and...it creates a lot of excitement and drama..." – Female, 24 focus group 4.

The presence of alcohol in the social environment provides the ability for individuals to meet and connect and acts as a conduit for breaking down barriers. The concept of 'social lubricant' is supported in the research literature extensively within myopia theories (Monahan & Lannutti, 2000; Moss & Albery, 2009). The statement also reflects the consequences of the social interactions escalating to excitement and possibly drama which could be argued to reflect an intensity within how drinking cultures are constructed.

This development of this theme explored the nature of social conventions and how they are part of student life with drinkers particularly in a university setting.

"#96-97 Florence: and it doesn't feel like a special occasion...or a once in a while thing...so it...wouldn't occur to me...to not drink at a social" – Female, 33 focus group 5.

This comment shows how alcohol consumption can be normalised in the social environment and how it is part of the convention of drinking (Merrill et al., 2018). Through highlighting the acceptance of alcohol as part of the social fabric within society it could be argued to be a process of embracing convention. Additionally, the individual is showing how alcohol has become suffused with all types of social activity that abstaining is not a consideration. Overall, the details of the drinker's experiences informed the subject of personal experience and alcohol activities and how they relate to interventions.

Personal experiences

As a theme 'personal experiences' explored thoughts, feelings and reflections that related to intervention, treatment, and addiction experience. The theme itself provided the basis for sharing personal details and linking behaviour to understanding. A central area that was discussed throughout this theme was the role of a person's experience with intervention delivery. Many insights were presented that illustrated how interventionists work with individuals in addiction settings (McGovern et al., 2004). Many of the personal accounts showed how individuals related to the subject of intervention with a perspective on the underlying function of the addictive behaviour.

"#500-504 Epsilon:...wrong one to ask really as I did my first detox when I was 21 so...I don't think anything would have stopped that regardless of what anyone anything anybody would have said but having said that I didn't have that intervention so who knows...I don't know how I would have reacted to that at the time", Male, 53 focus group 2.

This account reflects the individual's interpretation of their own resistance to intervention. The comment shows the feeling of fatalism, being destined to lead the compulsive life. However, the opportunity for brief intervention was not given and may have created a different outcome, although the participant clearly states that this provides merely subjective conjecture. These personal accounts were taken further with an exploration of addiction theory as it related to individuals' experiences.

"#506-507 Lambda:...I think the denial and the lying...for me it was a progressive illness so you know" – Female, 33 focus group 2.

The use of the term 'progressive illness' reflects a common interpretation and classification of addiction. The disease concept which has been reviewed in the literature (Peele, 1990; Volkow, Koob & McLellan, 2016). The theory presents an understanding of addiction from the concept that it is an illness requiring treatment through spiritual

approaches (Galanter et al., 2007). The participant ties this philosophy in to their own experience to which it relates to their own denial and ability to lie about the circumstances surrounding their use of substances or behaviours. However, the participant provides more insight based on their own understanding which contextualises addictive behaviour in relation to its origin.

The theme of personal experiences demonstrated many reflections on interventions that participants in focus group 3 had received and accounts of personal treatment history. Most participants in the group disclosed their status of being in 'recovery' from addiction and introduced their experiences in an open manner. The 6th participant did not subscribe to the same type of recovery and disclosed that they were in 'smart recovery' that was separate from 12-step philosophy (Peele, 1990). Each participant took a subjective account of their own position as students and recovering individuals. The theme also explored the use of humour when relating painful experiences to the wider group discussion.

"#180-181 Birch: So, I just got into more and more a state and then eventually I had to go to my family and say I am a lunatic proper I'm not just...it's not just a defence now I need help" – Male, 53 focus group 3.

This excerpt shows the conflict between humour and painful realisations on the nature of an individual's addiction and escalation. The participant was able to share with authority the removal of defence strategies leading to his own painful self-awareness. Another account reflects the alcoholic mindset with sharing their own experience with taking a drink. The participant uses a level of interpretation towards their own behaviour when relating it to the wider addiction community.

"#404-406 Olive: you know but the fact is, and I believe it to be true for me and other people that I know, and I've heard it so many times that if for an alcoholic like this one once you take a drink it sets something off" – Female, 40 focus group 3.

The comment of 'sets something off' refers to the concept that an inbuilt switch to addictive behaviour is triggered by their response to the action of drinking. This has been a consistent theme presented in the 12-step literature that depicts craving as a process that starts once an individual takes an alcohol drink (Littleton, 2000). The phenomenon of craving is a possible explanation for this comment that became an idea from 12-step philosophy to explain alcoholic drinking behaviours (Heinz et al., 2009).

#640-641 Olive: but also, what it's costing you because it's an AA thing, but you don't have to have got the point of being a dependent full on alkie for it really to go well actually what is this drink costing me – Female, 40 focus group 3.

This comment corresponds to a concept within therapeutic intervention that explores the opportunity costs of individuals when their behaviours are impacting their life (Copello, Templeton & Powell, 2010). Suggestions that an individual calculate what the substance is costing them in many areas (financial, intellectual, emotional and career progression) can provide greater acknowledgement of the impact that drinking has on the individual (Copello, Templeton & Powell, 2010). The increased amount of self-realisation and awareness demonstrates a deeper understanding on situations that have previously occurred.

"#138-140 Beech: it had to be something not only that I recognised probably because I... recognised it for a few years but it had to be the point where I'd had enough" – Female, 59 Focus group 3.

This acknowledgment of having 'had enough' shows the participant's acknowledgment of their reality. The comment also provides the discussion a place for identification with the idea of what enough means for each person. This is highlighted in the concept of 'rock bottom' and 'high bottom' drunken experiences that shape whether this acknowledgment takes place (Shinebourne & Smith, 2010). The 'rock bottom' signifies an extreme low point whereby the threshold for increased levels of pain and degradation are reached. Conversely, the 'high bottom' is a concept whereby the individual does not lose anything and yet has significant consequences of drinking without the necessary impetus to reduce or stop.

"#169-170 Birch: you talk about shame I think I utilised the shameless defence so from a very early age, even at 18-19 I was identified as an addict" – Male, 53 focus group 3.

This account demonstrates the participant's need to create a level of separation between himself and anyone getting close. This was further explored with statements being made that signified interpretation and understanding of addiction as a behaviour (McIntosh & McKeganey, 2000).

#431-432 Sycamore: It wouldn't have done me any good to have gone and left and and...so I think...what I tend to call it I've heard people call it this sod it syndrome" – Transgender Female, 65 focus group 3.

The notion of 'sod it syndrome' demonstrated that some individuals wish to not take responsibility and end things or change something drastically. This was later contrasted with comments that demonstrated shifts in perspective or where individuals came to realisations. It could be argued that the group's interrelations were formed upon a shared understanding of personal shifts in development or growth that occurred during their individual treatment journey's.

"#188-191 Birch: I think it was maybe the biggest heartbreak of my life because my absolute passion was taken away from me. You know my longest relationship my most reliable relationship no matter what's there does the job and is gone" – Male, 53 focus group 3.

This participants illustration of grief at the loss of addiction presents the paradox that individuals that identify as addicts have. Whereby wanting things to change although not wanting to lose anything, creates the dilemma. This dilemma is further explored when coming away from their addictive nature then realisation dawns as a result.

#398-399 Olive: and he was like what are you talking about and it for the first time it dawned on me that not everybody had the same feelings" – Female, 40 focus group 3.

The comment reflects how moments of spontaneous realisation can heighten an individual's self-awareness when it comes to their own personal situation.

A central idea that was depicted within the theme of personal experience was the identification of how an individual evaluates interventions and the reflections on drinking environments. Many of the accounts provided an evaluation of the IBA intervention that was delivered to them. The theme also explored the use of retrospective self-reflection, with previous alcohol experiences and individuals' histories.

"#32 Adeptio: There's no filter when your drink and it feels that you might have its just gone" – Female, 20 focus group 4.

This statement demonstrates both a personal account of their experience, with also commentary on wider society. The use of the projected 'you' is a subtle form of distancing themselves from their own statement. The individual is possibly talking from a global perspective rather than taking account of their own experience. The participant uses a level of interpretation towards their own behaviour when aiming to relate it to wider society.

"#339-340 Disco: yeah, I'm having fun, whereas actually when you have really...lovely places...you don't need to drink that much because the actual night itself is...so good" – Female, 24 focus group 4.

Similarly, this personal reflection is being shared alongside a global statement for how other people may experience a similar circumstance. The comment also provides insight into the necessity or lack of need to drink in social occasions due to the environment creating a good atmosphere.

"#437-438 Adeptio: but if you do want to know your limits it has to come within and it will needs a little experience to say hey when I'm feeling like this let me take a step back" – Female, 20 focus group 4.

This comment shows a continuation of the theme with an element of personal reflection that flips to social commentary with projective 'you' statement. However, the insight shows an account of what is required for interpersonal change to occur. A central area that was discussed throughout this theme was the role of an individual's experience with alcohol with elements of social commentary being offered.

"#120-123 Florence: It's funny isn't it, thinking about having a biased picture because I think, when I worked in services, seeing people...working with students...drinking to excess and getting in silly situations and or damaging instances, I...have the complete flip side of that is, 'well um, gosh none of my friends get, all my friends drink heavily and none of us have ever, ever end up in A&E" – Female, 33 focus group 5.

This commentary demonstrates how a person's views can be shaped by the experiences they personally have with alcohol. It could be argued that the participant's viewpoint represents a subjective judgement on other individuals' alcohol related behaviours. Also, the individual is using their own experience as a template for understanding others. This is explored further with their own experience in changing behaviour with smoking.

"#562-564 Florence:...changing...your habit, like anything like replacing the habits so I would still go and have a cup of coffee with them but just not...smoking...and telling them why" – Female, 33 focus group 5.

The theme shows how developing change behaviours around an established habit can be challenging when the same cues remain in these environments. This excerpt reflects the difficulty with re-engaging in a familiar setting when habitual behaviour had been altered.

Many of these concepts tied into the wider theme of drinking culture that was identified in the data throughout each focus group.

Drinking culture

Another major theme that was identified within the data analysis was the concept of drinking culture that exists within university campuses. A series of subthemes were identified that related directly to the main theme which included: pre-partying behaviour and drinking games behaviour. Drinking culture is an established concept that can be applied to classifying behaviour and types of activities that take place in university settings (Schulenberg et al., 2001).

"#16-17 Disco: by the way...just the culture of where we were at university that was just part of the...whole university experience" – Female, 24 focus group 4.

The theme encapsulates what is expected of university students that they join the drinking culture and become part of the experience. Which is depicted in 'disco's' comment on how much the culture of university influenced their own behaviour. Additionally, the participant is making comment as to the geographical location of the university having an influence on the amount of drinking. This could be argued to be a wider drinking culture influencing the university drinking culture.

"#300-302 Disco: our...drinking culture had changed dramatically so even though it sounds bad coming from me I think my rules experience especially when we started university was very tame" – Female, 24 focus group 4.

This transition from prior university experience to university experience is supported by the literature, (Schulenberg et al., 2001; Schulenberg & Maggs, 2002) that explores how developmental transitions alter and change from first day to last day of university. A strong part of the culture is the post-event processing (PEP; Lundh & Sperling, 2002) that takes place at university after alcohol experiences. These discussions operate in a way to alleviate any anxiety or negative experiences associated with alcohol usage. In this context of the analysis, it is being related to how individuals can reduce their feelings in discussions on shared social experiences.

"#201-202 Adeptio: In other countries where you go nobody bothers to predrink...you take your time whether you are going out for cocktails or you are going to a restaurant whatever" – Female, 20 focus group 4. This statement provided an opening to the exploration of views and experiences around pre-partying behaviour which was another subtheme in the discussion. The position that the participant is occupying is an observation having seen many instances of UK drinking culture and how pre-drinks form part of UK drinking habits (Foster & Ferguson, 2013; Howard et al., 2019). Drinking culture is an established concept that can be applied to classifying behaviour and types of activities that take place in numerous settings (Ridout & Campbell, 2014).

"#139-141 Avondale: I think for me it just seems very all or nothing...in the media, you never see someone just kind of going out, even just in tv programs like that, no one's ever just going out for one, [laughter=all]" – Female, 32 focus group 5.

This observation of the culture reflects how society can be set up for extreme behaviour with the need to drink excessively. This is especially identified in the statement 'all or nothing' reflecting the intense requirements of individuals to conform to the culture. This conformity is shown by the participant's subsequent view:

"#260-261 Avondale: but I don't think there's enough...stuff around...Why don't you...just have a couple?" – Female, 32 focus group 5.

The participants view reflected the question of how societal standards are set up and why small amounts are not promoted as a consumption method. Additionally, the commentary points towards the need for individuals to re-consider their own choices regarding the amount of consumption. A further discussion on type of alcohol consumption activities was expressed in most of the focus groups with pre-partying and drinking games being identified by participants.

Alcohol activities

The identification of a spectrum of alcohol related activities was gained from the personal reflections, views, and insights from the focus group participants. Both prepartying and drinking game participation were the central activities that participants in the discussions reported to engage in. The use of the theme to classify this behaviour demonstrated the varied nature of the experiences.

"#127 Red: Like to do that, yeah of course I have a **kitchen Disco** but come on who doesn't?" – Female, 38 focus group 1.

The clear statement of a new type of activity has a way of classifying a lonely activity where an individual is trying to generate an experience by themselves. This is

reflected in the development of a concept defined as a 'Kitchen Disco' whereby the person tends to drink and dance alone in their own kitchen. The experience was stated as a fun activity that involves a self-created environment for enjoyment with the use of alcohol. This activity is supported and identified amongst the cohort with a clear acknowledgement on how this behaviour occurs. However, it could be viewed as a solitary behaviour that seems problematic in that alcohol is consumed alone with no social influence or regulation. Further identification of new behaviours that are classified by participants in the group were expressed within this theme.

"#440-442 - Violet: Even my friends and I who all have like full time jobs, they can afford to live we still pre-drink before we go out because otherwise going out would be really expensive and then you have this thing called **Journey Juice** which is where you..." – Female, 25 focus group 1.

The reflection on the circumstances surrounding the motivation for pre-partying provided insight into the establishment of the behaviour amongst social groups (Foster & Ferguson, 2013). Also, some participants shared details of other people and their own experiences with pre-partying as an alcohol related activity. A further classification for an alcohol activity was mentioned with 'Journey juice' being a behaviour similar to pre-partying in transit. Additionally, increased consumption levels were noted with further intoxication being the goal amongst the individuals engaging in this pre-partying behaviour.

"#444 Violet: Yeah, you make a drink for the taxi or the tube or whatever" – Female, 25 focus group 1.

"#451-452 Violet: Yeah and make up like...a really strong journey juice and everyone chugs it in the back of an uber like" – Female, 25 focus group 1.

Both statements present information on the dynamics of the activity and how to engage with the behaviour for increasing levels of consumption prior to attending any social activity. It could be argued to represent a new form of pre-partying behaviour that includes transitional pre-partying. These activities relate directly to the subtheme 'Pre-partying behaviour' that was identified in the data.

Pre-partying behaviour

This subtheme of pre-partying behaviour was a present phenomenon in the recounting of alcohol experiences from the participants. Many of the participants in the discussion

explored the incidence of pre-partying in their lives (Zamboanga & Olthuis, 2016). This was further typified by one participant's experience in focus group 1 with pre-partying in a social engagement at a restaurant.

"# 283-285 - Violet: I have a friend that last time we went to Wagamama's, we got two flasks of sake and then got a bottle of Jägermeister and drank the entire thing on the beach before going out" – Female, 25 focus group 1.

This subtheme shows the nature of the consumption with extreme levels being common in the practice of drinking alcohol prior to attending any type of social function; prepartying (Zamboanga & Olthuis, 2016). A further development of this theme was noted by a participant in focus group 4 when they provided more cultural commentary on prepartying. The participant presents a counterargument to the normalisation of pre-drinking as an established practice in the UK. The participants reflections of other cultures and the lack of pre-drinking opened the discussion on this practice.

"#202-203 Adeptio: in other countries pre-drinking isn't a thing" – Female, 20 focus group 4.

"#205 Adeptio: It's not, it's only in the UK that I've seen this trend" – Female, 20 focus group 4.

These statements highlight the nature of how pre-drinking seems to be a UK based phenomenon as it serves many different functions for individuals. The participant is suggesting that the UK operates differently in its approach to drinking behaviour as opposed to other countries. Validating this comment was difficult as the other individuals form part of the UK drinking culture and were unable to refute the suggestion due to sharing the view themselves. However, the comments provided discussion on the details of pre-partying behaviour at UK universities (Forsyth, 2010; Foster & Ferguson, 2013; Howard et al., 2019).

"#215-216 Disco:...actually we were only ever out for normally a couple of hours and...more of the night we spent together pre-drinking than actually going to the club" – Female, 24 focus group 4.

The practice of pre-drinking demonstrated the increased level of social interaction that is part of the process. It also showed the most connected and fun part of the night was the time before the social event, which is consistent with research into pre-partying (LaBrie et al., 2012; Zamboanga et al., 2014). The practice of pre-partying usually involves a

varied collection of people drinking together with sometimes similar motivations and intentions for the forthcoming social event (Bachrach et al., 2012).

"#221-222 Capio: Most of the fun, it's the anticipation you go to pre-drinks and your like okay we're pre-drinking we've got to recover later that's where most of the fun starts" – Male, 24 focus group 4.

This level of anticipation prior to pre-drinking could be argued to be the fun within the behaviour itself. Most of the endorsed motivations for pre-partying involve the need to feel 'buzzed' or ready for the night out, which is consistent with the anticipation of the event (LaBrie et al., 2012). Another main drinking related behaviour was identified in a subtheme that explored how drinking games are established within campus culture.

Drinking games behaviour

This subtheme highlighted the incidence of drinking game playing that occurred on nights out and prior to nights out, which involved an experience of engaging with different drinking games.

"#211-212 Disco:...we played loads of drinking games and...its was like that oh I always really enjoyed that part" – Female, 24 focus group 4.

The participant expressed how much drinking games were part of the culture which demonstrates how alcohol related activities can be imbedded in the social life of students (Zamboanga et al., 2017). Additionally, as drinking games were played before social events it corresponds to pre-drinking games which could be argued to be a part of the behaviour of pre-partying. The subtheme forms part of the wider theme of alcohol motivations that examined the underlying processes for consumption.

Alcohol motivations

Another theme that was identified in the data was the alcohol motivations of participants and how they varied based on different levels of experience. Individuals were able to understand their own primary motivations for consumption and share their insights in the group. Dependent upon the activity many motivations may exist for different alcohol behaviours.

"#107 Yellow: I Don't know whether I'd use it for relaxation, I actually drink it because I like it" – Female, 39 focus group 1.

The notion of drinking for liking is an established concept in alcohol related literature (Payne, Govorun & Arbuckle, 2008). The individual develops an implicit attitude toward the use of alcohol once it has been established as a habit. Despite the research focusing on addictive behaviours, the motivation in this context is the function that alcohol has in the individual's life. Additionally, another participant evaluated the concept of a commitment with consumption that can change the nature of the social occasion. It could be argued that this may shift the motivation from one of social interaction to drinking at increased levels in another setting.

"#180-182 Violet: They do me in, like when it's cheaper to get a bottle of prosecco when you are out rather than getting multiple glasses, you just think we've committed to this now we've decided we are going out out rather than just having one glass" – Female, 25 focus group 1.

The use of the language 'out, out' as a popular culture reference relates to the idea of two different motivated activities with alcohol consumption. One being the idea of going out and the next a commentary on the effort required for 'out, out' which needs further preparation with being suitably dressed and ready for the type of drinking and increased sociability. The use of this phrase and its illustration provides an insight into the nature of social engagements and how they are constructed and maintained with alcohol as a factor. This subtheme relates to the concept of how behaviour can be normalised in the context of sociability. It was clear that participants viewed alcohol as a vice and felt that giving in to drinking excessively could prompt other behaviours.

"#74-75 Disco:...I think...there's...it goes hand in hand I think if your drinking you think well you know I'm giving in to one vice why not give in too many" – Female, 24 focus group 4.

The participant sees that by succumbing to one behaviour it is permissible to engage in another. The notion of whilst I am doing something potentially damaging, I might as well indulge is a principle that could account for more at-risk behaviour with students. The development of this theme moved towards identifying the underlying processes that drive alcohol related behaviour. The participants in focus group 5 discussed their own motivations for drinking and the other factors that are considered when they drink alcohol. The commentary on other motivations was presented with more incidence of projective 'you' and 'your' statements being used throughout. It was clear that participants viewed alcohol as a social enhancer with many factors, which included improved confidence.

"#163-166 Mesa:...quite the opposite I said it is about fun, it is that whole...you're not going to have a good night unless you're drunk and it is, or some people its confidence, so...the more you drink it loosens you up more, you can go and like dance" – Female, 28 focus group 5.

The participant demonstrates how varied the motivations for alcohol consumption can be with numerous areas highlighted. The freedom implied in the excerpt demonstrated an individual's ability to allow themselves to have a good time. This comment is contrasted with another participant that feels individuals are primed to respond to cues that elicit different motivations.

"#301-302 Avondale: No, exactly I think it's the opposite, it is that kind of mentality yeah, like you said...feeling stressful...have a glass of wine, or eat, its actually the opposite mentally, which" – Female, 32 Focus group 5.

This theme shows how the psychology of motivated behaviour can influence how consumption levels change (Cox & Klinger, 1988; 2011). This is usually based on many different factors according to an individual's personal drives. The participant is pointing towards the mentality around drinking itself when individuals can respond to emotions which trigger consumption.

Another essential subtheme in understanding and classifying addictive behaviour was illustrated in the identification of advertising and its role in influencing alcohol consumption.

Recognition of advertising

The subtheme that was identified from the data from most of the focus groups was related to the evaluation of advertising and awareness campaigns. The main theme alcohol promotions explored how alcohol is promoted and raising the awareness of at-risk drinking is conducted. A commentary on different campaigns and how the subtle and sophisticated techniques are used was analysed in the discussions. The theme of alcohol promotion was broken down into subthemes, the subtheme of 'impact of advertising' examined how different approaches aim to instil changes with drinking populations.

Impact of advertising

Some of the participant evaluations looked at key promotions and how the advertising was able to influence drinkers' behaviours.

"#530-532 Maple:...wasn't like stella, all the advertising is like premium like brand but then it got the reputation of like wife beater because...they were discounting it so basically everyone was, so it became associated with like you know" – Male, 40 focus group 3.

"#535-538 Maple:...it was like a big problem...for their branding because...it became known as wife beater...which meant that loads of people drank it and then went home and then beat up their...wives or whatever [Laughter]" – Male, 40 focus group 3.

The details of the campaign showed how much drinking behaviours can be shaped by the culture around drinkers. The problematic nature of the campaign and the outcome demonstrated what can happen when interpretations of brands conflict with the intention of the advertising being used. Overall, this subtheme provided a commentary into the nature of how interventions can be misinterpreted and applied in different circumstances similar to alcohol awareness campaigns (Moss et al., 2015).

Alcohol promotions

The final theme that was identified from the data was related to the evaluation of advertising and awareness campaigns. A commentary was included on the dynamics of different campaigns and how obvious campaigns may not elicit the desired response.

"#434-437 Adeptio:...if you think about it even with smoking well, they have fricking you'll see like someone that's...in the surgery operating room, and it looks disgusting on it and people still smoke, when adverts say drink responsibly nobody really thinks about it even, I ignore that part like in my head I won't really take it in" – Female, 20 focus group 4.

The details of this commentary showed how campaigns that are designed to shock or subtly influence are deemed to be ineffective according to the participants view. Despite the extreme messaging in advertising, the participants statement has some merit when evaluating the content of campaigns. The nature of the campaign and the outcome demonstrated what can happen when interpretations of the message conflict with the intention of the advertising being used (Moss et al., 2015). Overall, this subtheme provided a commentary into the nature of how interventions can be misinterpreted and applied in different circumstances.

The motivations that determine consumption of alcohol can be influenced by promotional campaigns as they aim to shape behaviour. A commentary on the design of each campaign was included along with some minor evaluation.

"#315-316 Mesa: I think we are so...engrossed in our phones if there is like a poster or anything like that, I don't see it at all" – Female, 28 focus group 5.

