

# UKCTAS Early Career Researcher Meeting 2014

The Leeds Metropolitan Hotel

Wednesday 18<sup>th</sup> June 2014



#UKCTASecr



## UKCTAS

UK Centre for Tobacco & Alcohol Studies



**UKCTAS Early Career Researcher (ECR) Meeting**

**Date:** Wednesday 18<sup>th</sup> June 2014

**Venue:** The Leeds Metropolitan Hotel

<b>08.45 – 09.10</b>	Registration
<b>09.10 – 09.20</b>	Introduction
<b>09.20 – 10.10</b>	Gone in 60 seconds!
<b>10.10 – 10.55</b>	Plenary session 1: 5 reasons early career researchers should blog and 5 ways to get started (Ms Suzi Gage, University of Bristol)
<b>10.55 – 11.15</b>	Tea and coffee break
<b>11.15 – 12.15</b>	Parallel paper session 1 (4 x 10 min talks)
<b>12.20 – 13.00</b>	Parallel plenary session 2: a) Getting published (Prof Marcus Munafò, University of Bristol) b) What makes a good grant? (Dr James Nicholls, Alcohol Research UK)
<b>13.00 – 14.00</b>	Lunch and poster viewing
<b>14.00 – 15.00</b>	Parallel paper session 2 (4 x 10 min talks)
<b>15.05 – 16.05</b>	Interdisciplinary discussions: a) Behaviour and harm epidemiology; b) Population-level intervention research; c) Individual-level intervention research; d) Harm reduction intervention research; e) Policy changes, ethics and industry.
<b>16.05 – 16.25</b>	Tea and coffee break
<b>16.25 – 17.25</b>	Plenary session 3: Career progression in academia and industry (UKCTAS Strategic Management Group and external speakers)
<b>18.30 – late</b>	Evening meal at Shears Yard (11-15 Wharf St, Leeds, LS2 7EH)

## MESSAGE FROM THE ORGANISING COMMITTEE

Dear Colleagues,

It is our pleasure to welcome you to the 2014 UKCTAS Early Career Researcher Meeting!

This meeting has been organised by early career researchers for early career researchers. We hope it will provide you all with the opportunity to present your research in a relaxed, informal environment, as well as offering the opportunity to meet other researchers at similar career stages across the UKCTAS network.

The programme for this event has been carefully designed to incorporate a balance of opportunities to network and present your research or research plans, alongside plenary sessions which we hope will be of particular interest to you at this stage in your career.

We have received many fantastic abstracts for the event this year, and we wish to thank everyone for contributing. We also wish to thank our plenary speakers and discussion facilitators for kindly agreeing to take part in this event.

We really hope that you enjoy the meeting.

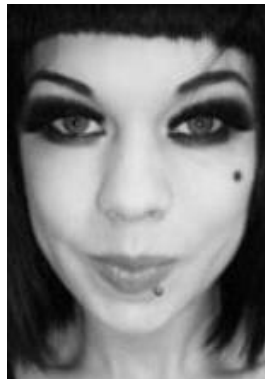
All the very best,

Jen Ware, Rachna Begh, Nicola Lindson-Hawley, and John Holmes

The UKCTAS ECR Event Organising Committee



Rachna Begh



Jen Ware



Nicola Lindson-Hawley



John Holmes

## PLENARY SPEAKER BIOGRAPHIES

**Linda Bauld:** Professor of Health Policy and Director of the Institute for Social Marketing, University of Stirling. Linda Bauld is Professor of Health Policy at the University of Stirling, Director of the Institute for Social Marketing and Deputy Director of the UK Centre for Tobacco and Alcohol Studies. She has a background in applied policy research and for the past 15 years her research interests have centred on the evaluation of public health interventions. She has conducted studies on drug and alcohol use, inequalities in health and, most notably, on tobacco control and smoking cessation. She is a former scientific adviser on tobacco control to the UK government and currently chairs a number of public health advisory and funding committees for NICE, Cancer Research UK and the Scottish government.

**John Britton:** John Britton is Professor of Epidemiology at the University of Nottingham and an honorary consultant in respiratory medicine at Nottingham city hospital. He is director of UKCTAS, chairs the Royal College of Physicians Tobacco advisory group, and is a member of the board of trustees of action on smoking and health (ASH).

**Tim Coleman:** Tim Coleman is a general practitioner and a Professor in Primary Care at the University of Nottingham. He has been a researcher for 20 years working mostly on studies of smoking cessation, with a particular focus on smoking in pregnancy and the use of nicotine replacement therapy; he also researches ways of preventing relapse to smoking after cessation attempts have been initiated. He is a founder-member of UK Centre for Tobacco Control Studies and his university department is in the NIHR School for Primary Care Research.

**Suzi Gage:** Suzi Gage is a PhD epidemiologist at the University of Bristol. She is also an award winning science blogger who writes 'Sifting the Evidence' hosted on the Guardian website.

**Marcus Munafò:** Marcus Munafò is Professor of Biological Psychology in the School of Experimental Psychology at the University of Bristol, and Director of the Tobacco and Alcohol Research Group (<http://www.bristol.ac.uk/expsych/research/brain/targ/>). His group is part of the UK Centre for Tobacco and Alcohol Studies, and the Medical Research Council Integrative Epidemiology Unit at the University of Bristol. He was an undergraduate at the University of Oxford, before moving to the University of Southampton to complete an MSc in Health Psychology and a PhD. Following this, he returned to the University of

Oxford, as a postdoctoral fellow in the Department of Public Health and Primary Care and later the Department of Clinical Pharmacology. In 2004-2005 he spent 6 months as a Visiting Professor at the University of Pennsylvania. In March 2005 took up a tenured position at the University of Bristol. He was promoted to Reader in Biological Psychology in 2008, and Professor of Biological Psychology in 2010.

**James Nicholls:** James Nicholls is Director of Research and Policy Development at Alcohol Research UK and an Honorary Senior Lecturer at the Centre for History in Public Health, London School of Hygiene and Tropical Medicine. He is author of *The Politics of Alcohol: A History of the Drink Question in England* and has written on many aspects of British drinking culture and policymaking. He is co-chair of the Public Health England licensing and public health network and sits on the editorial board of *Drugs: Education, Prevention and Policy*. James has previously been awarded a Knowledge Transfer Fellowship from the Arts and Humanities Research Council to work on local alcohol policymaking and a Mid-Career Fellowship from the British Academy to analyse national alcohol policy from 2000-10. He has also been awarded grants to analyse media representation of alcohol; to explore the role of public health in alcohol licensing; and to run the recent international conference *Under Control?: Alcohol and Drug Regulation, Past and Present*.

**Robin Purshouse:** Robin Purshouse is a Senior Lecturer in the Department of Automatic Control & Systems Engineering (ACSE) at the University of Sheffield. He received the MEng degree in Control Systems Engineering in 1999 and a PhD in Control Systems in 2004 for his research on evolutionary many-objective optimization. Commercial experience includes Logica plc (1999-2000), PA Consulting Group (2003-2007) and Rolls-Royce plc (2007-2008). He returned to the University of Sheffield in 2008 - initially as a Research Fellow in the School of Health and Related Research and joined ACSE as a Lecturer in 2010. Robin was a principal architect of the Sheffield Alcohol Policy Model – one of the most well-known and controversial mathematical models of recent years. He is the holder of an ESRC Future Research Leaders grant award (October 2012 - September 2014) investigating complex systems methods for explaining and predicting drinking dynamics. Robin was promoted to Senior Lecturer in 2014.



