Processes of Change: What are the Specific Pathways and Project Components that Have a Positive Impact on the Well-Being of Participants in a ‘Well London’ Project?

Cognitive functioning was measured at 43 and 60+ years using two tests: verbal memory (maximum words recalled 45) and visual search (maximum letter searched: 600).

Dietary data was obtained using a 5 days diet diary at age 36 and 43y. An overall score representing level of healthy food choice was derived, by summing scores from five separate criteria: 1. consumption of breakfast (0 no consumption to 2 all days); 2. type of milk (from 0 whole to 3 skim milk); 3. type of bread (from 0 white to 4 wholemeal); 4. number of daily portions of fruit and vegetables (from 0 none to 5 portions/day) and percentages of energy from daily intakes (0-more than 45% energy to 5-less than 30% energy). A total score was derived and further classified as 0 low or 1 higher choice, subject to median split at each age. A cumulative midlife score was further derived as 0 low choice at either age or 1 higher choice at least at one age or both. The confounding variables were father’s social class, childhood cognition, education, adult social class and depression.

Results There was a cross sectional positive association between a higher choice of diet and verbal memory scores at age 43y compared to a lower choice 1.83 (95% CI 1.12 to 2.54). This association was maintained after adjusting for all covariates. There was also a significant association between a midlife cumulative healthier choice of diet and a slower verbal memory from 43 to 60+ in a fully adjusted model 0.69 (1.10 to 1.27) compared to midlife lower choice. There was no association between dietary choice and visual search or visual search decline.

Conclusion Our results suggest that a healthy dietary option based on high intake of fruit and vegetables, complex carbohydrates and cereals made in early midlife is protective of verbal memory decline from mid to later life. Public health interventions based on healthy diets and the prevention of nutritional deficiencies should be considered an important line of defence against cognitive decline and dementia.

The Development of Minimum Unit Pricing of Alcohol in Scotland: A Policy Case Study

Awareness of alcohol as a public health issue has increased in the UK and elsewhere over recent years. Evidence exists to support the use of price mechanisms to address alcohol harms. While various Canadian provinces have used reference pricing to control off-license alcohol prices in state-run monopolies, no country has implemented a uniform minimum unit price (MUP) that applies to all alcohol sales. This policy is being actively considered in Scotland, with legislation likely to be passed this year. Studying developments in Scotland may therefore help those working in public health to improve their engagement with policymakers as well as being of use to other countries seeking to introduce MUP in the future.

Methods Political science theories can be used to identify potential explanations for the development of policy. We draw on a number of theorems to allow a range of explanations to be identified (a ‘multiple-lenses’ approach). Punctuated-Equilibrium Theory (PET) suggests policymakers use their limited time to address a few issues in detail (which can experience major policy change), while paying little attention to most other policy areas. Alternatively, multi-level governance highlights the diversity of actors seeking to influence policy within different governmental levels (venues). The same policy issue can therefore be considered at European Union, Westminster Parliament or Scottish Parliament, for example. We utilise political science theories to provide explanations for the
development of minimum unit pricing for alcohol as a public health policy in Scotland.

**Results** PET highlights the importance of redefining the policy problem so that it becomes a focus for policymaking. This therefore suggests reframing of alcohol as a public health problem amenable to a population-based solution has been instrumental in bringing about consideration of MUP. A multi-level governance framework suggests that the devolution of health (but not trade or taxation policy) to Scottish Parliament illustrates how public health advocates were able to ‘venue shop’ from Westminster to the Scottish Parliament. We also provide a necessary description of the process through which MUP has emerged.

**Conclusion** Political science theories are useful for understanding public health policy developments and could be more widely used by the public health community to inform advocacy or engagement with policymakers. This case study illustrates their value as well as providing more generalisable lessons for public health advocates (such as to seek opportunities for ‘venue shopping’ and an appreciation of the importance of framing of policy issues).

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**PS52 ARE THERE GENDER DIFFERENCES IN THE SOCIAL PATTERNING OF BINGE DRINKING IN THE CZECH REPUBLIC, RUSSIA, POLAND AND LITHUANIA? A CROSS-SECTIONAL STUDY**

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**Background** Binge drinking may have played a central role in mortality fluctuations in the former Soviet Union (fSU). In Eastern Europe, binge drinking is more common in men than women and in men of lower socio-economic position (SEP). Yet intersections of these factors have rarely been addressed with sufficient power to detect social patterns in binge drinking amongst women. The aim of this study was to determine whether there are gender differences in the social patterning of binge drinking in the Czech Republic, Russia, Poland and Lithuania.

**Methods** Cross-sectional baseline data from the HAPIEE (Health, Alcohol and Psychosocial factors in Eastern Europe) study was used. The participants were men and women aged 45–69 years randomly selected from population registers in the Czech Republic, Russia, Poland and Lithuania. Logistic regression was used to examine the association between social factors (education, employment status, household amenities and deprivation) and binge drinking (>100g (men) and >60g (women) ethanol per occasion ≥1x/month) in each gender and country separately. Amenities score was derived from 18 (Lithuania) or 12 (other countries) individual questions on household items. 'Few amenities' was defined as a score in the lowest quartile for the participant’s country.

Tests for interaction between gender and each variable were carried out. Tests for interaction between country and each variable were also completed. Pooled data (all countries) was interpreted where there was no evidence of country heterogeneity.

**Results** There were 34,069 participants with complete data. Amongst men in all countries, all markers of low SEP were associated with increased odds of binge drinking (e.g. OR 1.22, 95% CI 1.10–1.35 for few amenities, fully adjusted model). In women, few amenities (OR 0.81, 0.70–0.94, fully adjusted model), and to a lesser extent low education level, were associated with decreased odds of binge drinking. The associations between social factors, gender and binge drinking were homogenous between countries (few amenities test for country heterogeneity p=0.72 men, p=0.51 women) with the exceptions of education and deprivation in women.

**Conclusion** In Russia and Eastern Europe binge drinking in men and women is socially patterned, but in contrasting ways. Men with lower SEP may binge drink due to social instability and poor coping mechanisms. Women with higher SEP may binge drink due to greater resources and exposure to, and adoption of, male drinking patterns through employment or higher education. Policy to tackle binge drinking should take into account its gender-specific social determinants.