This statement reflects the current culture that focuses on technology and other media forms which could limit the public awareness. Also, the lack of wider awareness to things that may be happening in a person's life, due to the focus on the phone, offers comment to society and the integration of technology.

The themes identified from the focus groups provided insight into how individuals experience IBA interventions, and the most effective strategies being used. Overall, the themes and subthemes identified from the discussions produced a level of insight into the IBA intervention and how it is received. Additionally, personal experiences and varied alcohol consumption narratives were presented that provided insights into motivated behaviour and alcohol related activities with students.

Discussion

The aim of the focus groups was to investigate the barriers to and facilitators of IBA implementation with students to obtain views, opinions, and reflections on the intervention. The findings from the focus group discussions demonstrated a level of reflective commentary on interactions with interventions and a wide spectrum of experiences with alcohol consumption. A population of drinkers was identified from the sample through all the focus groups, except focus group 3, and elements of focus group 2 which contained individuals in recovery from addiction. Within the sample, a mix of drinkers was identified with light to heavy alcohol consumers, the heaviest group was amongst focus group 4 that contained both students and staff that had received IBA interventions. The Seven identified themes that were combined from all five focus groups were: Intervention Approach / Reflection, Drinker / Addict Identity, Social Convention of Drinking, Personal Experiences, Alcohol Motivations, Drinking Culture and Alcohol Promotions.

The first theme that explored the nature of drinker identity and provided insights into how individuals can be resistant to the delivery of interventions. Many individuals in focus group 1 were able to present incidences of resistance to change or the content of interventions from their own experience (Foster, Neighbors & Prokhorov, 2014; Rollnick, Heather & Bell, 1992). From this evaluation, the theme of intervention approach was explored, and the main components of the intervention were discussed by the participants of each focus group. The dynamics of behaviour change were explored and evaluated in detail within the context of addiction treatment settings in focus group 2. The lens for which some of the content of this focus group could be seen through was based on how professional interventions are delivered within an addiction context. The details of these insights were sometimes reflections on their own addictive behaviour or working with addicted populations. Furthermore, in Focus group 1, suggestions for intervention emerged from the views of participants with clear feedback on the messages around alcohol use for a positive purpose or a negative reinforcement. Also, the suggestion of a tool for interacting with students was suggested based on a participant's observations for how to interact with the student body. One of the observed trends with the use of a van to promote health awareness was incorporated into this suggestion. This supports previous research within the realms of opportunistic interventions and how to communicate to specific audiences (Heather, 2003). The implications of these suggestions point towards

IBA being a flexible tool in opportunistic settings with captive audiences and the underlying approach could potentially alter drinking behaviours.

Along with a volume of personal reflection, the theme of alcohol activities was a central theme that was identified from the data across all focus groups. The exploration of two classified behaviours emerged from each behaviour being presented. The notion of a 'kitchen disco' was illustrated and agreed through a consensus in focus group 1's discussion. Similarly, 'Journey Juice' was contextualised by a participant that demonstrated how the behaviour is related to pre-partying. The action of 'Journey Juice' could be a new type of transitional pre-partying behaviour that incorporates the time between venues. This supports extensive research into the evaluation of many different types of pre-partying behaviour that have been classified in the literature (Forsyth, 2010; Foster & Ferguson, 2013; Zamboanga & Olthuis, 2016). Incorporating these two activities into the research may strengthen the understanding of how pre-partying is developed within the UK culture of drinkers. Following on from this theme another central theme that was identified through the discussion was social convention of drinking. This theme examined the conventions and cultures that exist for students when consuming alcohol and many of the unwritten agreements with drinking practices. This theme was identified in focus group 4 along with 'drinking culture' which reflected all the elements of drinking habits, practices, and other alcohol related activities. This theme extended to previous literature that has explored different drinking cultures that operate on campuses (McCreanor et al., 2013). The theme of drinking culture provided details on how alcohol behaviours are organised in different social groups. Two main subthemes that were identified in the discussion in focus group 1: pre-partying and drinking game participation. The implications of the identified theme of drinking culture extended to the previous findings of study 1 whereby knowing the culture can assist in delivering interventions based on student requirements. For instance, a student culture of heavy pre-partying might require an intervention prior to a night out or an organised social event to highlight risks associated with subsequent behaviour.

A level of nihilism was evident within themes that explored personal experiences in much of the recounting when it came to sharing alcohol consumption narratives across all focus groups. This was also reflected in the sharing of focus group 2 and 3 when individuals in recovery from addictive behaviours were sharing about their own experiences with alcohol consumption. Which applies to the theme of drinker / addict identity. Many illustrations of how external factors influence addictive behaviour were explored between groups 2 and 3. The development of the addict identity was incorporated

into the theme which demonstrated how individuals construct a sense of themselves based on their behaviour (Ridout, Campbell & Ellis, 2012). The addictive behaviour becomes a definition for the individuals own self which is formed within a collective ideology. It could be argued that the addict label provides both an identification to a larger collective and a debilitating identity that disables their ability to eradicate addictive behaviour (McIntosh & McKeganey, 2000). The 12-step narrative has been validated to have therapeutic value (McGovern et al., 2004) which was evaluated by many of the participants in the group. However, within the culture of 12-step there can be a rigidity it could be argued that looks to maintain a constant connection to a group or set of individuals which is sometimes in contrast to the health of the person (McIntosh & McKeganey, 2000).

In focus group 3 the role of drinker / addict identity was further evaluated from the perspective of treatment with experiences of addict behaviour being shared. This consistent theme related to group membership and social identity models proposed by Buckingham, Frings and Albery, (2013). The theme was presented separately from personal experiences as it was deemed to be a more detailed account of identity as most of the participants were sharing their own sense of self.

Part of the discussion within the subject of drinker / addict behaviour moved onto how treatment is structured with addictive populations and the emergence of the subtheme of treatment initiatives. Both Focus group 2 and 3 noted how successful treatment for addicts is evaluated differently based on each setting. One of the key identified areas of doubt within treatment initiatives is the metric for measuring successful treatment. A comment within the treatment culture of addiction shows that completion of treatment irrespective of setting or modality is a measure of success. However, this philosophy does not account for the individual's level of health and wellbeing at the end of the treatment that was delivered. Also, this contrasts with the actual endorsement of the treatment initiative and the lack of improvements being reported. A clear dialogue on what elements of interventions could be influential with addicted populations was given in this theme. One of the main identified areas within treatment initiatives was the alternative reflection made by a participant from focus group 3 that challenged the main ideology. The views expressed by the individual showed a progression with using non-addiction focused approaches to instil changes and move away from the discussion of addictive behaviour (Peele, 1990). The implications of this finding offer comment to the validity of focusing on addictive behaviour within treatment settings and how this approach might not instil changes and simply reinforce established beliefs about drinking. Regarding IBA this

provides a reflection on how different interventions can have an influence on recipients and the need to create a flexible and tailored approach to many individuals.

Another theme that was identified from the data in each focus group was alcohol motivations that examined the underlying processes that can direct alcohol consumption. This theme demonstrated how individuals can be motivated based on a variety of individual, cultural, societal, and ideological factors when consuming alcohol.

A final theme explored alcohol promotions and its impact on individual's ability to regulate their own usage. A clear dialogue on what elements of advertising had an influence on the participants experiences were noted in all focus group discussions. Subsequently, the impact of advertising theme explored some of the obvious and subtle strategies that are used to elicit changes within student populations. The research questions were addressed by each focus group; firstly, the IBA intervention was examined, evaluated, and critically reviewed by the participants of each focus group. This led to a subtheme being identified with IBA specifics, it included details on how individuals viewed the IBA and its delivery. A discussion of the efficacy and appropriateness of the approach was explored by the participants. A consensus was that the use of 'unarmed' and open statements for individuals to talk about their alcohol usage showed efficacy for the IBA.

Focus group 1 contained drinkers with a span of experience with alcohol. These participants were able to discuss the nature of their alcohol experiences and accounts of intoxication. Although in answering the research questions, many individuals were unaware of the IBA or the details of the intervention. Therefore, first impressions were able to be gained from these participants, and reflection on interventions generally was offered by members of the group. Accordingly, focus group 2 participants had many similar alcohol experiences compared to focus group 1. However, some of the individuals identified themselves in recovery from alcohol addiction and explored the impact of alcohol in their lives. Evaluating addiction treatment and relevant interventions became a focus of discussion in focus group 2. Also, the second question was addressed when student interventions were examined in the context of delivery and implementation when targeting students across all focus groups. One participant in focus group 2 had some previous experience of delivering brief interventions in community settings. Therefore, this directed the tone of the conversation which incorporated more analysis of the intervention itself.

The third research question that was addressed with those that had received interventions from focus group 3 whereby personal accounts detailed how interventions were used to help reduce or help change a person's usage. The review of intervention provided insights into the requirements of intervention delivery with different populations. The final question that was addressed in the focus group 3 discussions included a deeper evaluation of improvements that could be made to interventions in many different settings. Many unique and alternative approaches to delivering IBA to students was offered by the participants in the group which provided more insight into the development and implementation of interventions that target students. In focus group 4 it was evident from the reflections of the participants that many different challenges affect student's adherence to intervention and timing is a key factor in delivery. The review of IBA interventions from focus group 4 provided insights into the requirements of intervention delivery with student populations. Due to the participants having experiences of interacting with IBA interventions many unique and alternative approaches to delivering student interventions were offered by the participants in the group. These provided more insight into the development and implementation of interventions that target students.

The key implications from the research have demonstrated that the context that delivery of the intervention takes place can alter the efficacy of the approach with suggestions being made by participants from the groups.

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General Discussion

One of the most common identified areas with drinkers was the discussion of drinking culture which corresponded to how drinking environments are designed as noted in the literature (Fry, 2011; McCreanor et al., 2013). The drinking culture theme presented an opportunity for the participants of the focus groups to analyse and debate the practices that define a drinking culture. It became an exploration of societal standards that are applied to excessive consumption and the underlying need for consumption in different environments. A consensus of views and experiences within drinking cultures was presented throughout the groups. That led to the establishment of drinking culture and social convention as main themes for the drinkers focus groups. Additionally, pre-partying behaviour was an identified subtheme that was consistently evaluated throughout most of the focus groups; especially in the drinkers focus groups.

Another consistent finding within the groups was the exploration of identity that showed the variations of how individuals viewed themselves (Ridout, Campbell & Ellis, 2012). The construction and establishment of identity was briefly explored in the discussions; Although, the level of detail was minimal. A tendency amongst the discussion was to be orientated by an observer standpoint as opposed to sharing from their own perspective or experience. This gave the discussions a consistent level of commentary about identity, drinking practices and other behaviours (Griffin et al., 2009). Despite a good level of personal reflection amongst each group, many elements of the discussion were statements that elicited discussion around the topics in contrast to self-reflection. Also, elements of 'Banter' were evident within the drinkers focus groups (1, 4 & 5) when discussing personal accounts of excessive consumption (Griffin et al., 2009). However, the individuals in recovery from addiction group (focus group 3) were more inclined to discuss their own personal experiences as they related to each topic of discussion. This was also noted in focus group 2 where many of the participants were abstainers or light drinkers that provided commentary on addiction related topics.

The commonalities amongst the identified drinkers in the groups showed how deprecating humour and introspective reflection were synonymous when evaluating behaviour and how individuals felt about themselves. Another key element within the groups was the observed differences in motivations between abstainers not drinking and drinker's consumption of alcohol (Huang et al., 2011). Additionally, the level of experience with drinking and not drinking was similar in group 2 (professional interventionists) and group 3 (intervention recipients) as some of the stories were retrospective and in greater depth. As all focus group discussions were divided into alcohol experiences and interventions at different points, it elicited responses that generated feedback on both personal accounts of alcohol and intervention reflections. Many of the personal accounts of alcohol consumption centred around the humorous and sometimes risky practices that occur when consuming. Many of the participants in the drinker focus groups (1, 4 & 5) discussed how negative consequences result from the behaviour of excessive consumption. This is consistent with the research conducted by De Visser et al., (2013) that investigated young people and their views and experiences with alcohol usage. Many of the participants in the discussion shared about how they viewed their own consumption in respect to risk with some subthemes exploring problematic usage (focus group 1). Additionally, the messages of IBA were evaluated throughout all the focus groups with constructive feedback being offered. The feedback detailed the need for further support to students and for the delivery of the intervention to incorporate opportunistic methods. The consensus provided by the participants in the discussion added to the wider understanding of brief interventions that led to more suggestions being made.

The discussions on intervention and the suggestions that were offered demonstrated how IBA interventionists adopt many interactive styles when using the IBA technique. Similarly, the research of Davies et al., (2017) that examined the role of embarrassment and humour in the development of intervention contributed to understanding brief intervention suggestions. The implications of using humour and interactive style could be a further area of development in subsequent IBA implementation research. Noting the feedback from the groups provided some insights into how these approaches could be incorporated to generate more engagement with students, e.g., providing stands at enrolment, opportunistic methods, and using external focus points with savings, health, and future plans. Overall, the evaluation and suggestions that were offered from the group discussions have contributed to the literature through first hand perspectives of IBA being delivered to students by focus group 5 participants.

The wellbeing team from focus group 5 (IBA interventionists) had insights that supported the notion of using humour and deflection to elicit responses from students that may have felt inhibited by the conversations on alcohol. Another key suggestion from this focus group was the use of prompts for individuals to recall other things in their life that they are focusing on (saving for a house, improving health). adheren

The use of focus points or externalisation was deemed to be an area that could be developed to keep individuals engaged in goals aside from alcohol consumption. Which has been explored in the behavioural change literature with 'If Then' plans being established (Gollwitzer, 1999). By instilling goals and plans that are reinforced during consumption could elicit awareness of these plans during consumption. Throughout, the focus groups many prominent themes were consistently identified in each different focus group. All themes were identified and applied to each focus group to create a consistent thematic analysis of all groups and how the data related to the established themes that were found. The trends observed provided a need to perform a higher order analysis and possibly identify global themes that could be used to classify the overarching messages within the focus group discussions.

Global Themes

A series of global themes were identified from a higher order analysis that was performed on the data set. A collection of overriding themes were collated from the focus group thematic analyses to identify any patterns that existed within the data. Common trends were identified and separated between the drinker groups (focus group 1, 4 & 5) and the abstinent and light drinker groups (focus group 2 & 3). These trends led to the development of two distinct organising themes: accounts of experiences and reflections on intervention. These were developed as they were consistent across all focus groups and showed the two main areas identified in the discussions. Additionally, as many of the themes were grouped under both drinker and non/light drinker groups it allowed the development of global themes to be generated from the data. As shown in Figure 6 Thematic network.

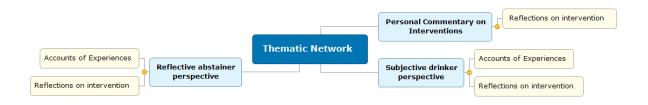


Figure 6 – Thematic network of global themes from all focus groups.

A thematic network analysis was used to identify global themes (Attride-Stirling, 2001) which constituted the higher order analysis. A central overriding theme identified within the data that demonstrated drinker responses was 'subjective drinker perspective'. This global theme represented how individuals constructed their views, experiences, and accounts of consumption. The theme also shows how drinkers provided social commentary on the nature of alcohol consumption that crosses many different demographics. It could be argued that the theme produced a perspective with the limitations in its subjectivity as many opinions and expressions were not completely transferrable and merely represented an individual's personal accounts. Along with the themes that examined interventions and approaches, a global theme of 'personal commentary on interventions' was developed, which showed the collective reflection of the participants from each focus group discussion. This global theme provided review for the intervention and commentary on the wider discussion on brief intervention from individual's personal ideas and accounts. The level of personal reflection was incorporated into this global theme as most participants in the group presented intervention suggestions from their own experiences or thoughts. The final global theme that was produced from the thematic analyses was constructed to demonstrate the balance of views on alcohol from the abstainers in the groups 'reflective abstainer perspective'. This global theme covered how abstainers review alcohol experiences and interventions from a different interpretative viewpoint. This could be argued to provide a balance to the amount of feedback and opinion given, especially with accounts from recovering individuals with considerable experiences on alcohol. The insights from both current drinkers and former drinkers produced detail on the nuances of consumption and related activities and the impact upon the individual and their own experience. Overall, the global themes contributed to a synopsis of the data that showed the variation between focus groups and the views and expressions on numerous subjects from alcohol experiences to intervention reflections.

Limitations

The qualitative study was solely based on UK students from a primarily non-drinking campus with a small sample of students. Additionally, most of the first focus group were students that had increasing risk within their alcohol levels identified by the AUDIT. Therefore, the bias of students advocating for interventions being delivered to other students may have been compromised, due to higher consumption levels observed with the first focus group participants themselves. This may have limited the fidelity of the responses in focus group 1.

Additionally, in the second and third focus groups most of the students were of an older age and primarily non-drinkers or individuals in recovery from drug or alcohol misuse. Therefore, a possible bias with individuals over identifying with the issues being raised and viewing the severity of the problems as more advanced than the reality of the situation. It could be argued that this viewpoint could be a compromised position from the professional interventionists taking part in the study. Also, most of the focus for the interventions with these two groups was based on the addiction sector. Therefore, it could reduce the level of expertise for brief interventions as they may be more experienced with individuals that have increased needs. Also, in focus groups four and five only one participant in group four was a student whilst the other participants were staff members at the university. Therefore, an unbalanced group was formed to discuss the central issues of intervention. Furthermore, a possible bias may have existed in the group 5. Whereby the group consisted of only staff members, which could have reduced the level of critique for IBA interventions as it was adopted for use on the campus. Therefore, this could constitute a conflict of interest amongst the staff members in focus group 4 and 5.

Future Directions

To enhance the research increasing the size of sample and having groups for comparison could provide more data to evaluate gender differences in alcohol behaviours. Sampling other types of interventionists could provide more information on the variability with intervention efficacy in different contexts. Also, using a different qualitative approach to conduct the study that incorporates semi-structured interviews could provide more detailed data. Additionally, generating data on the lived experience of individuals could inform how each person relates to the subject matter and its significance in their lives. Adopting an Interpretative Phenomenological Analysis (IPA) as a secondary analytical technique for the focus groups may enhance the inferences that can be drawn from the data and could provide comment on the establishment of identity. Taking a social constructionist epistemology as opposed to a realist perspective could change the direction of the analysis with more interpretation being used.

Conclusion

In conclusion the populations sampled presented many views and experiences that contributed to understanding many of the factors that influence IBA interventions.

Furthermore, the differences in perspectives provided insights into how each group interacts with the intervention. The expressions of identity and social commentary contributed to the wider discussions on alcohol consumption amongst varied populations. Many of the views, opinions and experiences captured impressions of the IBA and its efficacy with student groups. Regarding the aims of study 2 the findings were able to demonstrate that IBA is considered a feasible intervention for use with students and has relevancy in university settings. Study 2 is positioned within the programme of research in this thesis and provided rich data about IBA and intervention from the student population sampled. The implications of the findings showed how a cross section of groups at LSBU understood and interacted with IBA interventions and provided possible avenues for further discussion. Much of the feedback and evaluation centred around using opportunistic methods and creating different focuses for students to identify with a view to changing behaviour. Further implications of the findings showed that personal experiences with alcohol consumption influence the level of receptivity to intervention when views and experiences are entrenched. The effect upon IBA implementation could influence how students react to the delivery with their alcohol score being provided and defensiveness being expressed. This was exemplified in focus group 2 and 3 with individuals in recovery from addiction, many participants shared the difficulty with embracing messages around reduction and how delivery was crucial. As a result, using the data from this study and validating IBA as an approach with students allows the third study to explore the feasibility of implementing an IBA intervention with students.

Chapter 4

Examining the feasibility of implementing IBA interventions in a university setting. Study 3

Aims of study 3

The third study aimed to understand the feasibility of implementing IBA interventions with at risk student drinkers in a university setting. In this thesis, one of the central aims of the third study was to support established literature on IBA that shows reductions in alcohol consumption levels because of interventions given. Furthermore, testing the feasibility of using IBA with students that drink alcohol at increasing risk levels (Pre-partiers & drinking gamers) could provide information on the relevancy of using IBA with these groups.

Rationale

The rationale for presenting the IBA to students has been previously discussed in this thesis and is a building area of research (Clarke, Field & Rose, 2015; Donoghue et al., 2014; Heather et al., 2011; Monk & Heim, 2013; Scott-Sheldon et al., 2012; Taylor et al., 2015). The rationale for delivering the IBA to pre-partiers and drinking gamers stems from the literature on pre-partying which calls for more specified intervention to support reductions in risky behaviours (Pedersen, 2016). The IBA identifies different levels of risk using the AUDIT and personalised feedback, most pre-partiers and drinking gamers demonstrated different levels of risk which could make IBA relevant with these types of drinkers. Also, testing the feasibility of the IBA as an introductory intervention that enables a discussion on alcohol consumption could help students identify risks. The intervention provides personalised feedback which could influence pre-partiers and drinking gamers to evaluate consumption levels post discussion. Also, the third study is an extension of the programme of research being conducted in this thesis with the focus on testing the feasibility of IBA implementation in a university setting. The first study was able to identify the need to intervene and found pre-partiers and drinking gamers in the university setting. The second study further extended the research to include views, opinions, and experiences with IBA that showed the intervention is a viable tool at LSBU.

Finally, the third study tests the feasibility of implementing an IBA with the student population to observe if alcohol consumption levels can be reduced over a follow up period.

Introduction

The research on IBA implementation has demonstrated significant reductions in alcohol consumption post intervention in numerous settings (Clarke, Field & Rose, 2015; Dhital et al., 2015; Donoghue et al., 2014; Hall et al., 2019; Heather et al., 2011; McClatchey, Boyce & Dombrowski, 2015; Monk & Heim, 2013; Platt et al., 2016; Scott-Sheldon et al., 2012; Taylor et al., 2015; Thom, Herring & Bayley, 2015). The relevancy of this area of intervention research is important when testing the feasibility of an intervention with students. Due to the expanding research with IBA in university settings this study will enhance the literature with a feasibility study of an intervention delivered at a modern university.

Firstly, this chapter will explore the implementation research with IBA and discuss the efficacy of different BI approaches. Secondly, pre-partying and drinking game research will be explored in the context of a feasibility study of IBA with these behaviours. The chapter will then examine the longer-term efficacy of interventions regarding BI's.

IBA implementation

A vast amount of research has been discussed on brief interventions in previous chapters in this thesis. One of the areas of focus in the literature has been the need to explore the feasibility of implementing IBA with students in university settings (Thom, Herring & Bayley, 2015; Thom et al., 2016).

Implementing interventions has been an area of research that has been expanding with many focusing on testing feasibility (Shorter et al., 2019) and the efficacy of using IBA with students. Within the implementation literature, different educational tools have been used to evaluate how students respond to interactive methods that disseminate information on alcohol consumption. Croom et al., (2015) examined an online alcohol education program 'Alcohol-Wise' with students through an RCT with two separate university populations. The approach also used Electronic Check-Up and Go (e-CHUG; Doumas & Andersen, 2009; Fazzino, Rose & Helzer, 2016) to provide personalised feedback to students on alcohol consumption. The findings showed that an increase in alcohol

knowledge through 'alcohol wise' interventions helped reduce consumption levels in one of the two universities sampled. This supports some of the criticisms of implementation research which shows applying an intervention across different populations can yield mixed findings (Heather et al., 2011).

Furthermore, implementation studies with at-risk drinkers have shown different levels of efficacy with the variety of approaches tested. Hettema et al., (2018) examined varying Motivational Interviewing (MI) approaches within three Brief Intervention (BI) protocols. Primary care and university settings were evaluated with the implementation of these protocols. Findings showed that medical professionals struggled to implement interventions that included MI-based approaches due to the lack of familiarity, low confidence, and minimal time. Additionally, most of the feedback from both settings showed that barriers to feasibly intervening with students or patients was based on a lack of training with MI approaches. The implications of these findings demonstrate the need to educate practitioners on the best approaches with implementing interventions in different settings. Therefore, in this thesis, the researcher had adequate knowledge and experience of intervention when they delivered numerous IBA interventions to students. This could be argued to have mitigated some of the risks when interventions were implemented to students on campus.