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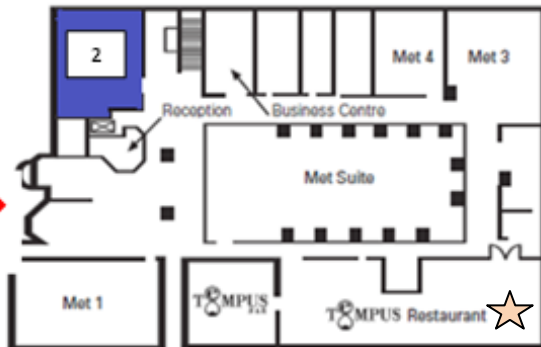
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## MET HOTEL FLOOR PLAN

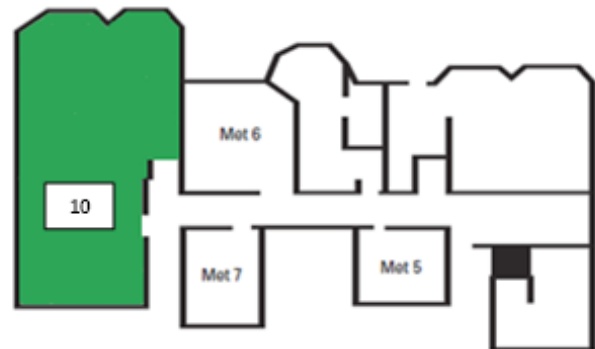
Tea & coffee, posters and cloakroom



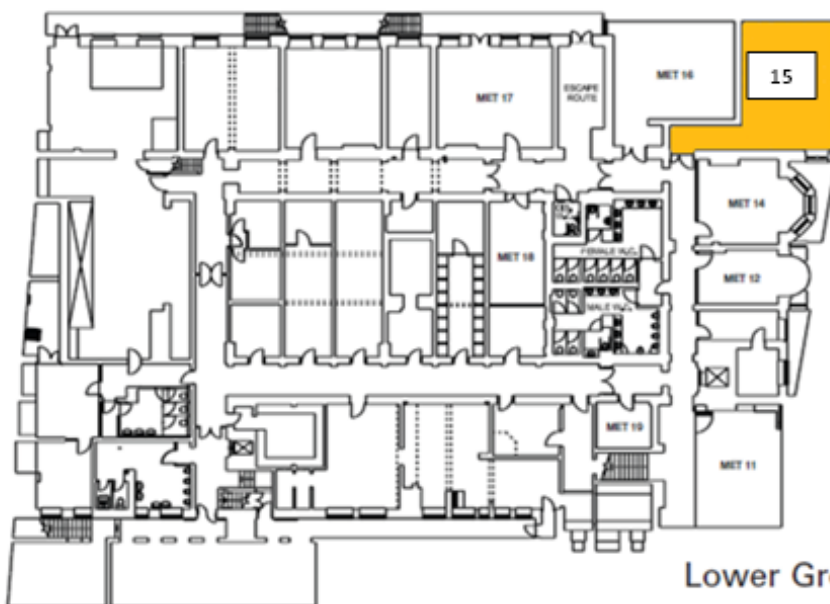
Ground Floor

Entrance

Plenary and parallel sessions



First Floor



Parallel sessions

Lower Ground Floor



## FULL SCHEDULE AND LOCATIONS

Time	Session	Room
8.45	Registration, refreshments and poster set up	Met 2
9.10	Introduction <b>Jen Ware, Rachna Begh, Nicola-Lindson-Hawley &amp; John Holmes</b>	Met 10
9.20	Gone in 60 seconds! Interactive session with all delegates	Met 10
10.10	PLENARY SESSION 1 Using social media in academia <b>Suzi Gage</b> , University of Bristol <i>5 reasons early career researchers should blog, and 5 ways to get started</i>	Met 10
10.55	Tea and coffee break with poster viewing	Met 2
11.15	PARALLEL SESSION 1: Met 15 Harm reduction (Chair- Heide Weishaar)  <b>Neneh Rowa-Dewar</b> University of Edinburgh <i>Doing the best they can: how disadvantaged parents protect their children from smoking in the home</i>	PARALLEL SESSION 1: Met 10 Environmental/Societal influences (Chair -Ilze Bogdanovica)  <b>Jamie Hartmann-Boyce</b> University of Oxford <i>The tobacco industry and personal responsibility for health in the US in the 1950s and 1960s: A discourse analysis</i>  <b>Olivia Maynard</b> University of Bristol <i>Effects of cigarette packaging on neural responses to health warnings</i>  <b>Jenny Hatchard</b> University of Bath <i>The role of evidence in health policy conflicts: The case of standardised packaging of tobacco products in the UK</i>  <b>Caroline Smith</b> University of Edinburgh <i>The social dynamics of giving up smoking</i>
11.30	<b>Gina Martin</b> University of St. Andrews <i>Examining the role of neighbourhood social conditions on adolescent drinking behaviours and motivations</i>	
11.45	<b>Tom Thompson</b> University of Plymouth <i>The recruitment and retention of low-socioeconomic status smokers in a pilot randomised controlled trial supporting smoking reduction with facilitated physical activity</i>	
12.00	<b>Leah Jayes</b> University of Nottingham <i>Evaluation of national smoke-free prison policies</i>	
12.15	Tea and coffee break with poster viewing	Met 2
12.20	PLENARY SESSION 2 – Met 15 <b>Marcus Munafo</b> , University of Bristol <i>Getting published</i>	PLENARY SESSION 2 – Met 10 <b>James Nicholls</b> , Alcohol Research UK <i>What makes a good grant</i>
13.00	Lunch	Tempus restaurant

	PARALLEL SESSION 2: Met 15 Cross-cutting themes (Chair - Eric Robinson)	PARALLEL SESSION 2: Met 10 Mechanisms of action (Session Chair - Colin Angus)
14.00	<b>Marisa de Andrade</b> University of Sterling <i>Using asset-based approaches, co-production and innovative methodologies to explore health inequalities in Glasgow</i>	<b>Jay Duckworth</b> University of Liverpool <i>A look at the specificity of attentional bias towards alcohol cues</i>
14.15	<b>Isabel Fletcher</b> University of Edinburgh <i>Partners, stakeholders or pariahs? How alcohol and food companies seek to reinforce tobacco exceptionalism</i>	<b>Andrew Jones</b> University of Liverpool <i>Alcohol-related and negatively-valenced cues cause disinhibition in social drinkers</i>
14.30	<b>Lucy Gell</b> University of Sheffield <i>Reflections on multidisciplinary working to identify the determinants of addiction: A case study from the Addiction and Lifestyles in Contemporary Europe – Reframing Addictions Project (ALICE RAP)</i>	<b>Lisa Di Lemma</b> University of Liverpool <i>An investigation of the psychological mechanisms that underlie effects of cognitive training on alcohol consumption in young heavy drinkers</i>
14.45	<b>Catherine Tisch</b> University of Edinburgh <i>The density of tobacco and alcohol retailers around homes and schools and the relationship with adolescent risky behaviours in Scotland</i>	<b>Amy Taylor</b> University of Bristol <i>Investigating the possible causal association between smoking and depression and anxiety using Mendelian randomisation meta-analysis: The CARTA consortium</i>
15.00	Break	
15.05	Interdisciplinary discussions a) Behaviour and harm epidemiology ( <b>John Britton</b> ) b) Population-level intervention research ( <b>Robin Purshouse &amp; John Holmes</b> ) c) Individual-level intervention research ( <b>Tim Coleman &amp; Sarah Lewis</b> ) d) Harm reduction intervention research ( <b>Ann McNeill</b> ) e) Policy changes, ethics and industry ( <b>Linda Bauld</b> )	Met 10
16.05	Tea and coffee break	Met 2
16.25	PLENARY SESSION 3 Career progression in academia and industry with the UKCTAS Strategic Management Group and external speakers <b>Tim Coleman</b> , University of Nottingham <b>Linda Bauld</b> , University of Sterling <b>James Nicholls</b> , Alcohol Research UK <b>John Britton</b> , University of Nottingham <b>Robin Purshouse</b> , University of Sheffield	Met 10
17.25	Close	
18.30	Evening meal - at Shears Yard (11-15 Wharf St, Leeds, LS2 7EH)	

# ABSTRACTS

## DOES ATTENTIONAL BIAS PREDICT SMOKING BEHAVIOUR AND TREATMENT SUCCESS?

Begh R<sup>1\*</sup>; Munafò MR<sup>2</sup>; Shiffman S<sup>3</sup>; Ferguson SG<sup>4</sup>; Nichols L<sup>5</sup>; Mohammed MA<sup>6</sup>; Holder RL<sup>5</sup>; Sutton S<sup>7</sup>; Aveyard P<sup>1</sup>.

