

Home Drinking in Women over 30 years of age. Findings from an internet survey in England

Short title: Drinking at home among women

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There has been a significant shift away from drinking in pubs and bars towards greater alcohol consumption at home. This study investigates the factors associated with hazardous drinking among women who drink at home. A web-based survey of women >30 years (N=411) were recruited from a university staff address book and web sites such as Mumsnet. Sociodemographic characteristics, alcohol consumption (AUDIT), purchasing patterns, and motivations for home drinking (HDAS) were assessed. A cut-off AUDIT score of ≥ 6 was used to defined hazardous drinking (HD). Logistic regression analysis determined factors associated with hazardous drinking. Nearly two thirds of the sample (65.7%) of the sample reported HD. Factors identified with HD included drinking at home everyday, purchasing alcohol as part of weekly shopping and preferring to drink at home. These factors could be used to develop approaches to encourage women to reflect on their alcohol use behaviours.

Keywords: women, hazardous drinking, home drinking, survey, factors

Introduction

Within the last decade, the gap in alcohol consumption between men and women has narrowed significantly compared to previous generations (Slade et al., 2016; Roche and Deehan, 2002; Colell, Sanchez-Niubo & Domingo-Salvany, 2013; Keyes, Grant & Hasin, 2008). Reviews of the literature have emphasized substantial change in levels and patterns of women's alcohol use, particularly among women in younger age groups (Slade et al., 2016; Cheng and Anthon, 2017). A decrease in gender differences has also been found in a range of alcohol-related phenomena including the prevalence of early drinking (Keyes et al., 2010) and alcohol use disorders (Seedat et al., 2009).

According to the Office of National Statistics (ONS) (2016), the number of women whom had drunk alcohol in the past week increased from 52% to 57% (between 2005 to 2014). In 2014, women who were in employment were more likely to drink (60%) than those who were unemployed (39%) and "economically inactive" (44%). In particular, women in managerial or professional occupations were more likely to drink than those in manual occupations (ONS, 2016). Market research data has shown that similar to other western countries including US and Australia (Quora 2019), wine is the most popular drink for women in the UK. In 2014, 70% of British women who binge drank (exceeded 6 units on their heaviest drinking day) consumed wine on their heaviest drinking day compared to 33% (spirits or liqueurs) and 22% normal strength beer, stout or cider (ONS, 2016). Similar trends were evident for non-binge drinkers, with 61% reported drinking wine on their heaviest drinking day (ONS, 2016). It is estimated that 13.4% of women in England drink hazardously, of whom 1.8% are drinking at harmful levels (≥ 35 units per week) (Department of Health 1995) and 0.6% are dependent on alcohol (McManus, Bebbington, Jenkins, & Brugha, 2016).

Several reasons for shifts in levels and patterns of drinking among women have been proposed. The empty nest syndrome has been reported in a number of media articles as an explanation for the increase in women's drinking after their children had left home (Spencer, 2015). Patterson and colleagues (2016) found that women's binge drinking has a higher media profile than men's and was often portrayed young women as "out of control, putting themselves in danger, harming their physical appearance and burdening men" with accompanying moralistic judgements. The Institute of Alcohol Studies (2017) suggest that this may have resulted in older generations of women regarding their own drinking as non-problematic as they do not fit the profile of a "binge drinker." Another explanation for increase in women drinking is associated with the greater numbers of women in the work force compared to previous generations. This has led to a generation of women with greater affluence, independence and disposable income than previous ones (Smith and Foxcroft, 2009). Alternatively, the use of alcohol may be a mechanism of coping with the burden of caring for children and/or older parents. In this context, drinking might represent a "*temporary return to a younger, carefree version of themselves*" (Emslie et al., 2015, p. 437). Cunningham (2017) sets out many of these factors in a press article highlighting how the promotion of alcohol was linked to Christmas and targeted at women, who are seen as controlling most of the spending. There were special drinks such as prosecco and gins aimed at women and the key message was alcohol was integral to enjoying Christmas. Alcohol is marketed at women, not exclusively, by promoting it as fashionable, sophisticated, and fun (EUCAM, 2008). One technique that is often used is to advertise alcohol alongside goods clearly aimed at women, such as handbags, make-up, hair care products and shoes- once more promoting a message of fun and sophistication.