Lopez-Vergara, Merrill, and Carey, (2018) explored how self-regulation and the therapeutic relationship affects individuals' responses to brief alcohol interventions. Findings showed that after participants received a brief intervention, alcohol problems and frequency of drinking were reduced at 1 month follow up. Although, individuals that reported lower levels of self-regulation had increased alcohol problems during the second follow up at 12 months. Also, the role of the therapeutic relationship did not influence any of the outcomes in the study at both 1 month and 12 months follow up. One criticism of this study is the limited therapeutic relationship that occurs in a brief intervention due to the lack of time spent in the interaction. A further criticism of the study was the amount of risk identified in the drinkers; with most of the sample not drinking to high risk levels reported at baseline. This may have impacted the efficacy of the intervention as the lack of risk may have reduced the need to intervene with the sample. The implications of this study question the influence that an interventionist may have on the outcome of the intervention. During the third study in this thesis, the role of the interventionist was considered if any participant provided feedback on how they found the intervention. Overall, many other strategies have been incorporated when considering the feasibility of

implementing IBA interventions to observe any reductions in alcohol consumption with students.

Health promotion messages

A strategy for students with heavy alcohol consumption has been to use implementation intentions (Gollwitzer, 1999) to get students to be aware of the health promotion messages and instil change in subsequent behaviour. Norman and Wrona-Clarke, (2015) explored the role of using implementation intentions and self-affirmations to help reduce Heavy Episodic Drinking (HED) with U.K. university students. A theory of self-affirmation proposes that interventions warning of future risk inversely promote individuals to avoid health-related messages. This is consistent with findings that are deemed contradictory when the messages that promote healthy behaviour increase the behaviour being targeted (Moss et al., 2015). This phenomenon is in line with psychological principles proposed by Bargh, Chen, and Burrows (1996) which states when an individual is primed with information for an activating stimulus, they typically unconsciously act following that stimulus. However, criticism of this theory has been that activating awareness can instil changes over a longer period with reinforcement despite introgenic effects happening initially (McKay et al., 2014).

This phenomenon was further identified in the research of Fernandez et al., (2017) with how MI-based interventions that aimed to reduce drinking game frequency did not demonstrate any effect throughout the trial. With first-year students, a finding in much of the literature has been the ability to engage the students with intervention efforts given the lack of entrenched habits or resistance. The design of the intervention being implemented in the trial included personalised normative feedback being given to students with details that involved: perceptions of others drinking, alcohol positive expectations, alcohol beliefs and peer drinking feedback. Findings showed many students did not reduce alcohol consumption and increased their level post-intervention. This finding supports the iatrogenic effect. This effect could be argued to support the notion of calculated hedonism that despite awareness an individual is prepared for excessive consumption to oppose health behaviours (Szmigin et al., 2008).

In this study students were presented with personalised feedback on their alcohol consumption and given drinking messages that identified where they were in the population. Unlike MI interventions that may focus on delivering health-related messages, IBA tends to draw awareness to an individual's alcohol consumption. Therefore, IBA is

efficacious in the short term as it directs an individual to reflect on their alcohol usage (Dhital et al., 2015). The longer-term efficacy of brief interventions has limited research to support the use of IBA and related interventions in the longer term.

Long term efficacy

One study exploring the longer-term efficacy of brief interventions focused on a sample of teenage school children (McKay et al., 2014). Many of the participants from the 29 schools in Northern Ireland were between ages 13 to 15 and had not drunk alcohol before. The researchers were observing the experiences of adolescents and their alcohol use or lack of use. One of the main influences on participants' retention of alcohol-related knowledge at follow up intervals was the individual delivering the information. In the experimental group, those that received information from external sources demonstrated safer attitudes to alcohol consumption in contrast to control groups showing no differences from teacher delivered interventions. One of the key findings was the continued efficacy of the intervention over the long term; specifically, reduced alcohol consumption was noted even at the 32 months follow up. The evidence supports the educational tools being delivered in these brief interventions that have relevance for memory recall and successful implementation over the long term. However, criticism of the research has been directed towards the ages being sampled and the high percentage of school children that endorsed not drinking for many reasons. The nature of these younger age populations could be argued to have a different or even non-existent relationship with alcohol that contrasts with most adult populations. Therefore, identifying how individuals drink in adult populations could reveal more information about drinking habits. The third study in this thesis explored how students had used reduction strategies or employed Protective Behavioural Strategies (PBS) in the past during the follow-ups which revealed their relationships with alcohol. Also, during the in-person feasibility study of IBA implementation, many students mentioned the context they drink alcohol in and the relationship they have with alcoholbased around frequency and outcome.

Following on from this Tanner-Smith and Lipsey, (2015) conducted a systematic review and meta-analysis for adolescents regarding alcohol brief interventions. Within the review, a comprehensive analysis was identified that focused on many studies delivering alcohol intervention with positive outcomes; although, most of the effects reduced over longer time frames. The main finding was the reduced impact of interventions being diminished for adolescents and young adults after a year from the original intervention. An

important observation in this third study of the thesis was the versatility and feasibility of delivering IBA interventions to at-risk students that pre-party and play drinking games.

Pre-partying

The level of risk associated with alcohol-related activities (pre-partying and drinking games) is an area of concern for student wellbeing. Also, much of the behaviour continues showing elements of resistance to interventions that have been implemented (Pedersen, 2016). Pedersen, (2016) examined the research in the development of interventions for pre-partying. The article also supported the evidence that students engaging in drinking games during pre-partying suffer high negative alcohol consequences and elevated Blood Alcohol Levels (BAL). A key finding was that Brief Motivational Interviewing (BMI) targeting general drinking do not reduce alcohol consumption amongst pre-partiers. Therefore, pre-partying behaviour requires structured interventions that could address the motivations of the behaviour. A key finding in the review showed that Personalised Normative Feedback (PNF) when used with interventions helps to reduce consumption levels with pre-partiers. However, evidence on the efficacy of intervention used with pre-partiers shows many different outcomes with reducing consumption in student populations. Therefore, in the third study of this thesis, the feasibility of implementing IBA with students that engage in pre-partying and drinking games was conducted to observe any reductions in students' alcohol consumption. This study highlighted the need for further interventions with pre-partiers and drinking gamers to be investigated in student campuses.

Drinking games

The nature of Drinking Game (DG) behaviour has been the subject of research as previously mentioned in this thesis. Zamboanga et al., (2014) explored how different games and types of play have influenced students' alcohol consumption. Findings showed that most individuals preferred team and skills-based games as opposed to those that instilled unity and group bonding. Additionally, beer pong and card games were preferred as opposed to drinking games that emphasised endurance drinking and more hedonistic behaviour. An important finding within the review was the reported location that drinking games occurred, with 65% reporting playing DG in private houses with only 10% happening in licensed venues. Also, an important finding from the research stated that pre-

partying and drinking games are associated positively together with students reporting 44% pre-partying in the previous month which involved drinking games. Criticisms of the study included the lack of screening for underlying issues with drinking gamers that may have influenced the level of consumption with the behaviour. In the third study, in this thesis, as stated the feasibility of implementing IBA with both pre-partiers and drinking gamers to observe any reductions in alcohol consumption with students was conducted. Another important element of interventions for these groups is the use of Protective Behavioural Strategies (PBS) and the effectiveness of using them to reduce consumption.

PBS strategies

Protective Behavioural Strategies (PBS) as discussed in previous chapters aims to assist students in employing risk reduction strategies or limiting alcohol consumption. Grazioli et al., (2015) explored alcohol outcomes and expectancies concerning PBS strategies. Measures being assessed were PBS usage, alcohol use, expectancies, and related consequences at both baseline and 12 months follow up. Findings indicated that students using more PBS strategies reported reduced negative consequences at the 12 month follow up. However, an interesting finding was the students that had greater alcohol expectancies and higher levels of PBS use were at increased risk for experiencing negative consequences. One key limitation within the design was the applicability of using the measure of PBS (Martens et al., 2005) with younger cohorts and the validity of the measure. Another consideration with the adoption of PBS strategies has been the timing and context that PBS strategies are suggested within. Reviewing the use of PBS strategies with UK students during a semester could provide more insight into the efficacy of the strategies. Part of the third study in the thesis when testing the feasibility of IBA implementation observed the use of PBS strategies for students reducing alcohol consumption.

Research question

The purpose of this research is to build upon the implementation literature on brief interventions and test the feasibility of implementing IBA interventions with students. This will be answered through feasibly implementing an IBA and observing any reductions in student alcohol consumption over a follow up period. Also, at-risk students that engage in

pre-partying and drinking games will form part of the feasibility study to observe implementing IBA with students' alcohol consumption with these behaviours.

Hypotheses

Hypotheses that were devised from the current research question explore the feasibility of implementing an IBA intervention with students that consume alcohol and participate in pre-partying or drinking games.

- (1) It is hypothesised that both the AUDIT <5 group and the IBA group will differ in levels of alcohol consumption from baseline through the follow ups.
- (2) It is hypothesised that greater reductions in alcohol consumption will be observed in the IBA group as opposed to the AUDIT <5 group throughout each subsequent follow up.
- (3) Finally, it is hypothesised that pre-partiers and drinking gamers will show reduced alcohol consumption levels at subsequent follow-ups post-IBA implementation.

Method

Study Design

The design of this third study was a feasibility study implementing an IBA intervention with a series of follow ups to observe any reductions in student alcohol consumption. Participants were allocated to each group by identifying baseline AUDIT-C scores that allowed participants to be selected into IBA and AUDIT <5 conditions. The design was between-subjects as each participant was allocated to one of the conditions based on their AUDIT score (AUDIT = <5; IBA = >5). The reason that 5 was given as a cut-off was that it is used to indicate the presence of more at-risk drinking with scores 5 or above and those below indicating reduced risk drinking (please see appendix N for AUDIT-C preliminary selection sheet). Participants that indicated lower scores (<5) were given the full AUDIT to ensure that they were assigned to the correct group. All participants were selected from the university student body with all levels of education being sampled. Non-drinkers were not actively invited to take part and if they scored zero on the AUDIT-C and were not asked to complete a further survey. The follow ups were

comprised of e-questionnaire formats to support gathering self-reported alcohol consumption levels at each time point. The two questionnaire measures comprised the factors that determine different levels of alcohol consumption between the AUDIT <5 and the IBA group. A series of follow up surveys were completed by many of the participants from each group. These follow-ups comprised the data that was used to explore the differences between each separate time point for alcohol consumption with both AUDIT <5 and IBA groups.

Participants were sampled through opportunity sampling methods at the university and were informally asked if they would like to take part in a discussion on alcohol. This was conducted through a stand at fresher's fair with participants coming to the stand to enquire about the research. Secondly, the experimenter walked around the university to invite potential students to participate in the study at recognised study and break out areas. Full Ethical approval was granted for sampling of students and delivering IBA on campus prior to recruitment of participants (See Appendix J). The extraneous variables were level of willingness to engage in a discussion around alcohol and availability to complete the IBA.

Study Population

A sample of 175 students participated in the study at baseline, split between IBA Group (n = 82) and AUDIT < 5 group (n = 61) with some participants not fully completing the e-interventions or not consenting to the follow ups (n = 32; See Figure 2 for Study Flow Diagram). All participants that did not consent and incomplete responses were excluded from the main analysis. All incomplete responses were analysed against the sample for demographic comparison (n = 32). All incomplete responses were not significantly younger t (143) = 0.60, p = .55 n.s. M = 23.75, SD = 5.53 compared to M = 24.24 (SD = 7.27) the main sample (n = 113). Minor differences between the ethnic origin of the participants were observed (Please see Table 8 for ethnic origin breakdown). The incomplete sample (n = 32) also had an average AUDIT-C score of M = 4.50 (SD = 2.91) at baseline which was not significantly different t (133) = 1.06, p = .29 n.s. compared to those who engaged in the follow up (n = 113) M = 5.13, (SD = 2.49).

The sample was comprised of 64% Female (n = 92) and 36% male (n = 51) participants. An opportunity sampling method was used to recruit participants for the study of which any drinker had an opportunity to take part, exclusion criteria applied to non-drinkers. Figure 2 shows the flow diagram for how participants were approached, allocated and randomised based on Consort guidelines (Montgomery et al., 2018).

Figure 2: Feasibility Study 3 Flow Diagram.

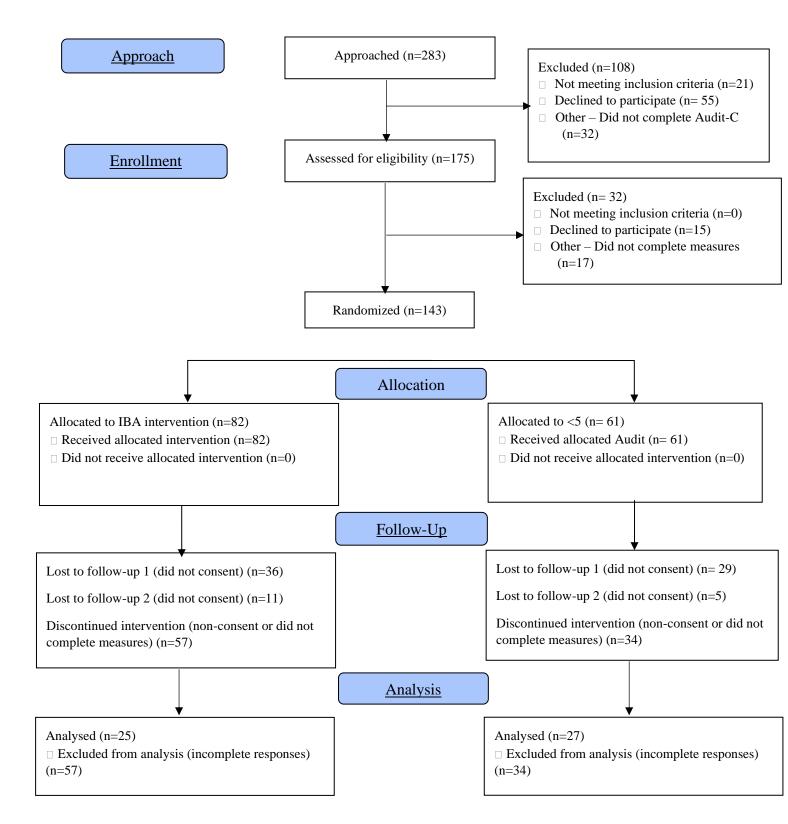


Table 8 shows the ethnic origin breakdown of the participants from the study. A total of two (n = 2) participants did not indicate their ethnic origin, therefore they are regarded as missing data.

Table 8 – Ethnic origin breakdown of student sample with complete and incomplete responses.

Ethnic Origin	% of complete	N of completed	% of incomplete	N of incomplete
	Sample	(n = 52)	sample	(n = 32)
White English/Welsh/ Scottish/ Northern Irish /	73%	38	75%	24
British / Other white background				
Black - Black British African / Black African /	5.8%	3	3.1%	1
Black Caribbean / Other Black background				
Mixed groups – White & Black Caribbean /	13.5%	7	6.3%	2
White & Black African / White & Asian /				
Other mixed background				
Asian – British Indian / Pakistani / Bangladeshi	5.8%	3	9.4%	3
/ Chinese / Other Asian background				
Other Ethnic origin	1.9%	1	~	0
Missing data	~	0	6.2%	2

All levels of education were selected from London South Bank University. Of those sampled the Mean average age was M = 24.24 (SD = 7.27) and the range of ages was 18 to 61 years. Of those sampled 39% (n = 56) identified as pre-partiers, having drunk alcohol before a social event recently. Another 29% (n = 41) were identified as drinking gamers having recently participated in drinking games in the previous month. All non-drinkers were not selected to participate before the administration of the IBA intervention. Additionally, several participants completed the AUDIT-C test upon an initial conversation with the IBA interventionist before either not completing the IBA or AUDIT <5 group questions. A total of N = 283 individuals completed the AUDIT-C initially during the IBA interventions of which 50.5% (n = 143) completed either the AUDIT <5 or IBA

intervention. The overall, attrition rates for the IBA group were 59.76% from baseline to follow up 1 and 69.51% to follow up 2. The AUDIT <5 group overall attrition rates were 47.54% from baseline to follow 1 and 55.74% to follow up 2.

Study Interventions

A small set of initial questions were asked that related to the quantity of beer, alcopop, wine, and spirits each participant had consumed in the previous month. These were used to identify the type of consumption. Also, questions related to pre-partying frequency and drinking game frequency were included to identify both pre-partiers and drinking gamers in the population sampled. These questions requested participants to state the frequency of occurrences for both behaviours - "In the past month how many times have you drank alcohol before attending a social event (pre-partied)?". Participants were prompted to state the exact number of occurrences for pre-partying and drinking games. Additionally, a final question was included in the IBA group that looked at endorsing statements that related to moderating drinking with multiple responses. These included: drink a lower strength alcohol drink; avoid drinking alcohol on a school/work night; take drink-free days during the week. Overall, these questions comprised the follow-up surveys for the IBA group.

The alcohol use disorders identification test

The AUDIT (Alcohol Use Disorders Identification Test; Saunders et al., 1993) is a brief diagnostic tool designed to find levels of hazardous, harmful, and dependence drinking. A set of 10 standardised questions is employed to assess the levels of drinking. The first three questions comprise the Hazardous scale which the measure of AUDIT-C is commonly used as the short form of the questionnaire. Each participant completed the AUDIT-C which screened the participants before being allocated to either AUDIT <5 (AUDIT-C <5) or IBA group (AUDIT-C >5). An example question from the scale is: "How often have you had 6 or more drinks in one session of drinking?" responses are rated as 'Never = 0', 'Less than Monthly = 1', 'Monthly = 2', 'Weekly = 3', 'Daily or almost daily = 4'. Each score has a zone to indicate the relevant level of intervention required for each participant based on the reported drinking levels. The level of intervention varies based on the score, with those scoring between 0-7 are considered at low risk and are given alcohol health messages. A score between 8-15 is considered risky or hazardous which a standard brief advice intervention (IBA) is given. Scores of 16-19 are given brief

interventions and assessments for more intensive interventions, with follow up and referrals in some cases. Those individuals scoring 20 or more is indicative of dependence drinking and would be offered a comprehensive assessment for a specialist alcohol service, the assessment should include multiple areas of need in a clinical interview (National Institute for Health and Care Excellence [NICE],2011). The maximum score received was 25, which became the cut off as higher scores are indicative of further dependence drinking which the focus of the current study was not. Those that scored 25 were signposted to extra support and given information related to alcohol harms. Each participant was assigned to either the AUDIT <5 group or IBA group, AUDIT <5 received the survey initially at baseline and subsequently at each follow up. The IBA group received the AUDIT with further questions on the frequency of drinking and other questionnaires at subsequent follow-ups. The AUDIT is a comprehensive tool that is used throughout most healthcare settings in the UK and yields excellent reliability and results (Heather et al., 2011).

The daily drinking questionnaire

The DDQ (Daily Drinking Questionnaire; Collins, Parks & Marlatt, 1985) is an instrument that assesses drinking quantity with the number of drinks consumed on a typical week and heavy consumption quantities. Participants were instructed to state how much alcohol they consume over a defined period through answering, "In a typical week during the last 30days, try to remember how much you typically consume of standard drinks on each day?" with responses for Monday through to Sunday with scores that range from 0-20. Students' open-ended responses across these 7 days were summed to form a "Mean drinks per week" variable that was not used in the analyses. Additional questions on the DDQ focused on the hours of consumption per day for a week. Participants were instructed to answer: "In a typical week during the last 30 days, try to remember the typical number of hours you drank each day?". Also, heavy consumption quantity and time was assessed in the same way to identify different levels of consumption during a typical week. Other questions on the scale related to the frequency of drinking alcohol in the past month, weekend drinking quantity, and peak alcohol quantity. The scores of these questions ranged from 0 to 15+ drinks with a frequency of past-month drinking ranging from "I did not drink at all" to "once a day or more". The DDQ questionnaire (Collins, Parks & Marlatt, 1985) was included in the follow-ups for the IBA intervention group to identify typical drinking quantity. However, during data analysis, these measures were not examined as they were not taken at baseline. The DDQ has demonstrated good convergent

validity (Collins, Parks & Marlatt, 1985) and test-retest reliability (Collins, Carey, & Sliwinski, 2002).

Protective behavioural strategies

Protective Behavioural Strategies (PBS; Martens et al., 2005) are a measure of how individuals reduce alcohol consumption when employing different methods. A selection of responses from the survey was selected to find out the frequency of PBS strategies being used by students. Participants stated how many PBS strategies they typically employ when trying to reduce their alcohol consumption. Each participant was posed a question that stated: "Please consider the following list and select the options that you would use when trying to reduce your alcohol consumption". The list included 10 items that individuals could select with more than one response being allowed. The responses available included: setting drinking limits, avoid drinking games, avoid pre-partying drinking before going out, drinking slowly instead of gulp/chug, and switching between alcohol-free and alcohol drinks. The total frequency of responses was calculated for each participant in the IBA intervention group. The PBS has been rigorously tested and validated (Martens et al., 2007) and some of the material was used in this design to see if PBS strategies can be used by students looking to reduce alcohol consumption.

Procedure / Randomization

All participants were given an AUDIT-C screening measure to determine which group to allocate them to (please see appendix N for AUDIT-C sheet). Stage 1 all participants were then assigned to the AUDIT <5 or IBA group based on their AUDIT-C scores with those scoring 5 or more allocated to IBA and below 5 allocated to AUDIT <5. All participants could enter the prize draw as an incentive for completing the initial intervention and the follow-ups. Enhanced consent (please see appendix K for enhanced consent form) was introduced at the beginning of the study with all participants being informed of their right to complete the intervention. The right to withdraw from the study was presented to the participant and explicitly stated at both the beginning and end of the intervention. All students eligible to participate were enrolled in a higher education course at London South Bank University. The eligibility criteria only extended to drinkers, as non-drinkers would score zero on the AUDIT-C and therefore not require an IBA intervention. Stage 2 was demographic questions on the intervention survey which was structured with multiple

choice answers with ethnic origin not being a forced response question. The ethnic origin classifications were taken from the ONS (Office of National Statistics, 2016) recently updated list of ethnic origin categories (please see appendix F for ONS list).

Those who scored <5 on the AUDIT-C were assigned to the AUDIT <5 group and were given the result of AUDIT-C and thanked for their participation after which they were informed of the subsequent follow-ups.

Stage 3 was those that scored >5 on the AUDIT-C were selected for the IBA intervention to test the feasibility of IBA and observe the intervention with students. Each student was given their score from the full AUDIT measure with their level of identified risk as per NICE guidelines (NICE, 2011). This constituted the personalised feedback on their score as some individuals gave reactions or comments based on receiving their score as described in field notes (See Appendix M). Three questions were posed to each participant as part of the IBA intervention that asked reflective questions that included: statement 1, based on their AUDIT score which indicates that they are at increasing risk / higher risk and fall within this population of drinkers. Statement 2 asked directly if they had ever thought about strategies for reducing consumption. Finally statement 3 asked them what the benefits would be of reducing consumption for them.

The first discussion point was to ask the participant 'what they thought about their score?' Which led to the second discussion point asking them 'what the benefit of cutting down for them would be?' Finally, each participant was asked 'how they would cut down?' with specific identification of the strategy that could be employed to enable them to cut down. Many different responses were gained from these IBA reflective questions as described in field notes (See Appendix M) when some individuals were shocked by their score or felt that it wasn't an accurate measure of their consumption habits. In some instances, individuals were reluctant to continue the discussions when they were offered time to talk about their score. Three students in one group were refusing to accept the score and the description of increasing risk when it applied to their drinking habits as described in field notes (See Appendix M). This subsequently ended the IBA interaction, and the students did not continue with the follow ups in this feasibility study. The fidelity of the questions themselves were delivered in the same manner with each IBA delivered to students on campus. Commonalities between the screening reactions were noted with the first reflective questions as this prompted some defensiveness and protection around the scores identified on the AUDIT. Students in groups became more defensive when their scores differed to peers in the identified level of risk. This may have been different if the IBA was delivered by the Health and Wellbeing Team at LSBU as they provide an

individual session for students to discuss alcohol consumption. The group environment on campus during this feasibility study may have been too confronting for some participants receiving a personal score related to their alcohol consumption.

Stage 4, each person was presented with a QR code for each group (AUDIT <5 or IBA) and then asked to complete a further set of surveys on alcohol consumption levels (please see appendix L for e-intervention). Each follow up was given 1month after the previous e-intervention with only 2 follows ups being given to all participants that consented.