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**Introduction:** Several theories of drug addiction propose that attentional bias for smoking-related cues may contribute to craving and failure to stop smoking. Some laboratory studies have reported cross-sectional associations between attentional bias, dependence and cigarette craving. There is little epidemiological data on the prospective relation of attentional bias and craving or abstinence during a quit attempt. In this study, we examined whether attentional bias was associated with dependence, craving and cessation outcome in smokers attempting cessation.

**Methods:** 118 cigarette smokers attempted to quit assisted by behavioural support and nicotine patch treatment. Participants performed on a visual probe task and pictorial Stroop task to assess attentional bias two weeks before quitting and again four weeks after quitting. Nicotine dependence was measured using the Fagerström Test of Nicotine Dependence (FTND). Craving was measured on the Mood and Physical Symptoms Scale (MPSS), both prior to quitting and during the quit attempt. Prolonged abstinence was measured and biochemically validated at each clinic visit.

**Results:** Linear regression analyses indicated that baseline attentional bias measured on a visual probe task was not associated with FTND ( $B=-0.06$ , 95% CI= $-0.48$ ,  $0.36$ , for a one standard deviation increase in attentional bias) or baseline craving scores ( $B=0.10$ , 95% CI= $-0.13$ ,  $0.34$ ). Similarly, baseline attentional bias was not associated with attentional bias four weeks after quit day ( $B=-0.02$ , 95% CI= $-5.38$ ,  $5.35$ ) nor craving at four weeks ( $B=0.01$ , 95% CI= $-0.33$ ,  $0.35$ ). Logistic regression analyses revealed that baseline attentional bias did not predict four weeks abstinence (OR= $1.07$ , 95% CI= $0.74$ ,  $1.55$ ). Similarly, there were no associations between baseline attentional bias on a pictorial Stroop task and the variables above.

**Conclusion:** Attentional bias is not related to the severity of tobacco dependence, craving or cessation outcome. These findings suggest that attentional bias is not an important factor maintaining addiction to cigarettes.

**Conflicts of Interest:** None.

## EXPOSURE TO POINT-OF-SALE DISPLAYS AND SUSCEPTIBILITY TO SMOKING AMONG YOUNG PEOPLE IN ENGLAND

*Bogdanovica I<sup>1\*</sup>; McNeill A<sup>2</sup>; Szatkowski L<sup>1</sup>; Britton J<sup>1</sup>.*

<sup>1</sup> *Division of Epidemiology and Public Health, University of Nottingham/ UK Centre for Tobacco Control Studies*

<sup>2</sup> *Addictions Department, Institute of Psychiatry, King's College London/ UK Centre for Tobacco Control Studies*

**Background:** Since 2002 in the United Kingdom most forms of tobacco product advertising and promotion have been banned leaving point-of-sale (PoS) displays and tobacco packaging as a last opportunity for the tobacco industry to promote tobacco products. The aim of this study was to investigate whether exposure to PoS displays is related to changes in susceptibility to smoking or smoking status.

**Methods:** For this study we used individually-linked data for 2,270 children aged 11-16 from two waves of a school based questionnaire survey carried out in March 2011 and March 2012. We explored changes in susceptibility to smoking, defined as absence of a firm decision not to smoke, in relation to exposure to PoS displays. We used multivariable logistic regression to examine the association between exposure variables and changes in susceptibility to smoking between 2011 and 2012.

**Findings:** We found that more frequent exposure to PoS displays was related to a significantly higher risk of becoming susceptible to smoking (OR=1.65; 95% CI 1.16-2.35) after adjusting for potential confounders. However, we did not find statistically significant evidence that higher frequency of exposure to PoS displays leads to a higher risk of becoming a smoker either among susceptible or non-susceptible non-smokers.

**Conclusions:** These findings suggest that exposure to PoS displays makes young people more likely to experiment with smoking, and hence more likely to become a smoker in the future.

**Conflict of interests:** None

## **A BRIEF PERSONALISED INTERVENTION FOR ALCOHOL USE: EVIDENCE THAT ASSESSMENT ALONE CAN BE EFFECTIVE IN REDUCING UNIT CONSUMPTION**

Clarke NC<sup>1, 2\*</sup>; Rose AK<sup>1, 2</sup>; Field M<sup>1, 2</sup>.

<sup>1</sup>*Department of Psychological Sciences, University of Liverpool*

<sup>2</sup>*UK Centre for Tobacco and Alcohol Studies, University of Bristol*

**Introduction:** Recent research suggests that feedback interventions may be important in reducing drinking behaviour (Miller et al., 2012). The current study examines the effect of a brief personalised feedback intervention on (i) fortnightly alcohol unit consumption and binge frequency, (ii) readiness to change (RTC) and (iii) recall of alcohol-related information.

**Method:** A sample of 103 alcohol-using students completed standardised baseline questionnaires [timeline follow-back (TLFB), readiness to change ruler (RTC) and alcohol related problems (AUDIT)] before completing an alcohol related quiz using the NHS Change4Life “Choose Less Booze” website (Department of Health, 2009). Half of the participants (N=52) then received 10 minutes personalised feedback. At 2-week follow-up participants were required to repeat the questionnaire battery and recall the answers to the alcohol questions.

**Results:** The results indicate that both groups significantly decreased their alcohol consumption. The intervention did not increase RTC or increase recall. Positive correlations were found between RTC ruler and AUDIT overall at baseline and follow-up, but not with unit consumption.

**Conclusion:** It was concluded that an assessment only control condition is as efficient as a brief intervention at reducing consumption. With further progress, research into interventions and their mechanisms will be vital in improving current alcohol policy.

**Conflicts of interest:** None

## USING ASSET-BASED APPROACHES, CO-PRODUCTION AND INNOVATIVE METHODOLOGIES TO EXPLORE HEALTH INEQUALITIES IN GLASGOW

de Andrade M<sup>1, 2</sup>

<sup>1</sup> Institute for Social Marketing, University of Stirling

<sup>2</sup> UK Centre for Tobacco and Alcohol Studies

**Introduction:** The Scottish Government advocates using asset-based approaches to tackle health inequalities. Its tobacco control strategy proposes working with communities at greatest risk of unequal health outcomes and a shift away from siloed approaches to consider interactions between tobacco and wider health behaviours such as alcohol. While the language is present in policy, there is a dearth of evidence on translating theory into practice and genuine community engagement. This presentation examines two NHS Greater Glasgow and Clyde (NHSGGC) projects that applied asset-based techniques in deprived/minority ethnic communities.

**Methods:** An innovative methodology was piloted to gather perceptions of illicit tobacco. Participatory radio broadcasting/podcasting workshops were offered to smokers/non-smokers to gather data, improve employability and inspire community members. Social marketing workshops followed. Through a process of creative and innovative co-production, participants contributed to NHSGGC's illicit tobacco campaign. Ethnography was used to engage with Romanian and Slovakian Roma, Pakistani and Polish migrants to explore how they perceive various determinants of health. 35 interviews with community groups/4 focus groups were also conducted.

**Results:** Participants shared detailed views on illicit tobacco, co-produced community campaigns and rejected labels of deprivation. BME groups openly discussed tobacco/shisha use, smoking cessation, alcohol consumption, social connectivity, acceptability of services, addiction and trust.

**Conclusion:** Promotion of health assets may be a valuable tool for tackling illicit tobacco use and health inequalities, but true asset-based approaches are difficult to apply. Community members are critical of tokenistic research and believe the organisational goal is ticking consultation boxes rather than genuine engagement. Research findings should not be dripped into professional discourses without co-production to help sustain meaningful relationships with communities. Practitioners should allow communities to identify knowledge gaps rather than starting with problems such as smoking/drinking. The next phase will test if trusted local champions can build trust/disseminate health messages within hard-to-reach communities.