The other trend that has accompanied the greater acceptability of drinking in women is the rise of consuming alcohol at home (Foster and Fergusson, 2012; Drinkaware Monitor, 2017). This is a development that has now been reported in Australia as part of the International Alcohol Control Study (Callinan et al., 2016). Sixty-three percent (n=1789) of the sample (over sampled with risky drinkers) reported consuming alcohol at home compared to 12% in pub bars and nightclubs. In a study about factors associated with hazardous drinking in adults who identified themselves as home drinkers, Foster and Canfield (2017) found that women were at greater risk of hazardous drinking than men. Foster and Canfield (2017) quoted data from the British Beer and Pub Association showing how the percentage of alcoholic drinks purchased in pubs, bars and restaurants (on-sales) had fallen from 2000-2013, this was particularly marked for beer, and cider. Off sales of wine were stable over that period 2000 (88%) and, 2013 (89%), indicating that home consumption of wine has been established for a number of years. Alty and colleagues (2016) postulate eight typologies of drinking in the UK and six of these include home drinking. These are mixed location heavy drinking, heavy drinking at home with a partner, getting together at someone's house, drinking at home alone, light drinking at home with family and light drinking at home with a partner. Overall motivations for home drinking reported in the literature revolve around cost, convenience and relaxation (Foster et al., 2010). It is not known however, whether these sets of motivations are gender-specific.

This study explored factors correlated with hazardous drinking in adult women in England. Emphasis is given to identifying home drinking characteristics and its association with hazardous drinking. Examination of drinking patterns in women

provides opportunity to develop proactive preventive strategies to reduce harmful drinking outcomes.

Methods

Data from two cross-sectional studies examining trends in home drinking was analysed.

Sample and Recruitment

Participants were recruited from two different sources using the same online questionnaire.

- (1) From an internet survey of University of Greenwich staff conducted by Foster and Canfield (2017) in January- July 2012 investigating factors associated with hazardous drinking among adult population who identified themselves as home drinkers (n=488). For the purpose of the present study, only the data from those female participants 30 years of age or over were selected for analysis (n=142)
- (2) A subsequent internet survey conducted in April-July 2016 targeting women 30 years of age or older who identified themselves as home drinkers and not having problems with alcohol. Participants were recruited from the following web sites: mumsnet, gransnet, and the Womens Institute. Female staff and students from University of Greenwich were also invited to participate in the study (n=270).

Both groups were recruited through an invitation-web link to the Qualtrics survey which was available in the web sites. Staff including administration and support staff and students from University of Greenwich were recruited through the University central address book where an invitation email with the survey link included. Participants were required to consent their participation electronically before they could proceed to the survey. Ethical approval for the studies was provided by the University of Greenwich Research Ethics Committee.

Measures

Socio-demographic characteristics

Data were collected on participants' age, living situation (e.g., live alone, with partner and/no children) and gross income.

Alcohol patterns

Alcohol consumption was assessed using the Alcohol Use Disorders Identification Test (AUDIT) scores (Saunders et al., 1993). It consists of 10 questions examining drinking patterns and outcomes over the past 12 months. Total scores range from 0-40. The cut-off score of 6 and above was used to identify at-risk drinking (hazardous drinking) among women. (Reinert and Allen, 2007). Hazardous drinking is defined as a pattern of drinking that increases the risk of physical or mental harm (Department of Health 1995). In addition, participants were asked to report how often in the week they consumed alcohol at home (i.e., none, less than once, once, 2-3 days, everyday) and to report (yes/or not for more than one option) surveying how they purchased their alcoholic drinks (i.e., off-licence, part of weekly shopping, for home parties). There was an option of multiple responses.

Patterns in Home Drinking

There were also a series of questions concerning the context in which alcohol is consumed at home: alone, with family members/housemates, with meals, with entertainment and drinking before going out (preloading). Participants had the option to report (yes/no) for more than one option. The variable 'with entertainment' comprised of watching television/DVDs, playing computer games and reading books or

newspapers. Two measures were collapsed to form a “With Meals” variable, these were drinking alcohol with meals and/or at a barbeque or similar.