At subsequent follow-ups participants were emailed the link to complete the relevant follow-up e-intervention. In some cases when the response from the email was minimal individuals were contacted via phone text message and given the link to complete the survey. Participants assigned to the AUDIT <5 group received only the full AUDIT survey at subsequent follow-ups. The AUDIT <5 group were retained in the analysis as they highlighted the differences between types of students that drink on campus and the variability of consumption. Also, the AUDIT <5 group from a health perspective do not need to reduce consumption and represent a group that can be observed over the end of year, new year period to identify consistent consumption levels or any changes in usage.

For the IBA group follow up participants received the AUDIT survey and then questions on the Daily Drinking Questionnaire (DDQ, Collins, Parks & Marlatt, 1985). Also, statements on Protective Behavioural Strategies (PBS; Martens et al., 2005) were presented for participants to endorse the strategies they use when reducing alcohol consumption. Finally, individuals were given a series of responses that others had reported when trying to moderate their consumption in the past. The participants were given the option to select the responses that they had tried when reducing consumption.

Ethical issues were considered when conducting the study; all participant's confidentiality and anonymity were maintained throughout testing (please see appendix L for e-intervention). All data from the e-interventions were safely stored on university computers that were password protected. All participants had the right to withdraw at any time without prejudice, although after data collection was completed, all participants were informed that their responses could not be removed.

Results & Statistical Analysis

Examining the reduction in AUDIT-C levels with both IBA and AUDIT <5 groups during intervention.

To examine the effects of intervention group on AUDIT-C scores between baseline, time 1 and time 2 a mixed ANOVA with Group (2 levels: IBA, AUDIT <5) as a between participant factor and Time (3 levels: Baseline, Follow-up 1, Follow-up 2) as a within participants factor were used. Results showed main effects for Time, F (2,100) = 5.49, p < .005, $\eta p = 0.09$, 95% CI [4.21, 5.06] and Group, F (1,50) = 60.17, p < .001, $\eta p = 0.05$, 95% CI [5.67, 6.90]. Importantly the Group x Time interaction was also significant, F (2, 100) = 0.000, 0.000

Table 9 – Means & SD's of AUDIT-C Scores for IBA and AUDIT <5 intervention groups.

Time	Group Condition	n	M	SD
Baseline AUDIT-C Score	IBA	25	6.72	1.99
Baseline AUDIT-C Score	AUDIT <5	27	2.96	1.13
Follow up 1 AUDIT-C Score	IBA	25	6.36	1.91
Follow up 1 AUDIT-C Score	AUDIT <5	27	3.04	1.40
Follow up 2 AUDIT-C Score	IBA	25	5.76	1.98
Follow up 2 AUDIT-C Score	AUDIT <5	27	2.96	1.34

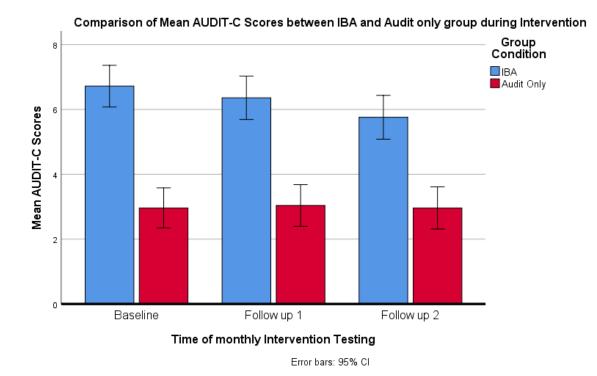


Figure 7 – The Mean differences in AUDIT-C scores at each time point between IBA intervention and Audit <5 intervention groups showing the reductions at each monthly intervention.

Exploring the AUDIT-C questions to identify the reduction in Mean AUDIT-C scores with IBA and AUDIT <5 groups.

To examine the effect of AUDIT-C Questions on AUDIT-C scores between baseline, time 1 and time 2 a mixed ANOVA with Group (2 levels: IBA, AUDIT <5) as a between participant factor and Time (3 levels: Baseline, Follow-up 1, Follow-up 2) as a within participants factor were used. Results showed main effects for Time, F (2,100) = 5.52, p < .05, $\eta p = 2.09$, 95% CI [0.61, 1.00] and Group, F (1,50) = 25.94, p < .001, $\eta p = 2.34$, 95% CI [1.25,1.87]. Importantly the Group x Time interaction was also significant, F (2, 100) = 4.30, p < .05, $\eta p = 2.08$, 95% CI [0.80, 1.23]. To explore this interaction further simple effects analyses were undertaken. Within the IBA group AUDIT-C Question 2 scores changed across Time, F (2, 100) = 8.55, p < .001. Post hoc tests showed baseline scores to differ with follow-up 1 (p < .001) and follow up 2 (p < .001). Within the AUDIT <5 group no differences across time was shown, F (2, 100) = .98, p = .38. Significant differences between the IBA and AUDIT <5 group were shown at baseline, F (1, 50) = 25.68, p < .001, follow-up 1, F (1, 50) = 16.08, p < .001, and follow up 2, F (1, 50) = 16.63, p< .001. (See Figure 8 for a breakdown of the changes for AUDIT-C Question 2).

To examine the effect of AUDIT-C Q1 on AUDIT-C scores between baseline, time 1 and time 2 a mixed ANOVA with Group (2 levels: IBA, AUDIT <5) as a between participant factor and Time (3 levels: Baseline, Follow-up 1, Follow-up 2) as a within participants factor were used. Results showed no main effects for Time, F (2,100) = .115, p = .891, n.s. except Group, F (1,50) = 33.16, p <.001, η p2 = .40, 95% CI [2.59,3.14]. Importantly the Group x Time interaction was not significant, F (2, 100) = .374, p = .690, n.s. To explore this interaction further simple effects analyses were undertaken. Within the IBA group AUDIT-C Question 1 scores did not significantly change across Time, F (2, 100) = .07, p = .93. n.s. Within the AUDIT <5 group no differences across time was shown, F (2, 100) = .44, p = .65. n.s. Post hoc tests showed baseline scores did not differ with follow-up 1 (p = 1.00 n.s.). and follow up 2 (p = 1.00 n.s.). Significant differences between the IBA and AUDIT <5 group were shown at baseline, F (1, 50) = 26.91, p < .001, follow-up 1, F (1, 50) = 29.67, p <.001, and follow up 2, F (1, 50) = 21.70, p<.001.

To examine the effect of AUDIT-C Q3 on AUDIT-C scores between baseline, time 1 and time 2 a mixed ANOVA with Group (2 levels: IBA, AUDIT <5) as a between participant factor and Time (3 levels: Baseline, Follow-up 1, Follow-up 2) as a within participants factor were used. Results showed no main effects for Time, F (2,100) = 1.30, p = .28, *n.s.* except Group, F (1,50) = 39.99, p < .001, η p2 = .44, 95% CI [1.12,1.47]. Importantly the Group x Time interaction was not significant, F (2, 100) = 1.30, p = .28, *n.s.* To explore this interaction further simple effects analyses were undertaken. Within the IBA group AUDIT-C Question 3 scores did not significantly change across Time, F (2, 100) = 2.51, p = .09 *n.s.* Within the AUDIT <5 group no differences across time was shown, F (2, 100) = .00, p = 1.00. *n.s.* Post hoc tests showed baseline scores did not differ with follow-up 1 (p =1.00 *n.s.*) and follow up 2 (p = .38 *n.s.*). Significant differences between the IBA and AUDIT <5 group were shown at baseline, F (1, 50) = 48.58, p < .001, follow-up 1, F (1, 50) = 29.54, p < .001, and follow up 2, F (1, 50) = 19.31, p< .001.

Differences in Question 2 scores on AUDIT-C from IBA and AUDIT <5 groups

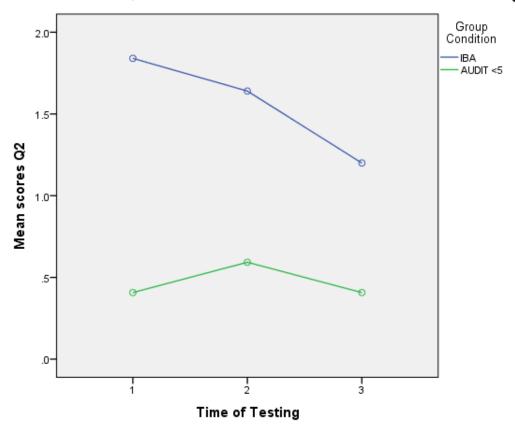


Figure 8 - The Mean differences in AUDIT-C Question 2 scores at each time point between IBA intervention and Audit <5 intervention groups showing the reductions at each monthly intervention.

Examining reductions in frequency of pre-partying and drinking games with IBA participants during intervention.

To examine whether pregaming frequency and drinking games frequency changed from baseline to Follow up 1 and Follow up 2 repeated measures ANOVAs were used. Results showed no effect of time for either pregaming frequency, F(2,48) = .849, p = .43, or drinking game frequency, F(2,48) = 2.87, p = .07.

Examining PBS strategy usage with IBA participants during intervention.

To examine PBS strategy usage during with IBA participants from baseline to Follow up 1 and Follow up 2, a repeated measures ANOVA was used. Results showed no effect of time for PBS strategy usage, F(2,46) = .613, p = .54.

Study Outcomes

The findings of the study demonstrated that the feasibility of implementing an IBA intervention showed reductions in alcohol consumption levels according to the AUDIT-C measure between baseline and follow up 2 in the IBA group. A full mean score was the reduction found with this group, meaning that those individuals involved in the intervention reduced their consumption after taking part in the feasibility study of the IBA implementation. The other group (AUDIT <5) that were identified as alcohol users with AUDIT-C scores below 5 on the original baseline measure did not show any reductions in alcohol consumption between the baseline and follow-ups. A series of Mixed level and repeated measures ANOVAs were calculated with the data and revealed that a significant difference existed between both groups in their AUDIT-C scores at each time of testing. The main finding shows that students identified as at-risk were able to reduce consumption after receiving an IBA intervention. One reason for the reduction in reported alcohol consumption in the IBA group is that participants were given the AUDIT consistently that required them to evaluate their drinking on a month-to-month basis. Other reasons for the reductions in consumption could be due to the time of intervention with the end of semester possibly influencing reported drinking due to less stress and reduced study load (McClatchey, Boyce & Dombrowski, 2015).

Additionally, the reduction in consumption could be due to financial reasons when student loans and other fiscal supports have depleted at the end of the year reducing the financial resources required to drink. Student loans are given in March time in the UK which could add further pressure for students to manage finances and possibly reduce consumption. Also, in the new year 'Dry January' is a national challenge that many drinkers attempt each year, this challenge could be a motivation to reduce consumption that would explain the reductions from baseline to follow up 2. Another perspective in the UK is that drinkers tend to consume more at the end of year compared to the new year which could account for the changes in reported consumption levels.

Simply intervening and providing this screening could also contribute to the raising of awareness and possible reductions in consumption with students. Also, due to the interactive nature of the discussions around alcohol and the commitment of the participants to continue in the feasibility study provided a possible motivation for students to observe their alcohol consumption. This may have prompted individuals to consider their consumption and alter behaviour based on this awareness. Contrastingly, those that were not at-risk, with safe reported levels, did not reduce consumption. This finding validates

and supports the feasibility of using an IBA intervention at the university with those identified as increasing risk. The findings also provide support for the feasibility of IBA for its use in other non-clinical settings. Given the nature of the findings of this study, IBA interventions produced data that supported the narrative on alcohol brief interventions and their efficacy with student drinkers (Clarke, Field & Rose, 2015; Donoghue et al., 2014; Heather et al., 2011; Monk & Heim, 2013; Scott-Sheldon et al., 2012; Taylor et al., 2015).

Discussion

The findings from this study enhance the research on IBA being used in different settings and provide greater observations of IBA implementation and the feasibility of using the approach with student drinkers.

Hypotheses tested

Concerning the hypotheses being tested in this feasibility study, the findings showed support for the first hypothesis with significant differences in alcohol consumption levels being observed between the AUDIT <5 and the IBA group. The second hypothesis was also supported by the findings with greater reductions in alcohol consumption amongst the IBA group, when observing the AUDIT <5 group. Also, the final hypothesis was not supported by the findings as pre-partiers and drinking gamers did not reduce the reported frequency of pre-partying or drinking games at each time of testing.

Regarding the aims, this third study was able to demonstrate that IBA is a feasible approach that can be implemented in a university setting. Also, the approach was observed to reduce student alcohol consumption. Further, the findings support the feasibility of using IBA as an intervention tool that can help to reduce consumption levels with students throughout follow-ups. Additionally, IBA was observed in reducing consumption levels with increasing risk students. Many of the aims of the study were supported by the findings of the research.

The rationale for targeting drinking gamers and pre-partiers was based on the previous findings in the first study which identified levels of pre-partying and drinking games in the student population. Although, a lack of reduction in the frequency of pre-partying and drinking games could mean that these behaviours require different types of intervention. Pre-partiers also could use the IBA as an introductory intervention that helps to reduce consumption. Future research with pre-partiers could focus on reducing the

frequency of the behaviour over a longer period (Pedersen, 2016). The main rationale for the third study was to test the feasibility of implementing an IBA intervention with students in a university setting. The findings supported the rationale that IBA is feasible and was observed to reduce student alcohol consumption as noted in established literature (Clarke, Field & Rose, 2015; Donoghue et al., 2014; Heather et al., 2011; Monk & Heim, 2013; Scott-Sheldon et al., 2012; Taylor et al., 2015).

IBA implementation

Concerning previously discussed literature, one of the approaches adopted in the delivery of IBA interventions was the incorporation of many of the principles of MI. The nature of the discussions that happened in the feasibility study involved elements of the approach which included: rolling with resistance, generating empathy, and allowing the individual to identify their level of discrepancy. It could be argued that using MI techniques were able to help students identify their consumption and reduce based on the personalised feedback they received; for example, Fernandez et al., (2017) research with drinking gamers. Also, due to the interventionist having knowledge in delivering IBA's, and feeling confident with the incorporation of the MI approach. This supports the evidence that without the necessary training and familiarity in the approach it can limit the effect the IBA can have on student alcohol consumption (Hettema et al., 2018). Additionally, as noted in the field notes previously (See Appendix M) many participants reacted with both surprise and defensiveness to their scores identified on the AUDIT during the IBA. This reaction was mitigated by adopting more of a discursive MI style when talking about the score and its meaning for the participant. In different contexts when IBA discussions started in a group these reactions were noted due to the differences of alcohol consumption observed between peers within student groups.

In some cases, students felt that the feedback was implying that they had an alcohol problem rather than identifying the personal risk. This phenomenon was observed with some postgraduate students that did not agree with the findings after the brief screening was administered. These individuals may have represented a small population with a greater risk of alcohol problems with entrenched personal views around their alcohol consumption. Each student that had this response was asked subsequently if they would like to discuss their result further with the experimenter. In many cases, all students refused this offer and were given the leaflet that gave details on alcohol risks. This could be argued to have influenced how students received the IBA, similar to research noted by Lopez-

Vergara, Merrill, and Carey, (2018) that examined therapeutic relationship influences on brief interventions. Many factors could have contributed to how students received the IBA and subsequently reducing consumption levels.

An observation of the reductions in consumption could have been a product of the natural changes in alcohol consumption levels that take place over the semester. Also, because the student setting is a modern university and typically has more mature students that live off campus. The setting could naturally highlight higher alcohol consumption on campus as it differs from the norms of the university setting. Therefore, students that have increasing risk alcohol consumption benefit from an alcohol screening that adds to their reflections on their drinking habits. Furthermore, the IBA could elicit a level of personal reflection and raise awareness for individuals to identify at risk behaviours. This is important when considering the pre-partiers and drinking gamers that constituted part of the study population.

One consideration that needs to be highlighted is the lack of an in-person follow up component in the feasibility study. The need for research to explore the benefits of in person or e-interventions could be a subsequent area of focus in future research which could support established literature (Cunningham et al., 2012; Dedert et al., 2015; Hallett et al., 2009; Kypri et al., 2014; Leeman et al., 2015; Walters, Miller & Chiauzzi, 2005; Walters & Neighbors, 2005).

Furthermore, an element of the approach involved incorporating some level of alcohol education when participants were unable to give many examples of reduction strategies. This may have been a possible area of limitation to the approach as found by Croom et al., (2015) that using educational tools on alcohol use did not contribute to reductions in consumption. However, the IBA includes many parts that are given to students with personalised feedback, questions on benefits of reducing and thoughts on reduction strategies. Therefore, it is not explicitly education that is being delivered in the IBA. The implications of this third study's findings support the research by Croom et al., (2015) in that increased use of educational strategies could produce more defensive reactions to the feasibility of implementing an IBA intervention. IBA as an approach is non-prescriptive in design as it looks to generate insight for the student to identify their drinking levels and consider reductions. Therefore, IBA is not explicitly educational although it incorporates some alcohol information once a student identifies their drinking level.

Despite the lack of significance with reducing pre-partying or drinking game frequency amongst the students, alcohol consumption levels were overall reduced in the IBA group. Therefore, feasibly using IBA interventions with at-risk drinkers has been observed to reduce student alcohol consumption in a university setting. However, the frequency of pre-partying and drinking games were not reduced by the IBA, although with alcohol consumption being reduced it could have mitigated some of the risk. Farlie, Maggs, and Lanza, (2015) explored the dynamics of pre-partying and drinking game behaviour over a short period. The third study in this thesis was conducted over a reduced time scale and identified reductions in consumption as opposed to the dynamics of the behaviour. Observing how feasibly IBA interventions work with at-risk students and observing reductions in student alcohol consumption was the focus of this third study. Prepartying and drinking games are another area for future research to explore in more detail how to tailor interventions for pre-partiers and drinking gamers (Pedersen, 2016).

Moreover, much of the literature has examined the function of drinking gaming and pre-partying behaviours intending to construct intervention techniques for these populations (Haas, Wickham & Gibbs, 2016; Kenney, Hummer, & LaBrie, 2010; LaBrie, & Pedersen, 2008; Miller et al., 2016; O'Rourke, Ferris & Devaney, 2016; Pedersen, & LaBrie, 2007; Radomski et al., 2016; Read et al., 2010). Zamboanga et al., (2014) reviewed the evidence on drinking games and the nature of the behaviour with students on campus. The behaviour was identified as being synonymous with pre-partying behaviour and was found to be positively associated. The findings of this third study showed that drinking gamers did not significantly reduce their consumption rates throughout the IBA and follow-ups. Therefore, further exploration of this behaviour could be conducted identifying the barriers and resistances to intervention with drinking gamers. Another part of the IBA was the incorporation of reduction strategies and how these could have mediated consumption with students.

Protective Behavioural Strategies (PBS)

Observing feasibly implementing an IBA was also explored with drinking gamers in this third study. Kilmer, Cronce, and Logan, (2014) also explored drinking games in the context of using PBS strategies and norms-based behaviour for reducing consumption. In this third study, PBS strategies were assessed at each time point from baseline to follow up 2. The findings showed that PBS strategies used by the IBA group were consistent

throughout each time point. However, the differences between each time point were not significant showing that PBS usage was evident although did not increase during the monthly testing. Further, the use of PBS strategies was evaluated by Doumas et al., (2017) main findings showed that PBS strategies did not influence reductions in risk despite the amount of PBS strategies being used. This finding was also supported in this third study with no significant increases in the frequency of PBS strategies being used. This could be argued to demonstrate how students can identify how to reduce consumption without the necessary implementation of reductions. Also, a rebound effect could be considered when PBS strategies are being employed on a drinking occasion, a student may increase consumption as a reward for employing reduction strategies on a previous occasion. This notion could support the idea of knowing the consequences and the impact and still choosing to engage in the behaviour which supports literature on calculated hedonism (Smizigin et al., 2008) and the iatrogenic effect (Moss et al., 2015). Overall, the function of PBS strategies is relevant in conjunction with personalised feedback as they can generate reflection with students to consider their consumption. However, findings within the research are mixed with PBS strategies having minimal impact on changing alcohol use behaviours. Therefore, increasing awareness and educating on the risks could enhance students' knowledge as a basis to further help support change in future interventions.

In contrast, Grazioli et al., (2015) demonstrated that PBS strategies could moderate the relationship between consequences and expectancies in high school students. Findings showed that students adopting more PBS strategies were able to experience reduced negative consequences at 12 months follow-ups. However, alcohol consumption levels were shown to remain at similar levels despite PBS usage that students reported. The third study in this thesis did not adopt a longitudinal design to understand how PBS strategies increases could help consumption reduce over a longer period.

Limitations

The main limitation of this third study was that the design was not run as an RCT using a control group for comparison with the intervention group. The main rationale for not running the design as an RCT was due to the third study focusing on feasibility of implementing IBA rather than evaluating a trial of IBA with students on campus. Also, depending upon the matching of participants the control group may have had low identified levels of drinking and could have proved difficult to compare to the main intervention group.

Pre-screening participants with the AUDIT-C to assign them to groups provided a bias as participants were assigned to either group based on AUDIT-C scores which lacked adequate randomization as per CONSORT guidelines (Montgomery et al., 2018). The bias may have caused some participants with lower hazardous drinking levels to be placed in the AUDIT <5 group although dependence drinking levels may have been higher for these participants. However, each participant was given the full AUDIT during the initial IBA. Plus, trends in the participant's follow-ups showed that drinking levels were similar in each of the assigned groups. Another limitation was the lack of comparison with in-person as opposed to online conditions when delivering both the IBA and the subsequent follow-ups. Furthermore, having high attrition rates in both the AUDIT <5 and IBA groups limits the strength of the findings due to the reduced numbers of students in each group at subsequent follow-ups. Despite the identified limitations within the design of the study, the results provide evidence to support the feasibility of implementing IBA with students to observe any reductions in alcohol consumption.

Future directions

A possible future direction to minimise many of these limitations would be to run a Randomized Controlled Trial (RCT) comparing different intervention approaches as noted in the literature (Cunningham et al., 2012; Dhital et al., 2015; Gaume et al., 2013; Miller et al., 2016). The RCT could evaluate the use of screening only, brief intervention, and indepth intervention with subsequent follow-ups that are split between online and in-person conditions. Additionally, exploring the role of PBS strategies and their relationship with regulating alcohol consumption could determine the way reduction strategies influence alcohol usage. Also, adopting a qualitative assessment of how students incorporate PBS strategies to reduce consumption and negative consequences would provide insight into the use of PBS strategies. Further exploration would be to collect feedback on the parts of the intervention that students found most effective. This could be conducted as a follow-up interview based on their experiences with receiving the IBA. This would provide evidence of its efficacy along with reflections on behavioural change. Additionally, sampling a larger population of at-risk student drinkers may provide more insights into the use of IBA with these populations.

Conclusion

The third and final study in this thesis demonstrated that IBA interventions are feasible when used with students and were shown to reduce consumption. The study itself contributes to a greater understanding of IBA in university settings. Overall, the findings from this third study demonstrate a feasibility to the approach when using IBA interventions with students. Also, IBA has been observed to reduce student alcohol consumption with more at-risk students that engage in pre-partying and drinking games being able to reduce consumption.

Chapter 5

Evaluating the implementation of IBA interventions with students in a university setting.

General Discussion

The focus of this thesis was to explore IBA interventions within the context of a university setting. The research was able to observe the approach and the feasibility of using IBA interventions with at-risk drinkers that pre-party and play drinking games. The research was comprised of three studies conducted in a mixed-methods approach to investigate the need for interventions and feasibly implementing IBA with students. The findings from these studies contribute to the literature by expanding the research on IBA implementation. Also, the contributions to intervention research have been through understanding different perspectives on IBA from both students and interventionists. The richness of the data provided by the qualitative study showed themes that captured the variability in alcohol experiences. Also, the study was able to demonstrate a broad range of views, opinions, and understanding around IBA, its usefulness, and the relevancy with student drinkers. Additionally, different perspectives on the IBA were noted from the each of the focus groups with many participants offering improvements to the design and delivery. Most of the findings have added contributions to observing the IBA as a feasible intervention tool and demonstrating the importance of reducing alcohol consumption with student drinkers.