**Conflicts of interest:** None

## **AN INVESTIGATION OF THE PSYCHOLOGICAL MECHANISMS THAT UNDERLIE EFFECTS OF COGNITIVE TRAINING ON ALCOHOL CONSUMPTION IN YOUNG HEAVY DRINKERS**

*Di Lemma L<sup>1\*</sup>; Field M<sup>1</sup>.*

<sup>1</sup> *Addiction Research Group, Department of Psychological Sciences, University of Liverpool*

**Introduction:** Recent studies (Wiers et al. 2010; Houben et al., 2012; Jones & Field 2013) have shown that cognitive biases for alcohol cues can be modified, resulting in a reduction of alcohol consumption in the lab. However, it is unclear which particular type of cognitive training is effective, and the psychological mechanisms that underlie their effects are not well understood.

**Methods:** In the present study we compared two different forms of training. Heavy drinking young adults (N = 120) completed either cue avoidance training, in which participants repeatedly pushed alcohol cues away from themselves by using a joystick (Wiers et al., 2010), or response inhibition training, in which participants learned to inhibit their motor response whenever alcohol cues were presented (Houben et al., 2012). Both interventions were contrasted with appropriate control conditions ('sham training'). Before and after the training, participants completed a pictorial alcohol Implicit Association Test (Houben et al., 2012), followed by a bogus taste test (a measure of the motivation to drink alcohol).

**Results:** Data collection is currently underway and we will present preliminary findings in June. We expect to replicate previous findings and show that both types of cognitive training lead to reductions in alcohol consumption. The two types of training have never been directly compared with each other so our study will reveal which type of intervention is most effective. We will also explore psychological mediators of the effects of the interventions: we expect both training interventions will lead to changes in implicit alcohol associations, and that these changes will mediate reductions in alcohol consumption during the bogus taste test.

**Conclusion:** Cognitive training interventions hold great promise as interventions for problem drinking, but it is important to know which treatment is most effective and to understand more about the psychological mechanisms that underlie their effectiveness.

**Conflicts of interest:** None.



## A LOOK AT THE SPECIFICITY OF ATTENTIONAL BIAS TOWARDS ALCOHOL CUES

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<sup>1</sup>Department of Psychological Sciences, University of Liverpool

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**Background:** Substance users' cognitive processing of addiction-related stimuli is different to that of non-users. Investigations reveal heavier users/abusers of drugs show greater cognitive or attentional bias (AB) towards drug-related cues than neutral cues, compared with lighter users/abstainers, and that this is likely due to Pavlovian conditioning. However, the reliability of AB measures has been questioned (Ataya et al., 2012). Subsequently, Christiansen and Bloor (2014) have compared alcohol users' performance on an individualised versus generic alcohol Stroop task – they found individualised task performance predicted alcohol use, whereas the generic task did not.

**Method:** The present study aimed to build on such work to assess whether AB towards preferred alcoholic drinks was a more reliable predictor of alcohol use than bias for general alcohol stimuli. Participants' eye movements were concurrently monitored as they completed a dot visual probe task. Participants' preferences and typical alcohol consumption regarding four drinks (vodka, beer, cider and wine) was also recorded. It was predicted that AB would be greater for images depicting preferred alcohol beverages than for non-preferred alcohol beverages.

**Results:** Hierarchical regression analyses revealed that attentional bias specificity appears to possess predictive utility regarding alcohol consumption. General alcohol use (determined by combining z-scores of total unit consumption and AUDIT scores) was predicted by bias towards preferred drinks, but not non-preferred drinks, with AB for preferred alcoholic drinks accounting for 18% of the variance ( $\Delta R^2 = .183$ ,  $p = .012$ ) in alcohol use.

**Conclusions:** Such patterns of results reveal that AB specificity towards preferred alcoholic drinks can predict alcohol consumption, over and above the variance that can be explained by bias for a range of generic alcohol cues. Such findings could potentially lead to better identification tools for individuals at risk of future hazardous use and even interventions (e.g. attentional retraining programmes; Wiers et al., 2013).

**Conflicts of Interest:** None

## **PARTNERS, STAKEHOLDERS OR PARIAS? HOW ALCOHOL AND FOOD COMPANIES SEEK TO REINFORCE TOBACCO EXCEPTIONALISM**

*Fletcher I<sup>1\*</sup>; Collin J<sup>1</sup>; Hill SE<sup>1</sup>; Plotnikova E<sup>1</sup>.*

<sup>1</sup>*Global Public Health Unit, University of Edinburgh*

**Objectives:** The increasing prominence of non-communicable diseases (NCDs) in global health agendas creates opportunities for the development of more coherent approaches to the regulation of the alcohol, tobacco and ultra-processed food industries. One possible starting point for such coherence is Article 5.3 of the WHO Framework Convention on Tobacco Control which excludes the tobacco industry from the making of public health policy. To assess the feasibility of such new forms of governance, we compare how alcohol, food and tobacco companies depict their role in the development and implementation of public health policy.

**Design:** Using NVivo we thematically analysed and coded twenty submissions to Australia's Preventive Health Taskforce, from alcohol, food and tobacco companies and related industry groups.

**Main results:** Although alcohol and food companies strongly reject comparisons with the tobacco industry, they appear to have learnt from its experience. Their submissions rely heavily on ideas of individual responsibility to explain health-damaging patterns of consumption and advocate partnerships with government to tackle "problematic" consumption. These framings are used to argue against more effective and evidence-based approaches, and to portray corporations as socially responsible. Across all three industries, preferred responses include self-regulation of marketing and advertising and targeted education campaigns, rather than more stringent regulation.

**Conclusion:** Tobacco control's comparative success is based on its exclusion of the tobacco industry. The vehemence with which the alcohol and food industries reject comparisons with tobacco speaks to the promise of extending such an approach to these industries.

**Conflicts of interest:** none

**REFLECTIONS ON MULTIDISCIPLINARY WORKING TO IDENTIFY THE DETERMINANTS OF ADDICTION: A CASE STUDY FROM THE ADDICTION AND LIFESTYLES IN CONTEMPORARY EUROPE – REFRAMING ADDICTIONS PROJECT (ALICE RAP).**

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**Introduction:** Studies on the determinants of addiction are found across the natural and social sciences. However, research is usually conducted by individual or closely related disciplines and, as a result, evidence on how determinants from multiple disciplines interact has been slow to emerge. As part of the ALICE RAP project we have drawn together expertise from 10 disciplines to identify the determinants of risky and harmful substance use and gambling. This paper describes a study that explores, with ALICE RAP members, experiences of working with experts from diverse disciplines to further understanding of the determinants of addiction.

**Methods:** Fourteen current ALICE RAP members representing 9 disciplines participated in in-depth interviews in early 2014 to: 1) explore the experience of working in the multidisciplinary team, 2) identify perceived strengths and weaknesses in our approach, 3) provide recommendations for future multidisciplinary collaborations. Data was analysed thematically, drawing out key findings related to the strengths and challenges of our work, as well as key recommendations.

**Results:** Participants described 5 broad strengths of our working process including flexibility, diverse communication strategies, the perseverance and openness to new ideas of our experts, the capability of the steering group and broad discipline coverage. Challenges included the clarity of some roles, issues related to project design such as resourcing, project scope, cultural and linguistic differences and clear expectations, and issues related to progress arising both in and outside of meetings. Four broad recommendations are identified including having: 1) a detailed project blueprint, 2) project staffing with built in resilience, 3) clear expectations of partners, 4) strong face-to-face and remote communication.

**Conclusions:** Understanding how researchers have found the experience of working together can help us and the wider research community to identify factors that contribute to and hinder multidisciplinary research, and how such work may best be undertaken.