Summary of each study main findings

Study 1 – *Drinking motivation and behaviour among university students*. The main findings from the first study demonstrated that LSBU and UEL universities had a sample of drinkers that are motivated to drink due to two primary factors: social enhancement and fun/celebration. A series of hierarchical regression analyses showed that pre-partying frequency was predictive of alcohol consumption over and above AUDIT-C scores. This means that pre-partying as a behaviour is motivated by factors other than general drinking motivations on the DMQ (Cooper, 1994). Also, interpersonal enhancement was an independent predictor of the motivation for pre-partying behaviour. Also, fun/celebration was an independent predictor of motivations for engaging in drinking games. Further analyses revealed that pre-partiers and drinking gamers have higher AUDIT-C scores and are motivated by enhancement factors.

Study 2 - A qualitative exploration of the barriers to and facilitators of IBA implementation: A thematic analysis. The main findings from the second study showed that seven main consistent themes typically denoted alcohol experiences amongst the five separate groups sampled. The themes included: intervention approach/reflection, personal experiences, social convention of drinking, alcohol motivations, drinking culture, and drinker/Addict identity. Two further global themes, specifically personal perspective and subjective evaluations were identified which contributed to the understanding and evaluation of IBA as an intervention tool. The overall analysis revealed that interventions which focus on captive audiences could be more efficacious than classifying and educating drinkers on risks. The analysis also revealed IBA to be a useful initiative with engaging students to reduce alcohol consumption. Two main organising themes separated the data into two distinct areas: accounts of experience and reflections on intervention. The higherorder analysis of global themes used some of the techniques of a thematic network analysis (Attride-Stirling, 2001) and produced three overarching global themes that depicted the focus groups collectively. These global themes were identified as: personal commentary on interventions, subjective drinker perspective, and reflective abstainer perspective. The implication of the findings demonstrated how a cross section of groups at LSBU interacted and understood the IBA and provided a forum to discuss the intervention further. Some of the feedback evaluated the use of opportunistic methods and creating different focus points for students to identify with to alter behaviours. Furthermore, implications of the findings

showed that individuals personal experiences with alcohol consumption influenced receptivity to interventions when experiences and views were entrenched. This was demonstrated in focus group 2 and 3 with individuals from recovery from addiction, that found difficulties with messages around reduction and the delivery of intervention impacting the outcomes. Overall, these findings have contributed to the IBA literature with identifying possible factors that might influence different individuals' adherence to intervention and the messages around alcohol reduction.

Study 3 - Examining the feasibility of implementing IBA interventions in a university setting. The findings of the third and final study demonstrated that IBA is a feasible intervention and was observed in reducing alcohol consumption across a two month follow up. Although, pre-partiers and drinking gamers were not shown to reduce the frequency of their behaviour at follow ups. However, reductions in alcohol consumption were significantly demonstrated in mixed level ANOVAs across each of the follow up time points. The findings validate the feasibility of implementing IBA with students on campus. Additionally, findings showed the relevance of the approach and its use with at-risk drinkers that engage in pre-partying and drinking games.

Study Aims and Objectives

The programme of research involved a series of studies designed to identify alcohol motivations, understand factors related to interventions and feasibly implement an IBA with students. The aim of the research was successful in the execution of each study finding support for identifying, understanding, and implementing the need for intervention with students. Secondary aims of the research were to expand the literature on IBA in university settings and examine the use of IBA with pre-partiers and drinking gamers. The outcomes of each of the studies have demonstrated that IBA is a feasible approach that has been observed in reducing alcohol consumption with students on campus. Therefore, the aims of this programme of research have been achieved through the sequence of studies that identified, understood and implemented IBA approaches with university students that engage in pre-partying and drinking games.

Much of the research findings have shown support for the literature on IBA and how it relates to previously discussed research within this thesis.

Alcohol motivations

The study of alcohol motivations has revealed that reasons for consumption are diverse amongst student populations (Cox & Klinger 1988:2011; Fried & Dunn, 2012: Monk & Heim, 2013). The findings for study 1 contribute to the evidence that pre-partiers and drinking gamers consume more alcohol and are exposed to more risk (Haas, Wickham & Gibbs, 2016; Kenney, Hummer, & LaBrie, 2010; LaBrie, & Pedersen, 2008; Miller, et al., 2016; O'Rourke, Ferris & Devaney, 2016; Pedersen, & LaBrie, 2007; Radomski et al., 2016; Read et al., 2010). This was noticeable with the samples of pre-partiers in both study 1 and 3 as they showed higher baseline rates of AUDIT-C scores when compared to non-pre-partiers. A key finding was the reduction in consumption levels with students during the feasibility study when implementing IBA in the third study. This was observed for reducing alcohol consumption with all drinkers engaged in the study that pre-party and play drinking games.

The validation of different motivations for pre-partying and drinking games was supported by the findings in study 1. Interpersonal enhancement was shown to be a key motivation for pre-partying behaviour (LaBrie et al., 2012). In addition, social enhancement of the environment or the experience has been cited as a key motivation for alcohol consumption amongst pre-partiers (Haas, Wickham & Gibbs, 2016; Kenney, Hummer, & LaBrie, 2010; LaBrie, & Pedersen, 2008; Miller et al., 2016; O'Rourke, Ferris & Devaney, 2016; Pedersen, & LaBrie, 2007; Radomski et al., 2016; Read et al., 2010). In contrast to pre-partiers, one of the key motivations for drinking gamers was found to be fun/celebration of playing the games. Within the research findings of this thesis, pre-partiers and drinking gamers motivations for consumption were shown to differ from general drinking motivations. The implications of these findings contribute to the understanding of how different motivations for alcohol activities can increase hazardous drinking. Within the findings identifying a group of pre-partiers and drinking gamers provided an opportunity to assess how motivations for these behaviours are organised in a university setting.

Study 1 focused on alcohol motivations and the underlying processes that guide alcohol use behaviour. The findings reflected that certain alcohol use behaviours, namely pre-partying and drinking games were motivated independently of standard alcohol use motivations. The implications of this finding support research by Cox and Klinger, (1988; 2011) that explored motivations for alcohol use being underpinned by goals and motivated

behaviour. Within this thesis, alcohol motivations were identified during discussions in study 2 that explored how drinkers consume due to many competing motivations. Themes identified in study 2 reflected these differences in motivations with many students reporting healthy usage in contrast to those identifying misuse. These findings highlighted the need for interventions with many types of drinkers, especially in the university setting. Alcohol motivations aid in understanding usage levels and why students engage in certain behaviours even when they appear contrary to their health and wellbeing. Despite some of the interesting and informative findings from the studies, the motivations for alcohol consumption were not the primary focus of this thesis. However, the implications of the findings throughout the series of studies have provided data to understand the motivations for consumption, the interactions with IBA and the resulting feasibility of implementing an IBA with students. Overall, the findings have contributed to observing the IBA from discussion to implementation and the observation of reduced alcohol consumption for a group of students in a university setting.

Drinker / Addict Identity

The findings from study 2 added further support to research on identity (Ridout, Campbell & Ellis, 2012) within how individuals view themselves and their perceptions of drinking. A consistent theme that was explored throughout each focus group discussion was the traits associated with different identities that ranged from the drinker to the addict identity. The participant's comments added to understanding how personalities and identities are formulated around alcohol as opposed to adopting a social constructionist understanding of identity development. The primary analysis for study 2 was based on the realist perspective, which focuses on tangible, rational interpretations of what is said. This contrasts with social constructionist perspectives that formulate identity based on the societal influences and the image of the drinker or addict identity. One of the key findings from the data was the experiences with alcohol could denote an identity or way of being that was classified from the viewpoint of Identity. This finding was noted with recipients of intervention (focus group 3) as they viewed their behaviour to be typical of addict identity and behaviour was observed through the lens of reinforcing out of control or nihilistic actions. This finding was contrasted with the drinkers in focus group 1, 4 and 5 that tended to view themselves and their usage from the standpoint of fun / enjoyment and social convention. The implications of these two differing accounts provide some

reflection on how identities can be constructed around alcohol consumption and the challenges in tailoring intervention to different types of individuals.

A consistent theme identified in each focus group was intervention approach / reflection that included evaluations on how interventions were constructed, developed, and implemented. This supported the practical applications of designing and implementing IBA with university students. Many of the insights of those students that had experiences with IBA were offered to the discussion which enhanced the understanding of how IBA is received. Those individuals that had received IBA interventions (focus group 4) were instrumental in understanding the student environment and the experience of IBA as an approach. Additionally, IBA interventionists (focus group 5) provided unique insights into how IBA is framed for students; an example of a tool used were flyers that discuss risks without judgement. The flyers and handouts were worded to reflect less of a problem and focus on solutions and strategies for healthy usage. Many of the themes identified within study 2 contributed to greater knowledge on how students experience IBA interventions and some of the best approaches for implementation. The main implications of study 2 demonstrate how a cross section of groups interact with IBA and the challenges that are apparent with each group when considering delivering interventions on campus. Many of the comments and reflections were varied across the groups and showed how individual differences could impact the adherence of students to messages around alcohol or altering behaviour based on IBA implementation.

IBA implementation

The IBA approach is similar to MI-based approaches that aim to generate insight within the individual, as opposed to stating directive action for the recipient. IBA interventions provide a non-confrontational approach for students to discuss their alcohol use without perceived judgement or shaming behaviour. Following the adaptability of MI approaches with the brief intervention (Gaume et al., 2013; Hettema et al., 2018; Kulesza et al., 2010; Kulesza et al., 2013; Murphy et al., 2015; Platt et al., 2016; Rollnick, Heather & Bell, 1992) the use of generating discrepancy could allow students to identify reduction strategies. This adds to understanding the effect of using the IBA when students come to identify their level of drinking. Also, generating insight with each student has the potential to allow them to reflect on their alcohol consumption and how to change behaviour if required. As noted in discussions during study 3 in this thesis, many students were

surprised by their personalised feedback. This finding was consistent amongst many of the participants that received IBA in the university setting.

In study 3, the feasibility of implementing IBA was observed in student drinkers reducing consumption amongst those sampled, specifically those at-risk who pre-party or play drinking games. During study 3, field notes showed that some individuals were resistant to sharing any information with the experimenter given the level of the score and what it meant for them as students drinkers. The implications of this add to the notion of reactivity that some participants may face when asked about alcohol consumption behaviours (Fazzino, Rose & Helzer, 2016). In the study, some participants were sensitive to the discussion on alcohol and may have had a history with problematic alcohol use. This is an area of consideration when participants are being given potentially distressing information that could be reduced by the experimenter offering the student space to discuss their identified level. However, during the feasibility study that implemented IBA, no students wished to discuss their usage further. Therefore, each student was given a leaflet that included more information on alcohol risks. Overall, the feasibility of implementing IBA was observed in reducing alcohol consumption with students that pre-partying and play drinking games in the university setting. The implications of these findings contribute to the literature on IBA implementation and how change can be produced by the use of interventions with students.

Behavioural change

A key focus of intervention research that has been previously discussed in this thesis is the use of behavioural change techniques (Abraham & Michie, 2008; Davis et al., 2015; Michie, et al., 2011). Study 3 was a feasibility study that was designed to instil behavioural change with a group of student drinkers that received an IBA. The findings showed that alcohol consumption levels reduced from baseline to follow up 2 as measured by the AUDIT-C scores. However, the AUDIT <5 group showed no reductions in consumption, which could be due to the low level of consumption identified at baseline. Also, the AUDIT <5 group were retained in the analysis with the IBA group to highlight the differences between types of students that drink on campus and the variability of consumption. Therefore, the need to develop behavioural change with these AUDIT <5 participants was not required as their consumption was not at a risk level.

The link between efficacy of the intervention and the inclusion of behavioural change approaches has been a consistent area of focus within the research literature (Davis

et al., 2015; Taylor et al., 2015). The level of short-term change identified in the feasibility study shows that IBA interventions can be observed to reduce consumption which produced behavioural change. Overall, the nature of behavioural change within this research was identified from an observational perspective, as opposed to trialling different behavioural change techniques, as noted in previous research (Abraham & Michie, 2008; Davis et al., 2015; Michie, et al., 2011).

The concept of choice architecture (Lockton et al., 2009; Thaler, 1980) was evident in the evaluation of IBA interventions during the focus group discussions in study 2. Many of the participants in the focus groups talked about their own experiences with intervention and how they developed change with their alcohol habits over different periods. This was also highlighted in focus group 3 (intervention recipients) as the participant's backgrounds included previous habitual/addictive behaviour regarding alcohol consumption. The essence of choice architecture shows how making plans and implementing changes based on choice can alter behaviours. The individuals in focus group 3 recounted instances where they had realisations on their behaviour and changed their habits through strategies, plans, and goals akin to levers of change noted in choice architecture. The change was evident in study 3, although how students were able to achieve that change in behaviour could have been based on many different factors that were not identified in the study.

Within study 3, the observation of increased self-awareness through the act of feasibly implementing an IBA intervention with students subsequently helped to reduce alcohol consumption. This adds to the literature on the observation of IBA as a brief intervention approach in the short term (Dhital et al., 2015; Hall et al., 2019; McClatchey, Boyce & Dombrowski, 2015; Platt et al., 2016; Thom, Herring & Bayley, 2015). Unfortunately, as study 3 was not conducted over a longitudinal period and was designed as a feasibility study it is difficult to relate the findings to established change over an extended period of time. Additionally, the feasibility study was observing the use of IBA with students that pre-partying and play drinking games and contributed to the findings of implementation literature as an observation in alcohol reduction was seen throughout the follow ups.

Personalised normative feedback

One part of the feasibility of delivering IBA from study 3 involved the use of normative feedback based on each student's AUDIT-C score to identify where they fell in the population of student drinkers. Many students were identified by their scores to be

either at increasing risk or in some cases high risk drinking. Those that were identified as increasing risk were given the IBA intervention and a leaflet that detailed the impact of drinking at increasing risk levels. However, some students were resistant to receiving this information and stated that they felt they knew what the risks were. Those identified at increasing risk were given time to discuss their consumption at the end of the IBA if they wished. Each person in the AUDIT <5 group was given the full AUDIT to ensure that their assignment to the group was correct. Those in the AUDIT <5 group were not given any detailed information on their score, merely information on them falling within the healthy range was indicated. Observation from field notes (See Appendix M) and the findings of reduced consumption amongst the students support the literature on the use of personalised normative feedback (Boyle et al., 2016; Clarke, Field and Rose, 2015; Gaume et al., 2014; Miller et al., 2016; Prince et al., 2014). Personalised feedback is shown to be effective within the delivery of the intervention itself. However, the lack of peer injunctive or descriptive norms being used meant that comparisons between standard normative behaviour and tailored information could not be compared. Overall, the strength of normative feedback shaping behaviour supports the literature on how individuals can be influenced to alter intentions, actions, and subsequent behaviour. Although, as personalised normative feedback is only one part of the intervention itself, it is difficult to conclude how much of an effect is had on students' consumption. Additionally, part of the focus of the third study in the thesis was observing if the feasibility of implementing IBA could reduce consumption with at-risk drinkers that pre-party and play drinking games. The implications of the findings demonstrated that IBA is feasible as an intervention tool and was observed in reducing consumption levels with pre-partiers and drinking gamers. Therefore, the findings support the literature with the use of personalised feedback having an influence as part of the intervention with groups that have at risk drinking namely, pre-partiers and drinking gamers.

Pre-partying and drinking games

One of the main findings within the feasibility of study 3 that contributes to the established literature on pre-partying (Haas, Wickham & Gibbs, 2016; Kenney, Hummer, & LaBrie, 2010; LaBrie, & Pedersen, 2008; Miller et al., 2016; O'Rourke, Ferris & Devaney, 2016; Pedersen, & LaBrie, 2007; Radomski., 2016; Read et al., 2010; Zamboanga et al., 2010) was reduced alcohol consumption with the IBA group. Participants in the IBA group reported frequency of pre-partying in the previous month and

were shown to reduce consumption based on AUDIT-C scores. However, pre-partying frequency along with drinking game frequency was not significantly reduced at any time point. Research in pre-partying has been calling for tailored interventions to support reducing the level of risk with the behaviour (Pedersen, 2016). While study 1 in this thesis was able to understand the motivations for pre-partying. Study 3 was able to help support reductions in alcohol consumption for at-risk drinkers, that pre-party and play drinking games. Therefore, the findings have added to the alcohol literature with students and offer comment to research on pre-partying and drinking games that can be explored in future study. Despite the contributions of the research there were some limitations in the studies conducted.

The main limitations of each study

Both studies 1 and 3 used self-reported measures, which can be subject to recall error, social desirability, response bias, and demand characteristics that sometimes could not be reduced. However, research has supported the use of self-report measures to ascertain accurate and validated responses (McCambridge & Kypri, 2011). Although, consideration must be given to the importance of the subject being investigated, particularly as alcohol consumption may produce a reaction from participants (Fazzino, Rose & Helzer, 2016). Also, many of the questionnaires that were used had high levels of internal consistency and validity with many populations (Collins, Carey, & Sliwinski, 2002; Fernandes-Jesus et al., 2016; Heather et al., 2011; Kuntsche et al., 2006; Kuntsche & Kuntsche, 2009; Martens et al., 2007). Additionally, due to research building with feasibility of IBA implementation, study 3 added further knowledge to this subject; although, it was limited due to the short follow-up duration.

Study 2 contained a small sample size which may have reduced the representativeness of the findings. However, most qualitative research designs contain limited numbers to gain richer data that can be extrapolated to inform research (Braun & Clarke, 2013). Although, many of the reasons for the small samples in study 2 was the lack of students willing to participate in the focus group discussions. Also, many of the intended participants belonged to small cohorts which limited the size of the possible groups before sampling took place. A further limitation was the sampling of each focus group only once; therefore, the views and experiences from each group do not represent the wider populations. Another limitation is the subjective interpretation of the data and the analysis itself, as another researcher could come to a different conclusion from the data. It could be

argued that my reflexivity as a researcher was limited as I was looking for views and experiences on the intervention that would shape the findings. Therefore, this may have contributed to barriers for observing the data in an objective way. However, a thorough assessment of the data through construct validation was conducted with the supervisory team before final acceptance of the thematic analysis. Additionally, participant input into the acceptance of the findings was ascertained through member checking to validate the nature of the data gathered in each focus group discussion. Another limitation was the time that elapsed between the focus group discussion and the follow up email. As a result, many participants did not respond to the emails sent which may have reduced some of the validity following the analysis.

Study 3 had several limitations with the design of the feasibility of IBA implementation and how it was conducted. Firstly, the IBA group and AUDIT <5 groups were pre-screened and assigned to each group which eliminated randomisation. Also, the AUDIT <5 group has small, reported alcohol consumption levels which contrasted with the main IBA group highlighting the differences between the types of students that drink on campus and the variability of consumption. Additionally, study 3 was designed to feasibly implement an IBA intervention with at-risk drinkers that engage in pre-partying and drinking games to observe any reductions in consumption with these groups. An additional limitation identified was the lack of consistency in using the DDQ (Collins, Parks & Marlatt, 1985) questionnaire at each time of testing. Due to the DDQ (Collins, Parks & Marlatt, 1985) not being included at baseline, the findings were not used in the analysis of the IBA group.

An overall limitation of the research was the use of a predominantly non-drinking campus to sample drinkers from. Traditional red brick university settings may have a completely different drinking culture and more access to diverse drinking behaviours amongst students. Also, traditional settings tend to have more live on-campus students as opposed to limited numbers in the universities sampled.

Future directions of the research

In study 1, to enhance the research further, comparing another traditional university setting (red brick institution) with modern universities could produce information on the type of drinking behaviour that exists in different university settings. A rationale for comparing these environments is the differences for students that live on campus;

specifically, traditional institutions may have more live on-campus students compared to students that live off-campus at modern universities. Plus, the demographics of each institution may differ considerably, with usually higher percentages of mature students attending modern universities. Another factor that could enhance the information being obtained in study 1 would be to include more online questionnaires. Using Kroenke, Spitzer and Williams, (2003) Patient Health Questionnaire to assess depression could gain information on the mental health of the students taking part and how this may be linked to consumption levels.

To enhance the research findings of the second study using a different qualitative approach that incorporates semi-structured interviews could gain more detailed data. Additionally, generating data on the lived experience of individuals could inform how each person relates to the subject matter and its significance in their lives. Adopting an Interpretative Phenomenological Analysis (IPA) as a secondary analytical technique for the focus groups may enhance the inferences that can be drawn from the data and could provide comment on the establishment of identity. Also, taking a social constructionist epistemology as opposed to a realist perspective could change the direction of the analysis with more interpretation being used. Plus, seeing the views and expressions as evocative of the wider discourse on social roles and how ideologies are established and maintained in the social milieu could provide greater insight.

Finally, enhancing the findings of study 3 would involve running the study as an RCT with an active control group that is randomly allocated. Also, increasing the incentives for those taking part in the study could motivate participants to commit to completing all stages, which could limit the attrition rates and increase the strength of the findings. Also, exploring the differences between types of intervention delivery from 'inperson' to e-interventions may provide insight into which interventions have the most effect on students' alcohol consumption. All these enhancements could add value to supporting more research in these areas.

Contributions to the literature on Intervention

One of the main contributions from study 3 has been the feasibility of implementing an IBA with students in a university setting, (Clarke, Field & Rose, 2015; Donoghue et al., 2014; Heather et al., 2011; Monk & Heim, 2013; Scott-Sheldon et al., 2012; Taylor et al., 2015) given the observed reduction in alcohol consumption with students over the short term this supports the literature on implementation. The validation

of IBA as a technique for targeting at-risk students has been a major contribution of the findings from the studies within this thesis. Within the feasibility study implementing IBA itself, adopting personalised normative feedback (Boyle et al., 2016; Clarke, Field and Rose, 2015; Gaume et al., 2014; Miller et al., 2016; Prince et al., 2014) and using MI techniques (Gaume et al., 2013; Hettema et al., 2018; Kulesza et al., 2010; Kulesza et al., 2013; Murphy et al., 2015; Platt et al., 2016; Rollnick, Heather & Bell, 1992) adds further to the literature on the implementation of IBA as an approach (Dhital et al., 2015; Hall et al., 2019; McClatchey, Boyce & Dombrowski, 2015; Platt et al., 2016; Thom, Herring & Bayley, 2015). The implications of the findings provide understanding on how the IBA can be observed to reduce consumption with students through reflection and feedback within the nature of the intervention. The ability of the students to personally take account of their alcohol consumption when compared to the student population was demonstrated through the interactions in study 3. These findings can offer much to the implementation of IBA in university settings as it can raise awareness with the observation in reducing alcohol consumption over a 2month follow up.

Another contribution from the research has been the feasibility of implementing IBA interventions with student drinkers that pre-party and play drinking games. Due to the level of research in this area being predominantly from U.S. based studies (Haas, Wickham & Gibbs, 2016; Kenney, Hummer, & LaBrie, 2010; LaBrie, & Pedersen, 2008; Miller et al., 2016; O'Rourke, Ferris & Devaney, 2016; Pedersen, & LaBrie, 2007; Radomski et al., 2016; Read et al., Zamboanga et al., 2010), these findings support the emerging literature on pre-partying in the UK (Foster & Ferguson, 2013; Howard et al., 2019).

In study 2, the contribution to the literature has been informative when examining the different barriers to and facilitators of IBA implementation with students on campus. Taking a snapshot of LSBU and how interventions are designed and delivered from many different perspectives. This allowed IBA interventions to be evaluated by the students, professionals, and recipients for identifying possible areas of improvement. Many of the reflections and thoughts on how best to deliver and alter intervention indicated the amount of experience that each informed cohort had with intervention. Also, having a cross-section of the population at LSBU from student drinkers to IBA interventionists was instrumental in accruing knowledge on IBA and brief interventions from those that receive them and those that deliver them.

IBA interventions in university settings

A further endorsement of feasibly implementing IBA interventions in university settings has been one of the outcomes from study 3 with reductions in alcohol consumption shown with students. This helps to expand the literature that is building within university settings and how different environments are demonstrating effects of using the approach (Hall et al., 2019; Thom et al., 2016). Additionally, IBA interventions provide an opportunity to have a conversation with an alcohol user in a way that is informal and focuses on discussion points without a level of confrontation or directive action. The benefits of this approach allow the recipient to consider their drinking level regarding normative levels. Also, it can allow an individual to generate their strategies for reduction whilst seeing the benefits. The feasibility of this approach has much to offer the university setting as it looks to generate insights that could empower an individual to think autonomously about their alcohol use. The implications of these contributions to the literature have highlighted where change can be evoked with student populations, which informs the narrative on IBA implementation. Overall, the findings have strengthened the understanding of feasibility with students and how delivery is a key component when attempting to alter alcohol related behaviours.