**Conflicts of interest:** None.

## A SYSTEMATIC REVIEW OF COGNITIVE TASKS SENSITIVE TO ACUTE ABSTINENCE AND PREDICTIVE OF

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**Introduction:** A better understanding of the underlying mechanisms of nicotine withdrawal is vital in order to develop novel behavioral and pharmacological treatment methods for smoking cessation. Insights from laboratory paradigms could be a cost- and time- effective way of guiding these developments. A comparison of performance after a period of acute abstinence with performance in a smoking- satiated state should indicate cognitive functions affected by nicotine withdrawal in regular smokers. Furthermore, as severity of withdrawal has been related to the ability to quit smoking, it is feasible that cognitive performance predicts long-term cessation outcomes. Testing cognitive performance before a cessation attempt could provide evidence for this, and indicate whether the underlying cognitive functions predictive of outcome are consistent with those sensitive to acute abstinence. Therefore, we conducted a systematic review investigating: a) which cognitive tasks are most sensitive to acute abstinence in smokers, and b) which cognitive tasks are predictive of smoking cessation outcome.

**Methods:** For both questions, the databases Embase, MedLine, Web of Science and PsycInfo were searched. Searches were limited to peer reviewed journal articles written in English and involving healthy volunteers.

**Results:** The initial search revealed 2,673 studies relevant to acute abstinence and 11,459 relevant to cessation. These were evaluated using a pre-defined set of inclusion and exclusion criteria for each topic, resulting in 31 studies for inclusion relevant to acute abstinence and 9 studies relevant to cessation. Cognitive domains investigated predominantly included, for acute abstinence, selective attention, working memory and attention, and, for cessation, attention. Results from those tasks used at least three times (Stroop, Smoking Stroop, Smoking Dot Probe, Mental Arithmetic, Recognition Memory, Delay Discounting in acute abstinence studies) were meta-analyzed. Effects sizes indicated an effect of acute abstinence for Mental Arithmetic (ES= 0.61, 95% CIs 0.14, 1.09), Delay Discounting (ES= 0.39, 95% CIs 0.04, 0.74), and Recognition Memory (ES= 0.81, 95% CIs 0.03, 1.60).

**Conclusions:** Several tasks seemed to be affected by acute abstinence, but as the number of studies was low results should be interpreted with caution. Interestingly none of the tasks designed to measure selective attention in smokers showed any effect. Summarizing the evidence from the review and the meta analysis it seems that, despite being the main focus, attentional reaction time tasks might not be the best way to investigate acute abstinence, and instead delay discounting and memory tasks might yield more robust results.

**Conflicts of interest:** This project is funded by an ESRC PhD studentship with co-funding from Rusan Pharma Ltd.

## THE TOBACCO INDUSTRY AND PERSONAL RESPONSIBILITY FOR HEALTH IN THE US IN THE 1950s AND 1960s: A DISCOURSE ANALYSIS

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**Background and methods:** This research examines the influence of the tobacco industry on American notions of personal responsibility for health in the 1950s and 1960s US and the implications of this influence today through analysing industry documents generated from a systematic search of the Legacy Tobacco Documents Library.

**Findings:** Existing scholarship tends to treat ‘personal responsibility for health’ as an innate cultural value, but the tobacco industry’s active and deliberate influence on this trope is evident when analysing industry documents from the 1950s and 1960s. The industry created new discourses which blamed individuals for their ill health, both through research they openly funded, and through covert actions in the media and academia. In particular, this analysis details the industry’s construction of the ‘constitutional hypothesis,’ namely the theory that personality defects caused smoking and that personality defects caused disease, but that these two phenomena worked independently of each other. Discourses focussing on personality defects remained an effective industry tool to shift blame on to individuals even when the causal link between smoking and disease was acknowledged, as manifested in descriptions of the smoker as guilty, destructive and suicidal and phrasing regarding ‘excess’ versus ‘moderation.’ This was also evident in the ‘substitution’ theory, namely the hypothesis that the need to smoke resulted from a personal flaw that would result in other, less desirable habits should the individual quit smoking.

**Conclusions:** Strategies used by the industry during this period, including front groups promoting personal responsibility, continue to be experienced in modern social landscapes. They are particularly evident in perceptions of blame and personal responsibility in lung cancer patients and in the language used to describe the ‘typical smoker.’ The influence of these strategies can also be seen more widely in policies emphasising individual behaviour and debates about government provision of health care.

**Conflicts of interest:** None

## THE ROLE OF EVIDENCE IN HEALTH POLICY CONFLICTS: THE CASE OF STANDARDISED PACKAGING OF TOBACCO PRODUCTS IN THE UK

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**Introduction:** Transnational tobacco companies (TTCs) have opposed standardised packaging of their products in the UK, arguing that the evidence base is inadequate to justify policy change. In view of the government's contemporary emphasis on evidence-based policymaking, and TTCs' history of creating uncertainty about scientific evidence, we analysed TTCs' consultation submissions to examine what evidence they cited and how they used it to oppose SP.

**Methods:** We analysed evidence cited in submissions from the UK's four largest TTCs using a mixed methods approach. Using content analysis, volume, relevance (subject matter) and quality (measured by independence from industry and peer-review) of evidence cited was compared with evidence from a systematic review of standardised packaging (Moodie et al. 2012). We then purposively selected and thematically analysed two TTC submissions and three TTC-commissioned expert reports using a verification oriented cross-documentary method to ascertain how published studies were used and interpretive analysis with a constructivist grounded theory approach to examine the conceptual significance of TTC critiques.

**Results:** TTCs cited 77 pieces of evidence to support their argument regarding the inadequacy of the evidence for standardised packaging. Of these, just 17/77 addressed standardised packaging: 14 were industry connected and none were published in peer-reviewed journals. Comparison of TTC and systematic review evidence on standardised packaging showed that industry evidence was of significantly lower quality in terms of both tobacco industry connections and peer review ( $p < 0.0001$ ). In citing this evidence, three complementary techniques that misrepresented the evidence base underpinned the TTCs' argument: misquoting of published studies, 'mimicked scientific critique' and 'evidential landscaping'.

**Conclusion:** TTCs' claims that standardised packaging will not deliver health benefits are based on weak evidence. The tools of Better Regulation, particularly stakeholder consultation, provide an opportunity for highly resourced corporations to misrepresent evidence to government in order to delay, weaken or prevent public health policies.

**Conflicts of interest:** AG is a member (unpaid) of the Council of ASH, and was a member of the WHO Expert Committee convened to develop recommendations on how to address tobacco industry interference with tobacco control policy.

## EVALUATION OF NATIONAL SMOKE-FREE PRISON POLICIES

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**Introduction:** Estimates suggest around 80% of prisoners held in establishments in the UK smoke; figures amongst prison staff members are also higher than the national average. Later in 2015 three 'early adopter' prisons in England will go smoke free. This move holds social and operational challenges; engrained smoking culture and use of tobacco as currency, high levels of mental health, negative staff attitudes, and misuse of Nicotine Replacement Therapy (NRT). It is therefore essential to assess and manage prisoners' and staff members' perceptions and views at these early adopter sites as they move towards becoming smoke free.

**Aim:** To evaluate and learn from the introduction of the policy in the designated prisons, to establish best practice, and identify areas which need research if the policy is to be rolled out nationwide.

**Methods:** Preliminary work will be carried out in collaboration with The National Offender Management Service (NOMS) within the pilot sites in 2014; prisoner focus groups will gather information on smoking behaviour and initial feelings towards smoke free legislation, alongside this, passive smoke exposure will be collected by using air monitors placed throughout the prison. In 2015, a full evaluation of the smoke free legislation will involve data being collected three months pre and three months post policy. Part of this evaluation will involve questionnaires and focus groups with prisoners and staff members to establish smoking prevalence, concerns and benefits relating to the policy, carbon monoxide monitoring on prisoner release, air monitoring, and collection of routinely gathered health and security data (e.g. self-harm incidents). The primary outcome will be to compare the views of prisoners and staff members and of objective measures three months prior and three months post policy. Overall, the results will go on to produce guidance for wider application to the prison estate.

**Conflicts of interest:** None



## THE EFFECTS OF ANTICIPATION OF REWARD AND LOSS ON ATTENTION FOR EMOTIONAL FACIAL EXPRESSIONS

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**Introduction:** Anticipation of motivationally salient outcomes (losses or rewards) can result in incongruity effects in attentional bias for stimuli associated with winning or losing opportunities (Rothermund, Voss & Wentura, 2008). On the other hand, literature focused on priming indicates that attention is allocated towards stimuli congruent with the current emotional state (eg. Van Dessel & Vogt, 2012).

**Methods:** The current study used an eye tracking computer task to evaluate the effects of anticipation of winning or losing chocolate on attentional bias for emotional facial expressions [happy, sad, and neutral].

**Results:** Eye movement gaze dwell times were analyzed using a 3 (Face pair: Happy vs Sad, Happy vs Neutral, Happy vs Sad) x 2 (Face type: Expression 1, Expression 2) x 5 (Probability; Definitely win, Maybe win, Cannot win/lose, Maybe lose, Definitely lose) repeated-measures ANOVA. The significant face pair x face type x probability interaction ( $F(8,224) = 3.24, p = .013, \eta^2_p = .104$ ) indicates effects of anticipation of reward/loss on attentional bias for emotional facial expressions. This interaction was driven by the effects of probability on attentional bias on trials when happy versus sad faces were in competition with each other. Post-hoc analyses revealed that participants experienced attentional bias for happy faces (versus sad faces) only during Definitely win and Maybe win trials. However there were no attentional bias effects on Maybe Lose and Definitely Lose trials.

**Conclusions:** Anticipation of reward increases the preferential processing of happy facial expressions rather than sad facial expressions. However, anticipation of loss does not lead to increased attention for sad facial expressions. These results are partially consistent with priming literature, but are inconsistent with the literature on incongruity effects.

**Conflicts of interest:** None

## **ALCOHOL-RELATED AND NEGATIVELY-VALENCED CUES CAUSE DISINHIBITION IN SOCIAL DRINKERS.**

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**Introduction:** Disinhibition, or the ability to stop, change or delay a behaviour that is no longer necessary or appropriate is a fundamental construct associated with heavy drinking. Recent hypotheses suggest that temporary fluctuations in disinhibition may promote alcohol seeking behaviour, and these fluctuations may be caused by exposure to alcohol-related cues. This research set out to examine whether social drinkers demonstrated increased disinhibition to alcohol-related cues, compared with general valenced cues.

**Methods:** 64 participants (32 male) took part in a laboratory study consisting of a stimulus-irrelevant stop signal task with cues (positive, negative, alcohol and neutral) embedded. Valenced cues were chosen from the International Affective Picture System (IAPS) based on pilot ratings. Participants also provided estimates of fortnightly unit consumption, Alcohol Use Disorders Identification Task (AUDIT) scores and craving data.

**Results:** There was a main effect of cue type on stop signal reaction time, a measure of disinhibition ( $F(3, 189) = 2.95, p < .05$ ). Alcohol cues significantly increased disinhibition compared to both neutral ( $p < .05$ ) and positive cues ( $p < .05$ ), but not negative cues ( $p > .10$ ). Negative cues significantly increased disinhibition compared to neutral cues ( $p < .05$ ). Results were not influenced by drinking status (heavy versus light drinkers) or gender.

**Discussion:** Both negatively-valenced and alcohol-related cues led to temporary increases in disinhibition in social drinkers. These findings suggest that the arousing properties of cues, rather than the pictorial content, may influence disinhibition. The findings also support the hypothesis that disinhibition is a transient state influenced by environmental cues. Future research should aim to develop methods of reducing the impact of cues on disinhibited behaviour.

**Conflicts of interest:** None

## THE IMPORTANCE OF PRACTITIONER SMOKING STATUS: A SURVEY OF NHS STOP SMOKING SERVICE PRACTITIONERS

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**Background:** Smoking cessation practitioners who are ex-smokers find their previous smoking status helpful in practice. Many smokers would prefer ex-smoker practitioners, but assume that all practitioners are never smokers. We investigated the smoking status of stop smoking practitioners, the perceived impact of this on their practice, and their reports of clients' success rates.

**Methods:** Respondents were asked questions concerning their smoking status, clients' quit rates and practitioner-client interaction, using a survey of smoking cessation practitioners in the NHS Stop Smoking Services. The association between these was investigated using logistic regression and potential confounders were adjusted for.

**Results:** Half (51%) of the sample (N=484) claimed to be ex-smokers. Most practitioners claimed they had been questioned about their smoking status by a client, with more ex-smokers than never smokers claiming this did not reduce their confidence when offering advice. Never smokers were significantly more likely to report that clients had questioned their ability as a practitioner based on their smoking status. However, there was no significant difference in practitioner self-reports of clients' quit rates between never and former smokers.

**Conclusions:** Not all stop smoking practitioners are never smokers; however the confidence of practitioners who are never smokers may be affected by beliefs of clients and fellow practitioners that former smokers make better practitioners. Clients' quit rates do not seem to differ dependent on the smoking status of their practitioner, so raising awareness of this and the amount of former smokers acting as practitioners could encourage more smokers to use the NHS SSS.

**Conflicts of Interest:** None.

## THE PRELOADING TRIAL: STUDY PROTOCOL FOR AN OPEN LABEL PRAGMATIC RANDOMISED CONTROLLED TRIAL OF NICOTINE PRELOADING FOR SMOKING CESSATION

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**Introduction:** The use of nicotine replacement therapy before quitting smoking is called nicotine preloading. Smokers are typically only advised to use nicotine replacement therapy after quit day, to reduce withdrawal symptoms and craving. Nicotine preloading could improve quit rates by reducing satisfaction from smoking prior to quitting, and breaking the association between smoking and reward. A systematic review suggests that evidence for the efficacy of preloading is inconclusive and further trials are needed.

**Methods:** A multi-centre, UK based, non-blinded, randomised controlled trial, enrolling 1786 smokers who want to quit, funded by the National Institute for Health Research, Health Technology Assessment programme and sponsored by the University of Oxford. Participants will primarily be recruited through general practices and smoking cessation clinics, and randomised (1:1) to use 21 milligram nicotine patches, or not, for four weeks before quitting whilst smoking as normal. All participants will be referred to receive standard stop smoking service support.

**Outcomes:** Follow-ups will take place at 1 week, 4 weeks, 6 months and 12 months post-quit. Primary outcome: prolonged, biochemically verified, 6 month abstinence. Additional outcomes will include abstinence at 4 week and 12 month follow-up, side effects, costs of treatment, and markers of potential mediators and moderators of the preloading effect.

**Discussion:** This large trial will add substantially to evidence on the effectiveness of nicotine preloading, but also on its cost effectiveness and potential mediators, which have not been investigated in detail previously. A range of recruitment strategies have been considered to compensate for challenges encountered in recruiting the large sample, and the multicentre design means that wisdom can be shared between recruitment teams. The pragmatic design means that results will give a realistic estimate of the success of the intervention if it were to be rolled out as part of standard smoking cessation service practice.

**Conflicts of Interest:** None.

## THE UK TOBACCO HARM REDUCTION POLICY DEBATE THROUGH A RISK LENS

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### Abstract

A critical analysis of how the tobacco harm reduction (THR) policy debate enables and constrains policy options and how or what stakeholders gain and lose as a result. Underpinning this research is a theoretical perspective assuming policy-making as an interpretive and historically contingent process involving competing ideas and meanings, and evolving norms. With a particular focus on ideas of risk and their construction this project will seek, with a critical perspective, to understand how public health and industry actors engaged in the tobacco harm reduction debate shape both the THR problem and what solutions are conceivable. A case study design, it will examine two (or three) instances of the debate using a critical policy frame analysis approach to discern how industry and public health stakeholders frame problems and solutions, and identify the role of risk constructions within those frames. It will conclude by considering implications for the wider public health community, both for its approach to tobacco control and in its dealings with industry.