Conclusions

When considering the level of research that currently exists with understanding alcohol use behaviour amongst student populations, the need for more research with intervention implementation and design is still required in the UK. The findings from the studies conducted in this thesis illustrate the need to feasibly implement IBA interventions in UK universities. In addition, students that have at-risk behaviour are needed to be examined in greater detail to design intervention that support reductions in these populations. Since the feasibility of implementation IBA in study 3 did not reduce prepartying and drinking game activities with these groups. This provides an opportunity for further research to feasibly explore the interventions targeting these activities. As prepartying and drinking games are social activities that involve conformity and peer pressure; individual interventions may not be as effective. Therefore, trialling the use of IBA within a social context prior to these activities and in group settings may provide an opportunity for exploration of the versatility of the intervention. Overall, the ability of interventions to evoke change in the trajectory of a student drinker is important for reducing the impact of risk within the student population. Instilling change with at-risk students could provide

enough incentive for the individual to alter their behaviour and build a different life for themselves. In summary, IBA is a feasible and adaptable approach that can be used with numerous types of drinkers. Essentially, this research supports the wider literature that IBA can be effective.

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Appendices

Appendix A - Ethical approval form for study 1 & 2 - SAS 1714

London South Bank

University

Direct line: 0207 815 5422 Email: dawkinl3@lsbu.ac.uk

Ref: SAS1714

Tuesday 11th

July 2017

Dear Ashley

RE: Understanding the components of brief alcohol intervention delivery within the student environment

Thank you for submitting this proposal and for your response to the reviewers' comments.

I am pleased to inform you that full Chair's Approval has been given by Dr. Lynne Dawkins, on behalf of the School of Applied Sciences Ethics Panel.

I wish you every success with your

research. Yours sincerely,

· Dawlais

Dr. Lynne Dawkins Chair, Research Ethics Coordinator School of Applied Sciences

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E-Questionnaire LSBU

Start of Block: Informed Consent

Q1

Drinking Motivations Questionnaire As participant you will be asked a series of questions on alcohol use or reasons for not drinking alcohol. As a participant you will be asked to fill out the questionnaires to the best of your ability answering all questions as they apply to you. The study should take you around 20 minutes to complete, and you will be eligible to enter into a prize draw to win a £50 amazon voucher for your participation. A copy of the terms and conditions is available if you decide to complete the survey and enter on the next page. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice. If you would like to contact the Principal Investigator in the study to discuss this research, please e-mail myself **Ashley Howard** — howarda5@lsbu.ac.uk or if you would like to speak to one of my supervisors about the nature of the study, please feel free to contact **Dr Tony Moss** — Mossac@lsbu.ac.uk.

This study has been approved by the Ethical Review Board at London South Bank University application number: **SAS1714a.** By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

O I consent, begin the study (1)
--------------------------------	----

I do not consent, I do not wish to participate (2)

Skip To: End of Survey If wish to participate

... = I do not consent, I do not



Q2 To be entered into the prize draw to win a £50 Amazon voucher:

The draw will take place on the 15th of December 2017 when the winner will be notified by email,

if you would like to be entered into this prize draw, please supply an email address below in order for you to participate.

The terms and conditions of the prize draw is available for your information here: Prize draw terms and conditions

Please note: The email address supplied will only be retained for contacting the winner and will not be used by the researchers after the prize draw has been completed.

End of Block: Informed Consent	
Start of Block: Demographic questions	
Q3 Please indicate your gender	
O Male (1)	
O Female (2)	
Q4 Please state your age	
O please specify in years (1)	-
Q5 Your current student status: Please indicate	
O Full time (1)	
O Part time (2)	

Q6 What level of education are you currently studying at? Please select the most appropriate answer
O Undergraduate (1)
O Post-graduate (2)
O Doctoral Level (3)
Q7 Please indicate where you live
O At Home (1)
At University (2)
Q8 What is your ethnic group? Please choose one option that best describes your ethnic group or background ▼ White - English / Welsh / Scottish / Northern Irish / British (2) Any other ethnic group (18)
Please choose one option that best describes your ethnic group or background
Please choose one option that best describes your ethnic group or background
Please choose one option that best describes your ethnic group or background ▼ White - English / Welsh / Scottish / Northern Irish / British (2) Any other ethnic group (18)
Please choose one option that best describes your ethnic group or background ▼ White - English / Welsh / Scottish / Northern Irish / British (2) Any other ethnic group (18) Q9 How often do you have a drink containing alcohol?
Please choose one option that best describes your ethnic group or background ▼ White - English / Welsh / Scottish / Northern Irish / British (2) Any other ethnic group (18) Q9 How often do you have a drink containing alcohol? ○ Never (0)
Please choose one option that best describes your ethnic group or background ▼ White - English / Welsh / Scottish / Northern Irish / British (2) Any other ethnic group (18) Q9 How often do you have a drink containing alcohol? Never (0) Less than monthly (1)
Please choose one option that best describes your ethnic group or background ▼ White - English / Welsh / Scottish / Northern Irish / British (2) Any other ethnic group (18) Q9 How often do you have a drink containing alcohol? ○ Never (0) ○ Less than monthly (1) ○ Monthly (2)

Skip To: End of Block If How often do you have a drink containing alcohol? = Never

drinking?
O 1 - 2 (0)
O 3 - 4 (1)
O 5 - 6 (2)
O 7 - 9 (3)
O 10+ (4)
Q11 How often have you had 6 or more drinks in one session of drinking?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q12 During the past year, how often have you found that you were not able to stop drinking once you had started?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)

Q10 How many standard drinks of alcohol do you consume on a typical day when you are

Q13 During the past year, how often have you failed to do what was normally expected of you because of drinking?
O Never (0)
C Less than Monthly (1)
O Monthly (2)
O Weekly (3)
Oaily or almost daily (4)
Q14 During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)

Q15 During the past year, how often have you had a feeling of guilt or remorse after drinking?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q16 During the past year, have you been unable to remember what happened the night before because you had been drinking?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q17 Have you or someone else been injured as a result of your drinking?
O No (0)
Yes, but not in the past year (2)
Yes, during the past year (4)

or suggested you cut down?
O No (0)
Yes, but not in the past year (2)
Yes, during the past year (4)
Page Break ————————————————————————————————————

Q18 Has a relative or friend, doctor or other health worker been concerned about your drinking

You can select	more than one response
	Student Union (1)
	Pub (2)
	Night Club (3)
	At home (4)
	In Restaurants (5)
	Social Events (6)
	Sports Venues (7)
	Theatres (8)
	Concerts (9)
	Wine Bars (10)
	Social Clubs (11)
	Other (Please specify) (12)

Q19 Please select the locations that you typically drink alcohol in?

Q20 How many drinks on average do you consume per week of Beer, Wines and Spirits? A standard can / pint of beer, Cider / 500ml or Bottle of beer / alcohopop 275/330ml A large glass of wine is 250ml (please note a bottle of wine contains 3 x 250ml glasses) A shot of any spirit 25ml measure

 $0 \quad 5 \quad 10 \quad 15 \quad 20 \quad 25 \quad 30 \quad 35 \quad 40 \quad 45 \quad 50$

BEER/CIDER, A standard pint or can of any beer, 500ml. ()
BEER/ALCOPOP, A standard bottle ()
WINE, A large glass of wine 250ml. ()
SPIRITS, A standard 25ml measure. ()

Q21 How long does it take you to consume a drink containing alcohol when you are drinking?

Time to consume a drink containing alcohol in minutes

40

20

60

BEER/CIDER, A standard pint or can, 500ml (1)

BEER / ALCOPOP, A standard bottle. (2)

WINE, A large glass of wine 250ml. (3)

SPIRITS, A standard 25ml measure. (4)

0

Page Break

r age break

Q22 How often would you say you drink for the following reasons:

	Almost never (0)	Some of the time (1)	Half of the time (2)	Most of the time (3)	Almost always (4)			
Because it helps you enjoy a party (1)	0	0	0	0	0			
To be sociable (2)	0	\circ	\circ	0 0				
Because it makes social gatherings more fun (3)	0	0	0	0	0			
Because it improves parties and celebrations (4)	0	0	0	0	0			
To celebrate a special occasion with friends (5)	0	0	0	0	0			
	I							

Q23 How often would you say you drink for the following reasons:

	Almost never (0)	Some of the time (1)	Half of the time (2)	Most of the time (3)	Almost always (4)			
To forget worries (1)	0	0	0	0	0			
Because it helps you when you feel depressed or nervous (2)	0	0	0	0	0			
To cheer you up when you are in a bad mood (3)	0	0	0	0 0				
Because you feel more self- confident and sure of yourself (4)	0	0	0	0	0			
To forget your problems (5)	0	\circ	\circ	\circ	\circ			

Q24 How often would you say you drink for the following reasons:

	Almost never (0)	Some of the time (1)	Half of the time (2)	Most of the time (3)	Almost always (4)			
Because you like the feeling (1)	0	0	0	0	0			
Because it's exciting (2)	0	0	0	0 0				
To get high (3)	0	\circ	\bigcirc	\circ				
Because it gives you a pleasant feeling (4)	0	0	0	0 0				
Because it's fun (5)	0	\circ	\circ	\circ	\circ			

Q25 How often would you say you drink for the following reasons:

	Almost never (0)	Some of the time (1)	Half of the time (2)	Most of the time (3)	Almost always (4)
Because your friends pressure you to drink (1)	0	0	0	0	0
So that others won't kid you about not drinking (2)	0	0	0	0	0
To fit in with a group you like (3)	\circ	\circ	\circ	\circ	0
To be liked (4)	0	\circ	\circ	\circ	\circ
So, you won't feel left out (5)	0	\circ	\circ	\circ	\circ

Q20 Have you drullk alcohol before a social eve	iii Oi	gati	iei ii i	gııı	LITE I	331 11	ionti	1:			
O Yes (1)											
O No (0)											
Skip To: Q27 If Have you drunk alcohol before a soci	al evei	nt or	gath	ering	in th	e last	t mon	th? =	Yes		i
Skip To: Q33 If Have you drunk alcohol before a soci	al evei	nt or	gath	ering	in th	e last	: mor	th? =	No		
Page Break -											
Q27 In the past month how many times have yo social event?	ou co	nsun	ned 5	5 or	more	drin	ıks b	efore	e atte	ndin	g a
	0	3	6	9	12	15	18	21	24	27	30
State the number of times you have consumed 5 or more drinks before a social event ()						ł					
O28 How many drinks do you typically consum	o hofe			ding			·····	· · ·	Par		
Q28 How many drinks do you typically consume Restaurant, Club?	e beit	пеа	шеп	uiiig	a 500	Liai e	veni	i.e.,	DdI,		
	0	3	5	8	10	13	15	18	20	23	25
State the number of drinks consumed before attending the social event ()						1					
Q29 Please indicate the relevancy of each state	ement		app ot lil		-	ur di			t like	me	
	0	1	2	3	4	5	6	7	8	9	10

I drink alcohol before a social event because I feel more energised before going out (1)											
I drink alcohol before a social event because having a few drinks makes the night more interesting (2)											
I drink alcohol before a social event because it helps to meet new people and make friends once I go out (3)											
I drink alcohol before a social event because it helps me to Relax or loosen up before going out (4)											
I drink alcohol before a social event because it makes talking to people easier (5)											
Q30 Please indicate the relevancy of each statem	ent			lies t ke me	•	ur dri		ng Most	t like	me	
	0	1	2	3	4	5	6	7	8	9	10
I drink alcohol before a social event because it helps me feel more relaxed when meeting new people once I am out (1)											
I drink alcohol before a social event so that I have control over what type of alcohol I'm drinking rather than relying on what is available at the venue (2)											
I drink alcohol before a social event to enjoy my favourite drink in case the social event doesn't Serve that drink (3)											
I drink alcohol before a social event so that I don't have to worry about someone spiking my drink (4)											
I drink alcohol before a social event to drink as much as possible so that I don't have to drink at the venue (5)											

0 1 2 3 4 5 6 7 8 9 10

I drink alcohol before a social event to have more confidence to talk to a potential partner once I go out (1)	ial partner once I go										
I drink alcohol before a social event to meet a potential partner whilst drinking before going out (2)											
I drink alcohol before a social event to increase the likelihood of finding a partner (3)											
Q32 Please indicate the relevancy of each statem	ent a	as it	appl	ies to	o you	ur dri	nkin	g			
		No	ot lik	e me			N	∕lost	Like	me	
	0	1	2	3	4	5	6	7	8	9	10
I drink alcohol before a social event to avoid getting caught with alcohol on the way to, or at the social event I am attending (1)											
I drink alcohol before a social event because alcohol may not be available or hard to get at the venue (2)											
I drink alcohol before a social event because I am underage and cannot purchase alcohol at the venue (3)											
Q33 How often have you played drinking games i	n the	e pas	st mo	onth	?						
O Never (0)											
Once (1)											
2- 4 times a month (2)											
2-3 times a week (3)											
4 or more times a week (4)											

▼ 1	(1)	15+ ((17)
· ·		, <u>+</u> J . 1	

Q35 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
To blend in with the crowd (1)	0	0	0	0
To fit in (2)	\bigcirc	\bigcirc	\circ	\circ
Because I don't want to feel left out (3)	0	0	0	0
Because other people are playing them (4)	0	0	0	0
Because I am afraid, I will look silly if I don't (5)	\circ	\circ	0	\circ

Q36 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
For the competition (1)	0	0	0	0
To avoid having to talk to somebody one-to-one (2)	0	0	\circ	\circ
To get practice at that game (3)	0	\circ	0	\circ
Because I want to win (4)	0	\circ	\circ	\circ

To take a risk (5)	0	\circ	\circ	\circ
To just go wild (6)	\circ	\bigcirc	\circ	\circ
To see the reactions of others when their inhibitions are lowered (7)	0	0	\circ	0

Q37 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
As a way of getting to know other people (1)	0	0	0	0
To make it easier to talk to someone (2)	0	0	0	0
To meet interesting people (3)	0	0	0	0
To learn things about others (4)	\circ	\circ	\circ	\circ
As a way of expressing interest in someone (5)	0	0	0	0
I				

Q38 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
To get drunk (1)	\circ	\circ	\circ	0
To get a buzz (2)	\circ	\circ	\circ	\circ
Because they are fun (3)	0	0	\circ	\circ
To liven up a boring party (4)	\circ	\circ	\circ	\circ
To have a good laugh (5)	\circ	\circ	\circ	\circ

Q39 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
To relax (1)	0	\circ	\circ	\circ
To forget about problems (2)	0	0	\circ	\circ
To feel better about myself (3)	0	\circ	\circ	\circ

Q40 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
To kill time (1)	\circ	\circ	\circ	\circ
When there is nothing else to do (2)	0	0	0	0
Because I don't know what else to do for fun (3)	0	\circ	\circ	\circ

Q41 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
Because it is a new experience (1)	0	0	0	0
To try something different (2)	\circ	\circ	\circ	\circ
Because it is a more exciting way to drink (3)	0	\circ	0	\circ
Page Break ———				

Q43 If you would like to take part in phase two of the study which involves a focus group discussion

please indicate below and leave a contact email so that you can be selected for the second phase where you will receive £10 for your time in participating.

Please state yes or no below:

\bigcirc	Yes (1)
\bigcirc	No (0)

Skip To: Q44 If you would like to take part in phase two of the study which involves a focus group discussion ... = Yes

Skip To: Q45 If you would like to take part in phase two of the study which involves a focus group discussion ... = No

Q44 Please supply email address below:	

Q45 Student Debrief Thank you for your participation. The purpose of the research was to understand how different contexts contribute to alcohol use behaviour with the student population.

If you would like to know any more information or would like to discuss further details about how this study was conducted, please feel free to contact myself, the researcher, **Ashley Howard** email **howarda5@lsbu.ac.uk** or my supervisor **Dr Tony Moss** – email **mossac@lsbu.ac.uk** or the ethical review board **SASethics@lsbu.ac.uk**. All data will be stored in secure encrypted files on a computer at the university. Any identifying details will only be stored on record for the prize draws and for contacting participants for other phases of the study. In the case of whether anything may have upset you, please contact the Student Mental Health and Wellbeing Team at London South Bank University; email: **studentwellbeing@lsbu.ac.uk** | telephone: 020 7815 6454.

Skip To: End of Survey If Student Debrief Thank you for your participation. The purpose of the research was to understand... Is Displayed

End of Block: Demographic questions

Start of Block: MAAQ

Display This Question:

If How often do you have a drink containing alcohol? = Never

Q46 Please indicate how important each statement is to you personally as a reason for not drinking by selecting the most appropriate response

	Not at all important (0)	Slightly important (1)	Moderately important (2)	Very important (3)	Extremely important (4)
I have a medical condition that is made worse by alcohol (1)	0	0	0	0	0
I have or used to have a drinking problem (2)	0	0	0	0	\circ
I have a genetic condition which makes it hard for my body to handle alcohol (3)	0	0	0	0	
My doctor told me not to drink alcohol (4)	0	0	0	0	0
One or both of my parents have or have had a drinking problem (5)	0	0	0	0	0

Q47 Please indicate how important each statement is to you personally as a reason for not drinking by selecting the most appropriate response

	Not at all important (0)	Slightly important (1)	Moderately important (2)	Very important (3)	Extremely important (4)
My family gets upset when I drink alcohol (1)	0	0	0	0	0
I was brought up to abstain from alcoholic beverages (2)	0	0	0	0	0
My family disapproves of drinking alcohol (3)	0	0	0	0	0
I was taught not to drink alcohol (4)	0	\circ	\circ	\circ	0

	Not at all important (0)	Slightly important (1)	Moderately important (2)	Very important (3)	Extremely important (4
My religion does not allow alcoholic beverages (1)	0	0	0	0	0
Drinking alcohol is against my spiritual and religious	0	0	0	0	0
beliefs (2)	cate how import	ant each stateme	ent is to you ners	onally as a reaso	n for not
beliefs (2)	cate how imports cting the most a Not at all important (0)			onally as a reaso Very important (3)	n for not Extremely important (4
beliefs (2)	cting the most ap	opropriate respo Slightly	nse Moderately	Very	Extremely
beliefs (2) 49 Please indirinking by sele I have no desire to drink	cting the most ap	opropriate respo Slightly	nse Moderately	Very	Extremely

Q50 Student Debrief Thank you for your participation. The purpose of the research was to understand how different contexts contribute to alcohol use behaviour with the student population.

If you would like to know any more information or would like to discuss further details about how this study was conducted, please feel free to contact myself, the researcher, **Ashley Howard**

email howarda5@lsbu.ac.uk or my supervisor Dr Tony Moss — email mossac@lsbu.ac.uk or the ethical review board SASethics@lsbu.ac.uk. All data will be stored in secure encrypted files on a computer at the university. Any identifying details will only be stored on record for the prize draws and for contacting participants for other phases of the study. In the case of whether anything may have upset you, please contact the Student Mental Health and Wellbeing Team at London South Bank University; email: studentwellbeing@lsbu.ac.uk | telephone: 020 7815 6454.

Skip To: End of Survey If Student Debrief Thank you for your participation. The purpose of the research was to understand... Is Displayed

End of Block: Debrief

Participant information sheet

An exploration of the motivations to consume alcohol as they relate to context and behaviour.

Hello fellow students, my name is Ashley Howard, and I am a Doctoral student with London South Bank University currently undertaking research into the area of brief interventions. I invite you to take part in this research study as you are a student at the university currently enrolled on a higher education course. Before you decide whether or not you wish to take part, it is important that you understand why the research is being conducted and what is involved. Please take the time to read the following information carefully.

The subject of brief interventions has been a widely researched area in psychology for the past few decades (Heather, 2010). Many different types of interventions have emerged that target different individuals in numerous contexts. The area that the current research focuses on is Identification and Brief Advice (IBA) which is one of the current leading approaches adopted in GP surgeries under NHS guidelines. It involves the screening of individuals to find out their current level of drinking and give structured information and feedback on the findings with some element of alcohol education being adopted. The current study is the first phase of investigating this area by understanding the different contexts and behaviours related to alcohol use that exist with the student population at London South Bank University.

The study will take 20-25 minutes to complete.

The study itself is designed in two phases first, questionnaires will be administered to ascertain student views on alcohol use in different contexts with many related behaviours. In the second phase of the study participants will be invited to take part in focus group discussions. These will be designed to understand the best way of delivering interventions with many different types of student drinker on campus.

You have been asked to participate as you are a student enrolled at the university and you may or may not drink alcohol. All members of the student body will be invited to participate in the online e-questionnaire to get a sense of the different drinking contexts and related behaviours that are present at London South Bank University.

It is up to you to decide whether or not to you wish to take part. If you decide to take part, you will be given this information sheet for you to keep and asked to sign a consent form. Even if you decide to take part you are still free to withdraw from the study at any time without giving reason. If you would like to withdraw from the study, please email myself, the main researcher, Ashley Howard, Email - howarda5@lsbu.ac.uk and I will remove all your data from the study and delete all records. As a student if you withdraw from the study, it will have no impact on your marks, assessments, or future studies.

All data will be collected from the online e-questionnaire, and you will be invited to attend the focus group discussions via email. Please ensure you leave an email address to be contacted for the second phase of the study. As a participant you will be asked to fill out the questionnaires to the best of your ability answering all questions as they apply to you. The total time for the study will be between 20-25 minutes in total. In order to opt in and consent to the study itself you will need to indicate on the tick box for the online e-

questionnaire and to agree to the consent form statements. One of the only disadvantages to participating in the study will be the loss of time if you wish to take part in both phases as it will take 20-25 minutes for the first phase and 45 minutes for the second phase. However, a benefit of participating is the possibility of winning the prize draw for the Amazon voucher and you will receive £20 for your time if you participate in the focus group discussions. Also, another benefit is learning more detailed information about alcohol use behaviours and intervention research, furthering knowledge, and understanding on the subject.

All information that is gathered about you and other participants in this study will be kept in secure encrypted files and will remain strictly confidential. The only individuals who will have access to the data will be myself and my supervisors.

All participant data will be kept confidentially on secure files from the moment of submission of the online e-questionnaire. Anonymity will be maintained throughout with only reference to student Id numbers being the main form of communication when inviting participants for phase two of the study. After the studies have been completed, data will be stored securely on encrypted files for a period of 10 years in accordance with the university's code of practice.

The anticipated results of the study once the research has been completed will be published in my doctoral thesis and form part of the series of studies, I will submit for publication in peer reviewed journals at the end of submission. As a participant you can request a copy of the published results of the study and a link to any publication if accepted into a peer reviewed journal.

The research is being part funded by London South Bank University and the Drinkaware Trust. I am a research student conducting the research as part of a studentship awarded to me by the university. The research will form part of the applied sciences literature in the department of Psychology.

The research has been approved by the Ethical Review Board at London South Bank University, application number: SAS1714.

If you require any further information about the nature of the study or any issue to do the research itself please feel free to contact me, Ashley Howard on email howarda5@lsbu.ac.uk or contact my supervisor Dr Tony Moss – email mossac@lsbu.ac.uk

If you have any concerns about the way in which the research has been conducted, please contact Professor Ian Albery - email alberyip@lsbu.ac.uk or the Ethical Review Board SASethics@lsbu.ac.uk .

Thank you for taking the time to complete this survey and agreeing to participate in the study.

With Best Wishes,

Ashley Howard Student Researcher

Research Project Consent Form

Full title of Project: Understanding the components of brief alcohol intervention delivery within the student environment.