**Conflicts of interest:** none

## **EXAMINING THE ROLE OF NEIGHBOURHOOD SOCIAL CONDITIONS ON ADOLESCENT DRINKING BEHAVIOURS AND MOTIVATIONS**

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### **Abstract:**

The characteristics of the physical and social environments that young people are exposed are known to shape their health behaviours. Past research has suggested a protective effect of the social environment on adolescent alcohol use; however, these studies were primarily conducted in North America with no study examining the role of the social environment on adolescent drinking outcomes in the UK. Additionally, no study has examined differences in drinking motivations of young people as they relate to characteristics of the neighbourhood environment. Gaining a better understanding of how and the extent to which drinking behaviours and motivations are influenced by the social environment can provide a better understanding of the etiology of alcohol use among adolescents and inform the design of targeted intervention and prevention strategies.

Background and methodological considerations will be presented in terms of examining for associations between social neighbourhood level factors and adolescent alcohol use. A socio-environmental framework of adolescent drinking will be presented and supporting research will be discussed. Preliminary results show that individual perceived social cohesion and perceived neighbourhood disorder are associated with weekly drinking and drunkenness.

**Conflicts of interest:** none

## EFFECTS OF CIGARETTE PACKAGING ON NEURAL RESPONSES TO HEALTH WARNINGS

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**Introduction:** Previous neuroimaging studies have found that presenting smokers with smoking-related cues increases activation in brain areas related to reward. However, no neuroimaging studies have yet examined the effects of plain cigarette packaging on brain activation. Our previous research indicates that plain packaging increases visual attention to health warnings among non-smokers and weekly smokers, but not daily smokers, who appear to actively ignore health warnings.

**Methods:** The present study investigated whether there are differences in activation in brain areas related to threat (amygdala) and reward (nucleus accumbens) when viewing plain and branded packs of cigarettes, and whether this differs between smoking groups. Participants underwent a single fMRI scan whilst viewing images of plain and branded cigarettes.

**Results:** A total of 72 participants were recruited, and after exclusions due to poor quality scans, data from 19 non-smokers, 19 weekly smokers and 20 daily smokers were available. Whole-brain analyses indicated that the presentation of branded as compared with plain packs increased activation in the upper visual field around the calcarine sulcus among both non-smokers and weekly smokers. However, this activation was attenuated among daily smokers. Furthermore, bilateral region of interest analyses in the amygdala and nucleus accumbens indicated differences in brain activation in the right amygdala among non-smokers and weekly smokers when they viewed branded and plain packages of cigarettes, but this difference was not observed among daily smokers.

**Conclusions:** Our findings demonstrate for the first time that viewing plain cigarette packaging as compared with branded packaging results in a different pattern of brain activation, particularly in the right amygdala, and that this difference is reduced among daily smokers. These findings extend our previous observations that daily cigarette smokers actively avoid cigarette package health warnings and lend support to the view that plain packaging might be an effective tobacco control strategy.

**Conflicts of interest:** None



## **'IT'S THE END OF THE WORLD AS WE KNOW IT': HOW TOBACCO COMPANIES FRAME PLAIN PACKAGING AS A LOOMING APOCALYPSE**

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**Introduction:** The potential significance of plain packaging to global tobacco control is demonstrated by the scale of international industry efforts to oppose its introduction. This paper maps and appraises the scope of conflicts claimed by tobacco companies between plain packaging and key social and economic objectives.

**Methods:** We undertook a structured thematic analysis of submissions by Phillip Morris International, BAT, Imperial Tobacco and Japan Tobacco International to public consultations in Australia, New Zealand and the UK.

**Results:** All of the companies consistently invoked five broad categories of argument in their submissions. First, they argue that plain packaging contravenes principles of good governance, advanced via claims about poor conduct of impact assessment and criticisms of the consultation processes as subjective and lacking transparency. Second, tobacco companies make wide ranging claims that plain packaging violates multiple domestic laws, trade agreements and human rights obligations. Third, the introduction of plain packaging is portrayed as damaging to national interests by jeopardising international reputations as business-friendly and reliable partners for trade and investment. Fourth, tobacco companies attribute market distorting effects to plain packaging, namely reduction in competition, falling prices and increasing illicit trade in tobacco products. Finally, it is argued that plain packaging is harmful to specific groups including consumers, retailers and taxpayers.

**Conclusions:** Tobacco companies have consistently employed scare tactics of starkly varying credibility to depict plain packaging as socially, economically and democratically damaging. The analysis highlights the multiple claims with which governments must effectively engage in adopting and implementing this key measure.

**Conflicts of interest:** None

## **DOING THE BEST THEY CAN: HOW DISADVANTAGED PARENTS PROTECT THEIR CHILDREN FROM SMOKING IN THE HOME**

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**Introduction:** Children are primarily exposed to secondhand smoke (SHS) and its health risks in the home and car. Children from disadvantaged homes are particularly at risk as their parents are more likely to smoke and to smoke in the home. While smokefree legislation and shifting social norms around smoking and SHS have reduced children's SHS exposure, little is known about how parents of young children living in disadvantaged circumstances view smoking in the home and what shapes their smoking practices in the home.

**Methods:** 25 semi-structured individual interviews with disadvantaged parents of children aged 1-3 years in Scotland in 2013/4, using an innovative floor plan method to prompt accounts. Parents, mostly mothers, were recruited through Early Years Centres which provide support for vulnerable families.

**Results:** Disadvantaged parents reported attempting to protect their children from both SHS and becoming future smokers, motivated by the perceived health and financial burdens entailed. The variable strategies used to protect children in the period from birth to early childhood, reflecting often changing domestic spaces and circumstances, and the challenges of limited living conditions and complex social relationships, are described. Against the backdrop of several intersecting dimensions of disadvantage (unemployment, low income, alcohol/drug and domestic abuse) we explore how the imperative to be, and to be seen to be, a good parent was enacted in relation to smoking in the home. A gendered analysis explored contrasting accounts of mothers' and fathers' interactions with healthcare professionals around smoking and SHS.

**Conclusion:** The changes in parental smoking practices in the period from pregnancy to early childhood, and contextual changes linked with changing domestic living circumstances and relationships identified in this study offer new insights into the challenges that disadvantaged parents face in protecting their children from SHS. This has implications for policy and practice aimed at reducing children's SHS exposure in the home.

**Conflicts of interest:** None

## THE SOCIAL DYNAMICS OF GIVING UP SMOKING

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**Background:** Social networks (SN) are increasingly seen as important in smoking cessation, yet a failure to capture real-world social processes has meant that efforts to develop interventions that increase SN support have been largely unsuccessful.

**Objectives:** To gain a deeper understanding of the social processes that help to shape quit attempts among smokers.

**Design:** A qualitative study, combining a novel, interactive and quitter-centred approach to SN mapping, with a detailed exploration of the complex inter-relationships between participants' social networks and their experiences of quitting. Thirteen participants from diverse socio-demographic backgrounds were recruited through three NHS stop smoking services in Scotland. In-depth interviews were undertaken approximately four weeks after quitting, and a thematic analysis was undertaken.

**Results:** While existing research has portrayed quitters as being passive in relation to their social networks, here the centrality and importance of individual agency emerged as the key issue, with participants adopting three main strategies in an effort to navigate their social networks and sustain their quit attempt: (1) seeking to make sense of family and friends' responses, both in relation to their specific actions (e.g. not/smoking in their presence) and their wider social relationships; (2) managing their social networks, taking control of their social environments (e.g. establishing a home smoking ban) and altering their interactions within them (e.g. avoiding smokers); and (3) using available social resources, drawing on lay stories of quitting as well as modelling their behaviour on, and judging their success against, other quitters.

**Conclusions:** Quitters take a more active role in navigating their social networks than previously suggested, and in doing so they negotiate the day-to-day realities of their existing social relationships. Efforts to develop SN-based smoking cessation interventions must, therefore, look beyond a simple focus on trying to increase social network support.