Ethics approval registration Number: SAS1714

Taking part (please tick the box that applies)

Name: Ashley Howard

Researcher Position: Student Researcher

Contact details of Researcher: email howarda5@lsbu.ac.uk

I confirm that I have read and unders	stood the information sheet/project		
brief and/or the student has explaine	ed the above study. I have had the		
opportunity to ask questions.		<u> </u>	
I understand that my participation is	voluntary and that I am free to		
withdraw at any time, without providi	ing a reason.		
I understand that my details will be k	•		
anonymity will be maintained through			
I agree to take part in the above stud	dy.		
Use of my information (please tick	k the box that applies)	Yes	No
Lunderstand that my data/words may	y be quoted in publications, reports,		
· · · · · · · · · · · · · · · · · · ·	•		
posters, web pages, and other resear	arch outputs.		
posters, web pages, and other resear I agree for the data I provide to be st	arch outputs. tored (after it has been anonymised)		
posters, web pages, and other resear	arch outputs. tored (after it has been anonymised)		
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posters, web pages, and other research agree for the data I provide to be st in a specialist data centre and I under research. I agree to the use of anonymised que	arch outputs. tored (after it has been anonymised) erstand it may be used for future otes in publications.	nature	
posters, web pages, and other research agree for the data I provide to be st in a specialist data centre and I under research. I agree to the use of anonymised que	arch outputs. tored (after it has been anonymised) erstand it may be used for future otes in publications. Date Sign	nature	

Project contact details for further information:

Project Supervisor/ Head of Division name: Dr Tony Moss and Professor Ian Albery

Phone: 0207 815 5777

Email address: mossac@lsbu.ac.uk

Yes

No

Debriefing Sheet

An exploration of the motivations to consume alcohol as they relate to context and behaviour.

Thank you for your participation.

The purpose of the research was to understand how different contexts contribute to alcohol use behaviour with the student population. The main reason for examining these factors in the e-questionnaire was to provide details on how different drinking contexts have an influence on alcohol behaviours when considering how to deliver interventions.

This study is phase one of the investigation and phase two involves the use of focus group discussions to explore how effective brief interventions have been in many different settings and to discuss how best to deliver interventions with certain drinkers in the student population.

All data will be stored in secure encrypted files on a computer at the university. Any identifying details will only be stored on record for the prize draws and for contacting participants for other phases of the study. Only student Id numbers will be used to contact any participants. This study has been approved by the Ethical Review Board at London South Bank University, application number: SAS1714.

If you would like to know any more information or would like to discuss further details about how this study was conducted please feel free to contact myself, the researcher, Ashley Howard email howarda5@lsbu.ac.uk or my supervisor Dr Tony Moss — Email mossac@lsbu.ac.uk or the Ethical Review Board SASethics@lsbu.ac.uk

In the case of whether anything may have upset you, please do not hesitate to contact the Student Mental Health and Wellbeing Team at London South Bank University; email: studentwellbeing@lsbu.ac.uk | telephone: 020 7815 6454.

Appendix E - Terms & conditions of prize draw for study 1

Prize draw terms and conditions

- 1. The prize draw (the "Prize Draw") is open to students aged 18 and over who provide their email address after completing the survey, you must be enrolled on a course at London South Bank University to be eligible to enter.
- 2. Supervisors or research colleagues directly related to the research or anyone else connected with the Prize Draw may not enter the Prize Draw.
- 3. Entrants into the Prize Draw shall be deemed to have accepted these Terms and Conditions.
- 4. By submitting your personal email it will be retained for contacting you with regards to the Prize Draw and if you selected to take part in any other part of the research.
- 5. To enter the Prize Draw you must complete the first study on the survey link sent via email from Internal Communications, London South Bank University. A valid email address must be supplied when prompted. If you have any questions about how to enter or in connection with the Prize Draw, please e-mail myself the main researcher Ashley Howard at howarda5@lsbu.ac.uk with Prize Draw in the subject line.
- 6. Only one entry per person. Entries on behalf of another person will not be accepted and joint submissions are not allowed.
- 7. London South Bank University accepts no responsibility is taken for entries that are lost, delayed, misdirected or incomplete or entered for any technical or other reason.
- 8. The closing date of the Prize Draw is 23:59 on 1st December 2017. Studies completed after this date will be retained for research purposes but will not be eligible to be entered into the Prize Draw.
- 9. One winner will be chosen from a random draw of entries received in accordance with these Terms and Conditions. The draw will be performed by a random computer process. The draw will take place on 1 December 2017.
- 10. The winner will receive one £50 Amazon gift Voucher.
- 11. London South Bank University accepts no responsibility for any costs associated with the prize and not specifically included in the prize.
- 12. The winner will be notified by email on or before 2nd December 2017. If a winner does not respond to London South Bank within 28 days of being notified by London South Bank University, then the winner's prize will be forfeited, and London South Bank University shall be entitled to select another winner in accordance with the process described above (and that winner will have to respond to notification of their win within 28 days or else they will also forfeit their prize). If a winner rejects their prize or the entry is invalid or in breach of these Terms and Conditions, the winner's prize will be forfeited, and London South Bank University shall be entitled to select another winner.

- 13. The prize will be sent to the winner from London South Bank University via email.
- 15. The prize is non-exchangeable, non-transferable, and is not redeemable for cash or other prizes.
- 16. London South Bank University retains the right to substitute the prize with another prize of similar value in the event the original prize offered is not available.
- 18. London South Bank University shall use and take care of any personal information you supply to it as described in its privacy policy, a copy of which can be requested from the university directly, and in accordance with data protection legislation. By entering the Prize Draw, you agree to the collection, retention, usage of your personal information in order to process and contact you about your Prize Draw entry and if you selected to participate in another part of the research.
- 19. London South Bank University accepts no responsibility for any damage, loss, liabilities, injury, or disappointment incurred or suffered by you as a result of entering the Prize Draw or accepting the prize. London South Bank University further disclaims liability for any injury or damage to your or any other person's computer relating to or resulting from participation in or downloading any materials in connection with the Prize Draw. Nothing in these Terms and Conditions shall exclude the liability of London South Bank University for death, personal injury, fraud, or fraudulent misrepresentation as a result of its negligence.
- 20. London South Bank University reserves the right at any time and from time to time to modify or discontinue, temporarily or permanently, this Prize Draw with or without prior notice due to reasons outside its control (including, without limitation, in the case of anticipated, suspected, or actual fraud). The decision of London South Bank University in all matters under its control is final and binding and no correspondence will be entered into.
- 21. London South Bank University shall not be liable for any failure to comply with its obligations where the failure is caused by something outside its reasonable control. Such circumstances shall include, but not be limited to, weather conditions, fire, flood, hurricane, strike, industrial dispute, war, hostilities, political unrest, riots, civil commotion, inevitable accidents, supervening legislation, or any other circumstances amounting to force majeure.
- 22. The Prize Draw will be governed by English law and entrants to the Prize Draw submit to the exclusive jurisdiction of the English courts.
- 23. Organisers of the Prize Draw: London South Bank University, PhD student Researcher project Ashley Howard, School of Applied Sciences, Department of Psychology, 103 Borough Road, London, SE1 0AA

Appendix F - ONS classifications for ethnic origin for study 1 & 3

What is your ethnic group?

Choose one option that best describes your ethnic group or background

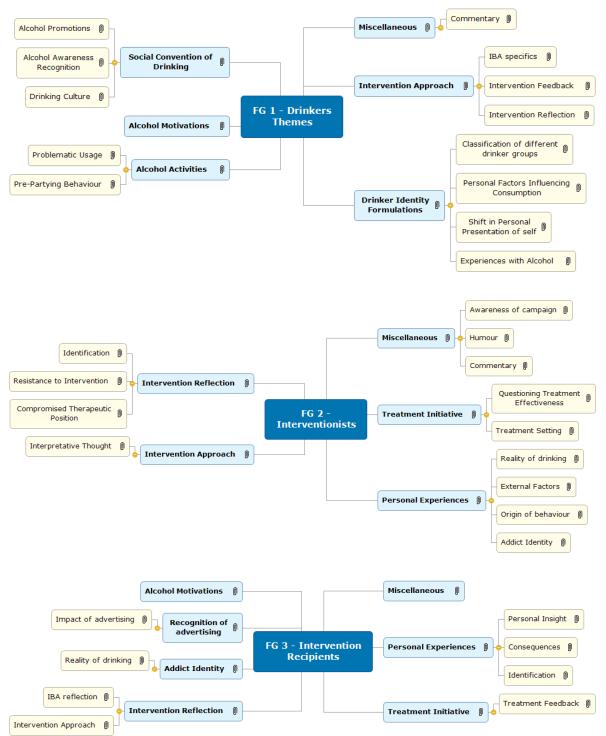
White

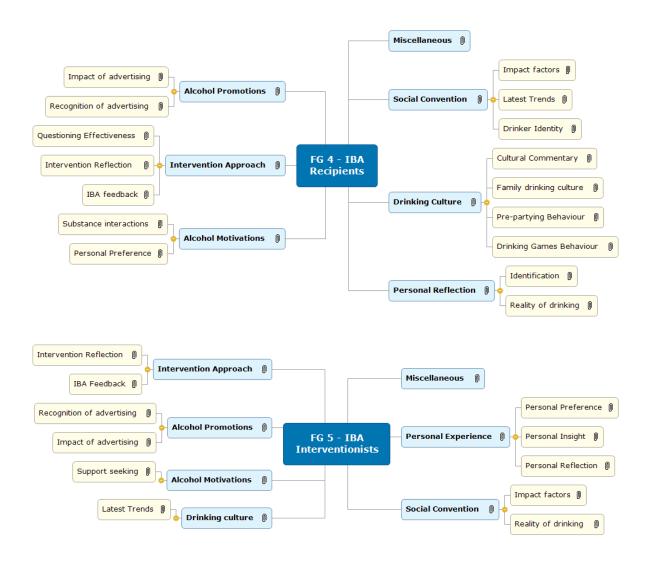
- 1. English / Welsh / Scottish / Northern Irish / British
- 2. Irish
- 3. Gypsy or Irish Traveller
- 4. Any other White background,

Mixed / Multiple ethnic groups

- 5. White and Black Caribbean
- 6. White and Black African
- 7. White and Asian
- 8. Any other Mixed / Multiple ethnic background, Asian / Asian British
- 9. Indian
- 10. Pakistani
- 11. Bangladeshi
- 12. Chinese
- 13. Any other Asian background, Black / African / Caribbean / Black British
- 14. African
- 15. Caribbean
- 16. Any other Black / African / Caribbean background, Other ethnic group
- 17. Arab
- 18. Any other ethnic group,

Appendix G – Thematic Map for Focus groups 1-5





E-questionnaire for Focus group

Start of Block: Informed Consent

Q1

Post Focus Group Questionnaire Thank you for taking part in the focus group last year. The purpose of this questionnaire is to gather information on reasons as to why some individuals do and do not drink. As participant you will be asked a series of questions on alcohol use or reasons for not drinking alcohol. As a participant you will be asked to fill out the questionnaires to the best of your ability answering all questions as they apply to you.

The study should take you around 10 minutes to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the study. However, once all data has been collected and analysed it cannot be removed. If you would like to contact the Principal Investigator in the study to discuss this research, please e-mail myself **Ashley Howard** – howarda5@lsbu.ac.uk or if you would like to speak to one of my supervisors about the nature of the study, please feel free to contact **Professor Tony Moss** – Mossac@lsbu.ac.uk.

This study has been approved by the Ethical Review Board at London South Bank University application number: **SAS1714a.** By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

O I consent, begin the study (1)		
O I do not consent, I do not wish to participate (2)		
kip To: End of Survey If vish to participate	= I do not consent, I do not	
nd of Block: Informed Consent		

Start of Block: Demographic questions

Q2 Please indicate your gender
O Male (1)
O Female (2)
Q3 Please state your age
O please specify in years (1)
Q4 Your current student status: Please indicate
O Full time (1)
O Part time (2)
O Staff (3)
Q5 What level of education are you currently studying at? Please select the most appropriate answer
O Undergraduate (1)
O Post-graduate (2)
O Doctoral Level (3)
O Staff (4)

Q6 Please indicate where you live
O At Home (1)
O At University (2)
O7 What is your othnic group?
Q7 What is your ethnic group? Please choose one option that best describes your ethnic group or background
▼ White - English / Welsh / Scottish / Northern Irish / British (2) Any other ethnic group (18)
Q8 How often do you have a drink containing alcohol?
O Never (0)
C Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)

Skip To: End of Block If How often do you have a drink containing alcohol? = Never

Q5 How many standard drinks of alcohol do you consume on a typical day when you are drinking:
O 1 - 2 (0)
O 3 - 4 (1)
O 5 - 6 (2)
O 7 - 9 (3)
O 10+ (4)
Q10 How often have you had 6 or more drinks in one session of drinking?
O Never (0)
C Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q11 During the past year, how often have you found that you were not able to stop drinking once you had started?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
Oaily or almost daily (4)

because of drinking?
O Never (0)
C Less than Monthly (1)
O Monthly (2)
○ Weekly (3)
O Daily or almost daily (4)
Q13 During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?
O Never (0)
Never (0) Less than monthly (1)
C Less than monthly (1)
Less than monthly (1) Monthly (2)
Less than monthly (1) Monthly (2) Weekly (3)

Q14 During the past year, how often have you had a feeling of guilt or remorse after drinking?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q15 During the past year, have you been unable to remember what happened the night before because you had been drinking?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q16 Have you or someone else been injured as a result of your drinking?
O No (0)
Yes, but not in the past year (2)
Yes, during the past year (4)

Q17 Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?
O No (0)
O Yes, but not in the past year (2)
O Yes, during the past year (4)
Q18 Please select the locations that you typically drink alcohol in? You can select more than one response

Student Union (1)
Pub (2)
Night Club (3)
At home (4)
In Restaurants (5)
Social Events (6)
Sports Venues (7)
Theatres (8)
Concerts (9)
Wine Bars (10)
Social Clubs (11)
Other (Please specify) (12)

Q19 How many drinks on average do you consume per week of Beer, Wines and Spirits? A standard can / pint of beer, Cider / 500ml or Bottle of beer / alcohopop 275/330ml A large glass of wine is 250ml (please note a bottle of wine contains 3 x 250ml glasses) A shot of any spirit 25ml measure

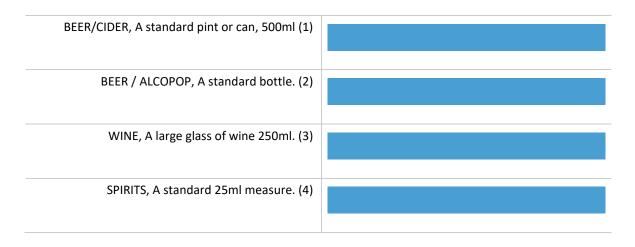
0 5 10 15 20 25 30 35 40 45 50

BEER/CIDER, A standard pint or can of any beer, 500ml. ()
BEER/ALCOPOP, A standard bottle ()
WINE, A large glass of wine 250ml. ()
SPIRITS, A standard 25ml measure. ()

Q20 How long does it take you to consume a drink containing alcohol when you are drinking?

Time to consume a drink containing alcohol in minutes

0 20 40 60



Page Break

Q21 How often would you say you drink for the following reasons:

Because it helps you enjoy a party (1) To be sociable (2) Because it makes social gatherings more fun (3) Because it improves parties and celebrations (4) To celebrate a special occasion with		Almost never (0)	Some of the time (1)	Half of the time (2)	Most of the time (3)	Almost always (4)
Because it makes social gatherings more fun (3) Because it improves parties and celebrations (4) To celebrate a special	helps you enjoy	0	0	0	0	0
makes social gatherings		0	\circ	\circ	\circ	\circ
improves parties and celebrations (4) To celebrate a special	makes social gatherings	0	0	0	0	0
special	improves parties and	0	0	0	0	0
friends (5)	special occasion with	0	\circ	0	0	\circ

Q22 How often would you say you drink for the following reasons:

	Almost never (0)	Some of the time (1)	Half of the time (2)	Most of the time (3)	Almost always (4)
To forget worries (1)	0	0	0	0	0
Because it helps you when you feel depressed or nervous (2)	0	0	0	0	0
To cheer you up when you are in a bad mood (3)	0	0	0	0	0
Because you feel more self- confident and sure of yourself (4)	0	0	0	0	0
To forget your problems (5)	0	\circ	0	0	0

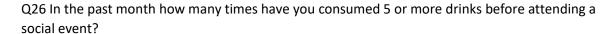
Q23 How often would you say you drink for the following reasons:

	Almost never (0)	Some of the time (1)	Half of the time (2)	Most of the time (3)	Almost always (4)
Because you like the feeling (1)	0	0	0	0	0
Because it's exciting (2)	0	0	0	0	0
To get high (3)		\bigcirc	\circ	\bigcirc	\bigcirc
Because it gives you a pleasant feeling (4)	0	0	0	0	0
Because it's fun (5)	0	\circ	\circ	0	\circ

Q24 How often would you say you drink for the following reasons:

	Almost never (0)	Some of the time (1)	Half of the time (2)	Most of the time (3)	Almost always (4)
Because your friends pressure you to drink (1)	0	0	0	0	0
So that others won't kid you about not drinking (2)	0	0	0	0	0
To fit in with a group you like (3)	0	\circ	0	\circ	\circ
To be liked (4)	0	\circ	\circ	\bigcirc	\circ
So, you won't feel left out (5)	0	\circ	\circ	\circ	\circ

Q23 Have you drunk alcohol before a social event of gathering in the last month:
O Yes (1)
O No (0)
Skip To: Q26 If Have you drunk alcohol before a social event or gathering in the last month? = Yes
Skip To: Q32 If Have you drunk alcohol before a social event or gathering in the last month? = No
Page Break -



0 3 6 9 12 15 18 21 24 27 30

State the number of times you have consumed 5 or more drinks before a social event ()



Q27 How many drinks do you typically consume before attending a social event i.e., Bar, Restaurant, Club?

0 3 5 8 10 13 15 18 20 23 25

State the number of drinks consumed before attending the social event ()



Q28 Please indicate the relevancy of each statement as it applies to your drinking

Not like me

Most like me

0 1 2 3 4 5 6 7 8 9 10

I drink alcohol before a social event because I feel more energised before going out (1)	
I drink alcohol before a social event because having a few drinks makes the night more interesting (2)	
I drink alcohol before a social event because it helps to meet new people and make friends once I go out (3)	
I drink alcohol before a social event because it helps me to Relax or loosen up before going out (4)	
I drink alcohol before a social event because it makes talking to people easier (5)	

Q29 Please indicate the relevancy of each statement as it applies to your drinking

Not like me

Most like me

0 1 2 3 4 5 6 7 8 9 10



Q30 Please indicate the relevancy of each statement as it applies to your drinking

0 1 2 3 4 5 6 7 8 9 10

I drink alcohol before a social event to have more confidence to talk to a potential partner once I go out (1)	
I drink alcohol before a social event to meet a potential partner whilst drinking before going out (2)	
drink alcohol before a social event to increase the likelihood of finding a partner (3)	

.....

	Not like me				N	∕lost	Like	me			
	0	1	2	3	4	5	6	7	8	9	10
I drink alcohol before a social event to avoid getting caught with alcohol on the way to, or at the social event I am attending (1)											
I drink alcohol before a social event because alcohol may not be available or hard to get at the venue (2)											
I drink alcohol before a social event because I am underage and cannot purchase alcohol at the venue (3)											
	n the	e pas	st mo	onth	?						
232 How often have you played drinking games i	n the	e pas	st mo	onth	?						
O Never (0)											
Once (1)											
2- 4 times a month (2)											
2-3 times a week (3)											
4 or more times a week (4)											
kip To: Q41 If How often have you played drinking ga	mes	in the	e pas	t mo	nth?	= Ne	ver				

▼ 1 (1) ... 15+ (17)

Q34 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
To blend in with the crowd (1)	0	0	0	0
To fit in (2)	\circ	\circ	\circ	\circ
Because I don't want to feel left out (3)	0	\circ	0	0
Because other people are playing them (4)	0	0	0	0
Because I am afraid, I will look silly if I don't (5)	\circ	\circ	0	\circ

Q35 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
For the competition (1)	0	\circ	\circ	0
To avoid having to talk to somebody one-to-one (2)	0	\circ	0	\circ
To get practice at that game (3)	0	\circ	\circ	\circ
Because I want to win (4)	\circ	\circ	\circ	0
To take a risk (5)	\circ	\circ	\circ	\circ
To just go wild (6)	\circ	\circ	\circ	\circ
To see the reactions of others when their inhibitions are lowered (7)	0	\circ	0	0

Q36 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
As a way of getting to know other people (1)	0	0	0	0
To make it easier to talk to someone (2)	0	0	0	0
To meet interesting people (3)	0	0	\circ	\circ
To learn things about others (4)	0	0	\circ	\circ
As a way of expressing interest in someone (5)	0	0	0	0

Q37 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
To get drunk (1)	0	\circ	\circ	\circ
To get a buzz (2)	0	\circ	\circ	\circ
Because they are fun (3)	0	\circ	\circ	\circ
To liven up a boring party (4)	0	\circ	\circ	\circ
To have a good laugh (5)	0	\circ	\circ	\circ

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very impo
To relax (1)	0	0	0	(
To forget about problems (2)	0	\circ	\circ	(
To feel better about myself (3)	0	0	0	(
Q39 Please rate hov personal decision to	play drinking gam	atement		comes to yo
	play drinking gam	es?	ments are when it Moderately important (3)	comes to you
Q39 Please rate hov personal decision to	o play drinking game esponse for each sta Not at all	es? atement Somewhat	Moderately	
Q39 Please rate hov personal decision to Please select one re	o play drinking game esponse for each sta Not at all	es? atement Somewhat	Moderately	

Q40 Please rate how important each of the following statements are when it comes to your personal decision to play drinking games?

Please select one response for each statement

	Not at all important (1)	Somewhat important (2)	Moderately important (3)	Very important (4)
Because it is a new experience (1)	0	0	0	0
To try something different (2)	\circ	\circ	\circ	\circ
Because it is a more exciting way to drink (3)	\circ	0	0	0

Page Break

Q41 Student Debrief Thank you for your participation. The purpose of the questionnaire was to gather information on reasons as to why some individuals do and do not drink.

If you would like to know any more information or would like to discuss further details about how this study was conducted, please feel free to contact myself, the researcher, **Ashley Howard** email **howarda5@lsbu.ac.uk** or my supervisor **Professor Tony Moss** – email **mossac@lsbu.ac.uk** or the ethical review board **SASethics@lsbu.ac.uk**. All data will be stored in secure encrypted files on a computer at the university. In the case of whether anything may have upset you, please contact the Student Mental Health and Wellbeing Team at London South Bank University; email: **studentwellbeing@lsbu.ac.uk** | telephone: 020 7815 6454.

Skip To: End of Survey If Student Debrief Thank you for your participation. The purpose of the questionnaire was to gather... Is Displayed

End of Block: Demographic questions

Start of Block: MAAQ

Display This Question:

If How often do you have a drink containing alcohol? = Never

Q42 Please indicate how important each statement is to you personally as a reason for not drinking by selecting the most appropriate response

	Not at all important (0)	Slightly important (1)	Moderately important (2)	Very important (3)	Extremely important (4)
I have a medical condition that is made worse by alcohol (1)	0	0	0	0	0
I have or used to have a drinking problem (2)	0	0	0	0	\circ
I have a genetic condition which makes it hard for my body to handle alcohol (3)	0	0	0	0	
My doctor told me not to drink alcohol (4)	0	0	0	0	0
One or both of my parents have or have had a drinking problem (5)	0	0	\circ	0	0

Q43 Please indicate how important each statement is to you personally as a reason for not drinking by selecting the most appropriate response

	Not at all important (0)	Slightly important (1)	Moderately important (2)	Very important (3)	Extremely important (4)
My family gets upset when I drink alcohol (1)	0	0	0	0	0
I was brought up to abstain from alcoholic beverages (2)	0	0	0	0	0
My family disapproves of drinking alcohol (3)	0	0	0	0	0
I was taught not to drink alcohol (4)	0	\circ	\circ	\circ	0

	Not at all important (0)	Slightly important (1)	Moderately important (2)	Very important (3)	Extremely important (4
My religion does not allow alcoholic beverages (1)	0	0	0	0	0
Drinking alcohol is against my spiritual and	0	\circ	0	0	0
religious beliefs (2)					
beliefs (2)	· · · · · · · · · · · · · · · · · · ·	ant each stateme ppropriate respo Slightly important (1)		onally as a reaso Very important (3)	n for not Extremely important (4
beliefs (2)	cting the most ap	ppropriate respo Slightly	nse Moderately	Very	Extremely

Q46 Student Debrief Thank you for your participation. The purpose of the questionnaire was to gather information on reasons as to why some individuals do and do not drink.

Start of Block: Debrief

If you would like to know any more information or would like to discuss further details about how this study was conducted, please feel free to contact myself, the researcher, **Ashley Howard** email **howarda5@lsbu.ac.uk** or my supervisor **Professor Tony Moss** – email **mossac@lsbu.ac.uk**

or the ethical review board **SASethics@lsbu.ac.uk.** All data will be stored in secure encrypted files on a computer at the university. In the case of whether anything may have upset you, please contact the Student Mental Health and Wellbeing Team at London South Bank University; email: **studentwellbeing@lsbu.ac.uk** | telephone: 020 7815 6454.

Skip To: End of Survey If Student Debrief Thank you for your participation. The purpose of the questionnaire was to ga... Is Displayed

End of Block: Debrief

Enhanced Consent Form

Participant Information Sheet for focus group

Hello fellow students, my name is Ashley Howard, and I am a Doctoral student with London South Bank University currently undertaking research into the area of brief interventions. I invite you to take part in this research study as you are a student at the university currently enrolled on a higher education course. Before you decide whether or not you wish to take part, it is important that you understand why the research is being conducted and what is involved. Please take the time to read the following information carefully.

The subject of brief interventions has been a widely researched area in psychology for the past few decades (Heather, 2010). Many different types of interventions have emerged that target different individuals in numerous contexts. The area that the current research focuses on is Identification and Brief Advice (IBA) which is one of the current leading approaches adopted in GP surgeries under NHS guidelines. It involves the screening of individuals to find out their current level of drinking and give structured information and feedback on the findings with some element of alcohol education being adopted. The current study is the second phase of investigating this area by presenting information on IBA techniques and brief interventions and learning strategies to deliver effective interventions on campus with the student population.

The focus group will take around 60 minutes to complete.

In this phase of the study, you are being invited to take part in focus group discussions. These will be designed to understand how you found the discussion on alcohol / intervention. Each focus group will start with questions based around your experiences before exploring how to improve or alter intervention techniques, specifically IBA. After all discussion questions have been addressed, a full debrief will be offered to the group and individual members depending upon how each member of the group feels.

It is up to you to decide whether or not to you wish to take part. If you decide to take part, you will be given this information sheet for you to keep and asked to sign the enhanced consent form. Even if you decide to take part you are still free to withdraw from the study at any time without giving reason. If you would like to withdraw from the study, please email myself, the main researcher, Ashley Howard, Email - howarda5@lsbu.ac.uk and I will remove all your data from the study and delete all records. As a student if you withdraw from the study, it will have no impact on your marks, assessments, or future studies.

All data will be collected from audio recordings of the focus group discussions and will be kept in secure encrypted files to be analysed by the main researcher. No identifying details will be retained, and participants responses will only be analysed for research purposes. The total time for the study will be around 60 minutes total. In order to opt in and consent to the study itself you will need to complete and return the enhanced consent form to the main researcher. One of the only disadvantages to participating in the study will be the loss of time as it will take 60 minutes for this second phase to be completed. However, a benefit of participating is being paid £10 for your time. Also, another benefit is learning more

detailed information about alcohol use behaviours and intervention research furthering knowledge and understanding on the subject.

All information that is gathered about you and other participants in this study will be kept in secure encrypted files and will remain strictly confidential. The only individuals who will have access to the data will be myself and my supervisors.

All participant data will be kept confidentially on secure files from the moment of completing the focus groups discussions. Anonymity will be maintained throughout with only reference to student email addresses being the main form of communication when analysing data from phase two of the study.

After the studies have been completed, data will be stored securely on encrypted files for a period of 10 years in accordance with the university's code of practice.

The anticipated results of the study once the research has been completed will be published in my doctoral thesis and form part of the series of studies, I will submit for publication in peer reviewed journals at the end of submission. As a participant you can request a copy of the published results of the study and a link to any publication if accepted into a peer reviewed journal.

The research is being part funded by London South Bank University and the Drinkaware Trust. I am a research student conducting the research as part of a studentship awarded to me by the university. The research will form part of the applied sciences literature in the department of Psychology.

The research has been approved by the Ethical Review Board at London South Bank University, application number: SAS1714.

If you require any further information about the nature of the study or any issue to do the research itself please feel free to contact me, Ashley Howard on email howarda5@lsbu.ac.uk or contact my supervisor Dr Tony Moss – email mossac@lsbu.ac.uk

If you have any concerns about the way in which the research has been conducted, please contact Professor Ian Albery - email alberyip@lsbu.ac.uk or the Ethical Review Board SASethics@lsbu.ac.uk.

Thank you for taking the time to complete this survey and agreeing to participate in the study.

With Best Wishes,

Ashley Howard Student Researcher

Research Project Enhanced Consent Form study 2

Full title of Project: Understanding components of brief alcohol intervention delivery within the student environment.

Ethics approval registration Number: SAS1714

Taking part (please tick the box that applies)

Name: Ashley Howard

Researcher Position: Student Researcher

Contact details of Researcher: email howarda5@lsbu.ac.uk

I confirm that I have read and under	rstood the information sheet and the		
student has explained the above stu-	dy. I have had the opportunity to ask		
questions.			
I understand that my participation is	s voluntary and that I am free to		
withdraw at any time, without provi	iding a reason.		
I understand that my details will be	kept strictly confidential, and my		
anonymity will be maintained throu	ighout all phases of the study.		
I understand that I will be posed dis	scussion questions in a group on how		
best to deliver alcohol interventions	s to students.		
I agree to take part in the above stud	dy.		
Use of my information (please tick	k the box that applies)	Yes	No
I understand that my data/words may be quoted in publications, reports,			
posters, web pages, and other research outputs.			
I agree for the data I provide to be stored (after it has been anonymised)			
in a enecialist data centre and Lund	erstand it may be used for future		
in a specialist data centre and i und	orstand it may be ased for factor		
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Project contact details for further information:

Project Supervisor/ Head of Division name: Dr Tony Moss and Professor Ian Albery

Phone: 0207 815 5777 Email address: mossac@lsbu.ac.uk

No

Yes



School of Applied Sciences

Direct Line: 0207 815 5422 E-Mail:dawkinl3@lsbu.ac.uk Ref:SAS1817

Monday 6th, August 2018

Dear Ashley,

RE: Understanding the components of brief alcohol intervention delivery within the student environment

Thank you for submitting your application.

I am pleased to inform you that full Chair's Approval has been given by Dr. Lynne Dawkins, on behalf of the School of Applied Sciences.

I wish you every success

with your research. Yours

sincerely,

Become what you want to be

Participant information sheet IBA intervention exploring alcohol consumption

Hello fellow students, my name is Ashley Howard, and I am a Doctoral student with London South Bank University currently undertaking research into the area of brief interventions. I invite you to take part in this research study as you are a student at the university currently enrolled on a higher education course. Before you decide whether or not you wish to take part, it is important that you understand why the research is being conducted and what is involved. Please take the time to read the following information carefully.

The subject of brief interventions has been a widely researched area in psychology for the past few decades (Heather, 2010). Many different types of interventions have emerged that target different individuals in numerous contexts. The area that the current research focuses on is Identification and Brief Advice (IBA) which is one of the current leading approaches adopted in GP surgeries under NHS guidelines. It involves the screening of individuals to find out their current level of drinking and give structured information and feedback on the findings with some element of alcohol education being adopted.

The current phase of the research is the delivery of an IBA intervention that looks to screen for alcohol consumption, offer information on alcohol use, and provide details on Protective Behavioural Strategies (PBS) for adjusting usage depending upon the current level of consumption.

The intervention itself will last between 7-10minutes in total.

In order to take part, you must fill out the enhanced consent form because the intervention involves a set of follow ups scheduled at 1month and 2months.

You have been asked to participate as you are a student enrolled at the university and you may or may not drink alcohol.

It is up to you to decide whether or not to you wish to take part. If you decide to take part, you will be given this information sheet for you to keep and asked to sign the enhanced consent form. Even if you decide to take part you are still free to withdraw from the study at any time without giving reason. If you would like to withdraw from the study, please email myself, the main researcher, Ashley Howard, Email - howarda5@lsbu.ac.uk and I will remove all your data from the study and delete all records. As a student if you withdraw from the study, it will have no impact on your marks, assessments, or future studies.

All data that is collected will be kept in secure encrypted files to be analysed by the main researcher. No identifying details will be retained, and participants responses will only be analysed for research purposes. The total time for the study will be around 7-10 minutes total. In order to opt in and consent to the study itself you will need to complete and return the enhanced consent form to the main researcher. One of the only disadvantages to participating in the study will be the follow up periods as it asks you to participate 1 month and 2 months later with 7-10minutes being required at each follow up occasion. However, a benefit of participating is that you can enter the draw to win one of two £50 Amazon vouchers. Also, another benefit is learning more detailed information about alcohol use

behaviours and intervention research furthering knowledge and understanding on the subject.

All information that is gathered about you and other participants in this study will be kept in secure encrypted files and will remain strictly confidential. The only individuals who will have access to the data will be myself and my supervisors.

All participant data will be kept confidentially on secure files from the moment of completing the IBA intervention to the end of the follow ups. Anonymity will be applied at the end of the study with only reference to participant numbers and emails for follow up and prize draw being used.

After the studies have been completed, data will be stored securely on encrypted files for a period of 10 years in accordance with the university's code of practice.

The anticipated results of the study once the research has been completed will be published in my doctoral thesis and form part of the series of studies, I will submit for publication in peer reviewed journals at the end of submission. As a participant you can request a copy of the published results of the study and a link to any publication if accepted into a peer reviewed journal.

The research is being part funded by London South Bank University and the Drinkaware Trust. I am a research student conducting the research as part of a studentship awarded to me by the university. The research will form part of the applied sciences literature in the department of Psychology.

The research has been approved by the Ethical Review Board at London South Bank University, application number:

If you require any further information about the nature of the study or any issue to do the research itself please feel free to contact me, Ashley Howard on email howarda5@lsbu.ac.uk or contact my supervisor Professor Tony Moss – email mossac@lsbu.ac.uk

If you have any concerns about the way in which the research has been conducted, please contact Professor Ian Albery - email alberyip@lsbu.ac.uk or the Ethical Review Board SASethics@lsbu.ac.uk.

Thank you for taking the time to complete this IBA intervention and agreeing to participate in the study.

With Best Wishes,

Ashley Howard Student Researcher

Research Project Enhanced Consent Form

Full title of Project: Understanding components of brief alcohol intervention delivery within the student environment.

Ethics approval registration Number:

Name: Ashley Howard

Researcher Position: Student Researcher

Taking part (please tick the box that applies)

Contact details of Researcher: email howarda5@lsbu.ac.uk

I confirm that I have read and understood the information sheet/project		
brief and/or the student has explained the above study. I have had the		
opportunity to ask questions.		
I understand that my participation is voluntary and that I am free to		
withdraw at any time, without providing a reason.		
I understand that my details will be kept strictly confidential, and my		
anonymity will be maintained throughout all phases of the study.		
I agree to take part in the above study.		
Use of my information (please tick the box that applies)	Yes	No
I understand that by participating in the IBA intervention I am agreeing		
to take part in the follow ups at 1 month and 2 months later.		
I agree to complete the AUDIT (Saunders et al. 1993) questionnaire		
during the IBA intervention and the DDQ (Collins, Parks & Marlatt,		
1 1085) at follow ups		
1985) at follow ups. Lagran to discuss any changes to alcohol use or consumption during the		
I agree to discuss any changes to alcohol use or consumption during the		
I agree to discuss any changes to alcohol use or consumption during the IBA intervention and at the follow up period for the next month.		
I agree to discuss any changes to alcohol use or consumption during the IBA intervention and at the follow up period for the next month. I consent to share my alcohol consumption level with the researcher		
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I agree to discuss any changes to alcohol use or consumption during the IBA intervention and at the follow up period for the next month. I consent to share my alcohol consumption level with the researcher during the IBA intervention and at the 1 month & 2 month follow ups. Signature of Participant		
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Project contact details for further information:

Project Supervisor/ Head of Division name: Professor Tony Moss and Professor Ian Albery

Date

Phone: 0207 815 5777

Email address: mossac@lsbu.ac.uk

Name of Researcher

Signature

Yes

No

e-Intervention

Start of Block: Informed Consent

01

IBA Intervention You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. As participant you will be asked questions on some demographics before answering the AUDIT (Saunders et al. 1993) questionnaire which involves questions that ask about alcohol consumption during different time periods. Further questions will be asked relating to strategies to help reduce alcohol consumption.

After this has been completed some information on Protective Behavioural Strategies (PBS) will be presented with some questions. PBS strategies involve the use of techniques to help reduce alcohol consumption e.g., using a designated driver, drinking slowly etc.

The total time for the questionnaire will be around 7-10minutes, and you will receive an email with feedback on your alcohol consumption levels from the main researcher after you have completed the questionnaire.

Your participation in this research is voluntary. You have the right to withdraw from the study during the time of data collection for any reason. Unfortunately, once all data has been received and analysed your responses cannot be removed from the research. If for any reason you wish to withdraw from the study, please contact the main researcher Ashley Howard Email: howarda5@lsbu.ac.uk with a statement requesting for your details to be removed. As a student if you wish to take part or not take part in the study it will have no impact on your marks, assessments, or future studies. Also, if you decide to withdraw from the study, it will have no impact upon your marks, assessments, or future studies. If you would like to contact the Main researcher in the study to discuss this research, please e-mail Ashley Howard — howarda5@lsbu.ac.uk or if you would like to speak to one of my supervisors about the nature of the study please feel free to contact Professor Tony Moss — Mossac@lsbu.ac.uk.

This study has been approved by the Ethical Review Board at London South Bank University application number: SAS1817 By clicking the button below, you acknowledge that your participation in the study is voluntary, you are over 18 years of age, and that you are aware that you may choose to terminate your participation in the study during the time of data collection and for any reason.

Please note that this intervention will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

O I consent, begin the study (1)
O I do not consent, I do not wish to participate (2)
Skip To: End of Survey If do not wish to participate IBA Intervention = I do not consent, I
Q2 To be entered into the prize draw to win one of two £50 Amazon vouchers: The draw will take place on the 1st of December 2018 when the winner will be notified by email, if you would like to be entered into this prize draw, please supply an email address below in order
The terms and conditions of the prize draw is available for your information here: Prize draw terms and conditions Please note: The email address supplied will only be retained for contacting the winner and will not be used by the researchers after the prize draw has been completed.
End of Block: Informed Consent
Start of Block: Demographic questions
Q3 Please indicate your gender
O Male (1)
O Female (2)
O Prefer not to say (3)
Q4 Please state your age
O please specify in years (1)

Q5 Your current student status: Please indicate
O Full time (1)
O Part time (2)
Q6 What level of education are you currently studying at? Please select the most appropriate answer
O Undergraduate (1)
O Post-graduate (2)
O Doctoral Level (3)
Q7 Please indicate where you live
O At Home (1)
O At University (2)
Q8 What is your ethnic group? Please choose one option that best describes your ethnic group or background
▼ White - English / Welsh / Scottish / Northern Irish / British (2) Any other ethnic group (18)

Q9 How often do you have a drink containing alcohol?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Skip To: Q25 If How often do you have a drink containing alcohol? = Never
Q10 How many standard drinks of alcohol do you consume on a typical day when you are drinking?
O 1 - 2 (0)
O 3 - 4 (1)
O 5 - 6 (2)
O 7 - 9 (3)
O 10+ (4)
Q11 How often have you had 6 or more drinks on a single occasion in the last year?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)

Q12 During the past year, how often have you found that you were not able to stop drinking once you had started?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q13 During the past year, how often have you failed to do what was normally expected of you because of drinking?
O Never (0)
O Less than Monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)

Q14 During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q15 During the past year, how often have you had a feeling of guilt or remorse after drinking?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)
Q16 During the past year, have you been unable to remember what happened the night before because you had been drinking?
O Never (0)
O Less than monthly (1)
O Monthly (2)
O Weekly (3)
O Daily or almost daily (4)

Q17 Have you or someone else been injured as a result of your drinking?
O No (0)
Yes, but not in the past year (2)
Yes, during the past year (4)
Q18 Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?
O No (0)
Yes, but not in the past year (2)
Yes, during the past year (4)
Page Break —
Q19 How many drinks on average have you consumed in the past MONTH of: Beer, Wines and Spirits?
A standard can / pint of beer, Cider / 500ml or Bottle of beer / alcohopop 275/330ml A large glass of wine is 250ml (please note a bottle of wine contains 3 x 250ml glasses) A shot of any spirit 25m measure
Beer/Cider, A Standard pint, or any beer, 500ml: (1) Beer/Alcopop, A standard bottle: (2) Wine, A large glass of wine, 250ml: (3) Spirits, A standard 25ml measure: (4)
Total:

Q20 In the past month how many times have you drank alcohol before attending a social event (pre-partied)?
Please state the exact number of times i.e., 3.
Q21 In the past month how many times have you played drinking games?
Please state the exact number of times i.e., 2.
·
Q22 Protective Behavioural Strategies (PBS; Martens et al., 2005)
Many strategies that students employ are designed to help support reducing alcohol consumption and avoid negative consequences as a result of drinking alcohol
Please consider the following list and select the options that you would use when trying to reduce your alcohol consumption
Please feel free to select more than one response

	Having a designated driver (4)
	Setting drinking limits (5)
	Avoid drinking games (6)
	Avoiding pre-partying / drinking before going out (7)
	Drinking slowly instead of chug/gulp (8)
	Switching between alcohol free and alcohol drinks (9)
	Make sure you go home with a friend (10)
	Know where your drink is at all times (11)
	Keep track of how many drinks you have had (12)
	Limit the amount of money you spend on alcohol (13)

Q27 Benefits of Cutting down

Please state what you feel are the most important benefits for you when reducing alcohol consumption

ease feel free to select more than one response					
	Improved Mood (1)				
	Improved Relationships (2)				
	Reduced Risks of drink driving (3)				
	Save money (4)				
	Sleep better (5)				
	More energy (6)				
	Lose Weight (7)				
	No hangovers (8)				
	Reduced Risk of injury (9)				
	Improved Memory (10)				
	Better Physical Shape (11)				
	Reduced risk of high blood pressure (12)				
	Reduced risk of cancer (13)				
	Reduced risk of liver disease (14)				
	Reduced risk of brain damage (15)				

Q23 Informed Consent for Follow ups Please select below if you would like to consent to participate in the second part of this study
O I consent to take part in the follow ups in 1month & 2months time (1)
O I do not consent to take part in the follow ups and wish to only complete this study (2)
Skip To: Q24 If Informed Consent for Follow ups Please select below if you would like to consent to participate = I consent to take part in the follow ups in 1month & 2months time
Skip To: Q25 If Informed Consent for Follow ups Please select below if you would like to consent to participate = I do not consent to take part in the follow ups and wish to only complete this study
Q24 Thank you for consenting to take part in the follow ups Please provide an email and contact number in order to be contacted in 1month and 2months time
O Email (1)
O Phone Contact number (2)
Page Break

Q25 Student Debrief Thank you for your participation. The purpose of the research was to understand how different drinking behaviours can be screened for during standard IBA interventions with the student population. If you have selected to participate in the second part of the study, you will be contacted via email or phone in one month and two months for a short questionnaire for 7-10minutes total. Thank you for your consideration with this request. you would like to know any more information or would like to discuss further details about how this study was conducted, please feel free to contact the main researcher, Ashley Howard email howarda5@lsbu.ac.uk or my supervisor Professor Tony Moss – email mossac@lsbu.ac.uk or please contact **Dr. Lynne Dawkins** on the ethical review board SASethics@lsbu.ac.uk. will be stored in secure password protected files on a computer at the university. In the case of whether anything may have upset you, please contact the Student Mental Health and Wellbeing Team at London South Bank University; email: studentwellbeing@lsbu.ac.uk | telephone: 020 7815 6454. Alternatively, if you feel that you need further support please contact: **Alcohol** concern's Drink-line on 0300 123 1110, Talk to Frank on 0300 123 6600 or The Samaritans on 116 123.

Skip To: End of Survey If Student Debrief Thank you for your participation. The purpose of the research was to understand... Is Displayed

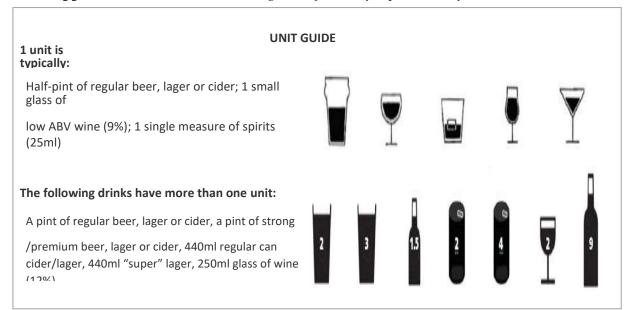
End of Block: Demographic questions

- Log Date Description of Interaction with students when Implementing an IBA
- 1-26/9/2018-2 Individuals refused to take part due to not being interested. 10 individuals were identified as non-drinkers and wished to not take part. 1 individual was concerned about their AUDIT score compared to their peers, they were offered more time to discuss their score, although they refused to continue with the follow ups.
- 2-27/9/2018-1 Individual identified themselves as a staff member and felt that it was a conflict of interest and did not continue the screening. 3 Individuals in a group were enthusiastic until the nature of the study was discussed and subsequently refused to take part.
- 3 2/10/2018 A group of 3 individuals received the IBA and were unsure of the scores that they had received and were reactive to their identified score. Most of the participants refused to take part in the follow ups. Another group of individuals self-identified as light drinkers and scored accordingly on the AUDIT, they were unsure if they could commit further to the follow ups.
- 4 3/10/2018 1 Individual identified as having had a drinking problem in the past and was unsure of wanting to take part in the IBA. They completed the AUDIT and scored zero therefore did not wish to continue.
- 5 5/10/2018 A group of 3 individuals were willing to take part until they realised that it involved 2 follow ups and subsequently withdrew after completing the AUDIT.
- 6 9/10/2018 1 Individual was reactive to their score; they were shocked by how high their identified consumption was based on the AUDIT. This person was offered more time to discuss their score, they received a handout on alcohol risks and was reflective about how others might score.
- 7 10/10/2018 Minimal students were willing to take part initially until they heard more about the prize draw or incentive to take part. One group of 2 were receptive to the feedback based on their score and interested in the research.
- 8-11/10/2018 Some individuals were struggling with deadlines and were unable to commit to completing the follow ups. One person was dumbfounded by their score, and they thought it might be lower. This individual wanted to discuss how student populations differ from the public and if that score would be more sensitive to student groups. The individual was happy to continue with the follow ups as they were studying psychology.
- 9-12/10/2018-A group of undergraduates were new to the university and unsure how RPS points worked and if they would qualify based on taking part. I explained that RPS points were not part of this study although they could be entered into the prize draw to possibly win some amazon vouchers.
- 10 15/10/2018 A few students were unavailable as they had lectures starting soon and wanted to participate later. 1 Individual was interested in the study and how it related to alcoholism which led to a further discussion on addictive issues.
- 11 16/10/2018 A group of 5 individuals were amazed and how high they scored as they stated that they tend to not drink much. The reflective questions added more consideration

to their drinking habits moving forward. They all completed the measures and were interested to continue with the follow ups.

- 12 17/10/2018 Some individuals had a straight refusal to take part as they were not interested in being involved in any research currently.
- 13-24/10/2018-1 Individual was hearing impaired and wanted me to write out the reflective questions once they had completed the AUDIT. They were surprised that they were identified as increasing risk. More time was offered to discuss the score, although they didn't feel the need. They wanted to take part in the follow ups as long as it didn't take up too much time.

Appendix N - *AUDIT-C* screening sheet for study 3 preliminary selection



The following questions are validated as screening tools for alcohol use

AUDIT- C Questions		Scoring system				
	0	1	2	3	4	score
How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times per month	2-3 times per week	4+ times per week	
How many units of alcohol do you drink on a typical day when you are drinking?	1 -2	3-4	5-6	7-9	10+	
How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last year?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
TOTAL:						

A score of **less than 5** indicates *lower risk drinking*

Scores of 5+ indicates increasing or higher risk drinking.