**Conflicts of interest:** None

## **EXPLORING THE NEED AND OPPORTUNITIES TO MANAGE BINGE DRINKING AMONG UNDERGRADUATE STUDENTS AT THE UNIVERSITY OF SOUTHAMPTON – A QUALITATIVE RESEARCH STUDY**

*Taylor A\*.*

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**Background:** The pattern of binge drinking is prevalent among undergraduates in the UK despite it being associated with many health and social consequences.

**Objectives:** To explore the need and opportunities to manage binge drinking at the University of Southampton, and make recommendations to the University.

**Methods:** Undergraduate students were invited to participate in focus groups and an online survey. 61 sport club executives and 18 staff involved in student welfare were invited to participate in semi-structured interviews. Knowledge, attitudes and perceptions toward binge drinking, as well as opportunities to manage it, were captured. Discussions were tape-recorded and thematically analysed using NVivo.

**Main results:** One focus group (n=3) took place, 11 undergraduates completed the online survey and interviews were conducted with seven sport club executives and nine service providers. The findings indicate students regularly engaged in binge drinking and saw it as a big part of social activities, but did not associate their behaviour with this term or the related consequences. Existing interventions mainly focused upon preventing adverse social consequences, although service providers were unaware of the various efforts within different departments of the University. No monitoring of binge drinking takes place. Increasing non-alcohol events and awareness-raising were warranted.

**Conclusion:** Binge drinking is a problem among the group studied and the data suggests action is required by the University and Students' Union to reduce this behaviour. A number of recommendations were made to the University.

**Follow up action:** The results of this research were disseminated to relevant departments within the University. As a direct result, the Students' Union changed the training that student social representatives receive, shifting the focus to student welfare and discouraging the promotion of binge drinking. This project has also contributed to a review of studies exploring students' health and wellbeing at the University.

**Conflicts of interest:** None

## INVESTIGATING THE POSSIBLE CAUSAL ASSOCIATION BETWEEN SMOKING AND DEPRESSION AND ANXIETY USING MENDELIAN RANDOMISATION META-ANALYSIS: THE CARTA CONSORTIUM

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**Background:** Smoking and depression and anxiety are highly comorbid. Whilst there are plausible biological mechanisms through which smoking may lead to depression and anxiety, causal links are often difficult to infer from observational data due to confounding and reverse causality. These issues can be overcome in Mendelian randomisation analyses, by using genetic variants as proxies for smoking behaviour. Using a variant in the *CHRNA5-CHRNA3-CHRN4* nicotinic acetylcholine receptor gene cluster, which demonstrates robust associations with smoking heaviness in smokers, we aimed to establish whether smoking causes depression or anxiety.

**Methods** We performed a Mendelian randomisation meta-analysis using data on 127,948 individuals from 26 studies in the Consortium for Causal Analysis Research for Tobacco and Alcohol (CARTA). We used logistic regression to look at the associations of the smoking heaviness related variant with binary measures of depression and anxiety. All analyses were stratified by smoking status (never, former, current). We also investigated observational associations between smoking status and smoking heaviness (cigarettes per day) and depression and anxiety.

**Results:** In observational analyses, current smokers were 1.84 times (95% CI: 1.64, 2.06) more likely to be depressed and 1.70 times (95% CI: 1.53, 1.89) more likely to be anxious than never smokers. There was evidence for positive associations between smoking heaviness and depression and anxiety in current smokers (ORs per cigarette per day: 1.03 (95% CI: 1.02, 1.04) for both outcomes). However, in Mendelian randomisation analyses, there was no strong evidence that the *CHRNA5-CHRNA3-CHRN4* variant was associated with depression (OR per minor allele 1.00, 95% CI: 0.95, 1.05) or anxiety (OR 1.02, 95% CI: 0.97, 1.07) in current smokers.

**Conclusions:** Although these findings demonstrate associations between smoking and depression and anxiety, they do not support a causal role of smoking in the development of depression and anxiety.

**Conflicts of Interest:** None

## THE RECRUITMENT AND RETENTION OF LOW-SOCIOECONOMIC STATUS SMOKERS IN A PILOT RANDOMISED CONTROLLED TRIAL SUPPORTING SMOKING REDUCTION WITH FACILITATED PHYSICAL ACTIVITY

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**Introduction:** Little is known regarding the most effective ways to recruit and retain low-socioeconomic status smokers in research trials. Smoking is identified as the leading single contributing factor to health inequalities, and as health inequalities continue to increase, more needs to be done to understand how to engage with low-socioeconomic groups.

**Methods:** Recruitment focussed on two deprived neighbourhoods of Plymouth, UK, via three approaches: 1) invitation letter from their GP, 2) invitation letter from the local NHS Stop Smoking Service, and 3) a range of other community approaches. The number of invitations sent and associated researcher time was recorded to derive recruitment rates and the time required to recruit one participant. Follow ups were at 8 and 16 weeks post baseline. Those who failed to provide data at week 16 were considered lost to follow up. Various logistic regressions were completed to explore factors related to attrition.

**Results:** 99 smokers were randomised. Between 5.1-11.1% of those invited via GP and SSS invitation entered the trial depending on intensity of recruitment activity, with associated researcher time varying between 18-157 minutes to recruit one participant. Other community approaches required 469 minutes of researcher time to recruit one participant. 62% were followed up at week 16. Those who had low confidence to quit and were physically inactive were more likely to be lost to follow up. Exploratory analyses showed several factors linked to whether participants withdrew early or late in the study. It remains unclear whether early success or failure to reduce smoking is linked to attrition.

**Conclusion:** Recruitment of low-socioeconomic status smokers is possible through invitation from GP practices and Stop Smoking Services. Community engagement is largely ineffective and very resource intensive by comparison. Factors have been identified which relate to study attrition and may require more attention in future research.

**Conflicts of interest:** PA has been a consultant and done research for manufacturers of smoking cessation products. RW has undertaken research and consultancy for companies that develop and manufacture smoking cessation medications. He is co-Director of the National Centre for Smoking Cessation and Training and a trustee of the stop-smoking charity, QUIT. He has a share of a patent on a novel nicotine delivery device. All other authors have declared no competing interests.

## THE DENSITY OF TOBACCO AND ALCOHOL RETAILERS AROUND HOMES AND SCHOOLS AND THE RELATIONSHIP WITH ADOLESCENT RISKY BEHAVIOURS IN SCOTLAND

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**Introduction:** Neighbourhood retailing of tobacco and alcohol has been implicated in affecting smoking and drinking behaviours for adults, however, less is known about the effects for adolescents. In this paper we examine how smoking and drinking behaviours of 13 and 15 year olds across Scotland are linked to the density of tobacco and alcohol retailers within their home and school environments.

**Methods:** We brought together three large postcode-referenced datasets; (1) all outlets licensed to sell alcohol for consumption off the premises, (2) all outlets selling tobacco, and (3) survey responses from adolescents involved in the 2010 wave of the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS). Postcode level tobacco and alcohol outlet density measures were created using Kernel Density Estimation (KDE) and joined to the individual responses from SALSUS (n = 20,446). Using logistic regression models we explored the relationships between density of outlets and smoking/drinking behaviours.

**Results:** Those living in the areas of highest tobacco outlet density were 53% more likely to report experimental smoking (95% CI 1.30, 1.81) and 47% more likely to report established smoking (95% CI 1.14, 1.89). Conversely, those attending schools in areas of highest density had reduced odds of experimental smoking (OR 0.66, 95% CI 0.52, 0.82). Results for alcohol environments were not statistically significant.

**Conclusions:** The density of tobacco retail outlets in residential neighbourhoods is associated with increased odds of both experimental and established smoking amongst adolescents in Scotland. Policy makers may be advised to focus on reducing the overall density of tobacco outlets, rather than concentrating on 'child spaces'.

**Conflicts of interest:** None