Reasons for drinking at home

The nine-item Home Drinking Assessment Scale (HDAS) (Foster et al., 2015) was used to assess two motivational reasons for drinking at home: emotional reasons (3 items) (e.g., *because it helps to relax, because it is convenient*) and practical reasons (4 items) (e.g., *because of childcare issues, because I do not have to drink and drive*). Two additional items were also included, one related to preferring to drink at home and the other, not being comfortable drinking outside home. Each item is scored on a 5-point scale ranging from strongly agree (1) to strongly disagree (5). Items were reversed with high scores indicating greater level of agreement with the statement.

Data Analysis

Descriptive statistics were calculated using frequencies and percentages for categorical data and means and standard deviations for continuous data. Significant differences between samples from the two studies were assessed using t-tests for continuous data and chi-square tests for categorical data. Variables associated with hazardous drinking for AUDIT scores of ≥ 6 were explored. Odds ratios (OR) and 95% confidence intervals (95%CI) were calculated using a logistic regression analysis. Variables with $p < .20$ (equivalent to a small effect size) in the univariate analyses were entered into a separate multivariate logistic regression to ascertain variables associated with drinking status and the amount of variance explained by them.

Results

Demographic characteristics

Table 1 presents the sample characteristics for the total sample. The age mode of the sample was 40-49 years old (32.6%). A similar proportion of participants reported living with a partner only and living in a house with a partner/another adult and children (40.6% and 41.4%, respectively). Nearly fifteen percent (14.9%) reported living alone. The mean annual income of participants was £34,422 (SD 20,371). Participants from Study 1 were older than participants from Study 2.

Drinking patterns

The drinking patterns characteristics are reported in Table 1. The mean AUDIT total score was 6.32 (SD 4.21). Nearly two-thirds of the sample met the criteria for hazardous drinking (65.7%). The most reported activities associated with home drinking were drinking with entertainment (75.6%) and with meals (71.3%). A quarter of the sample reported drinking 2-3 days per week at home. A similar proportion of participants also reporting drinking less than 1 days a week and almost every day of the week. Almost all participants reported purchasing alcohol for home parties (91.9%). A significant proportion of participants also reported buying alcohol as part of weekly shopping (63.7%). While more participants from Study 1 reported drinking alcohol alone at home, preloading, drink almost every day of the week, more participants from Study 2 reported drinking alcohol at home with meals, drinking less frequently in the week and purchasing alcohol from an off licence.

Reasons for drinking at home

The motivational reasons for drinking at home are also reported in Table 1. The HDS scores showed that participants are generally inclined to drink at home as a form of relaxation (M=3.43 out of 5, SD = 1.10), because of the difficulty in smoking in licensed premises (M=3.17, SD = .74) or because they do not feel comfortable drinking outside the home (M=3.18, SD = 1.32). Feeling of safety (M=2.97, SD=1.06) around drink at home and a strong preference for home drinking (2.82, SD=.94) were also perceived as motivational reasons for home drinking.

Table 1 here please

Factors associated with hazardous drinking among home drinking women.

Univariate analysis of variables associated with hazardous drinking are presented in Table 2. Women who reported drinking at home alone were four times more likely to be hazardous drinkers (OR 4.04, 95% CI 1.80-9.09) than those who did not. The odds of drinking hazarously increased by two-fold for those who reported drinking at home with entertainment. There were significant differences in the number of days alcohol was consumed at home weekly according to drinking status; those who reported drinking one day/less than one day/ none were less likely to be hazardous drinkers, while those who reported drinking two/three days a week were over five times more likely to be hazardous drinkers (OR 5.50, 95% CI 3.14-9.23) and those who reported drinking almost every day of the week were over six times more likely to be hazardous drinkers (OR 6.32, 95% CI 3.62-11.04). While women in the hazardous drinking group were more likely to report the three alcohol purchasing patterns than women in the non-hazardous group, the odds ratios of purchasing alcohol as part of weekly shopping (OR 6.49, 95% CI 4.03-10.44) were larger than purchasing alcohol in off-licences (OR 2.84, 95% CI 1.42-5.65) and for home parties (OR 2.44, 95% CI 1.10-5.40). High scores on

preferring to drink at home was also associated with hazardous drinking as were high scores on the motivation reasons of relaxation and drinking and driving.

Table 2 here please

The following variables remained significantly associated with hazardous drinking in the multivariate analysis (Table 3): drinking at home almost every day of the week, purchasing as part of weekly shopping and the preference for drinking at home. This final model explained 61% of variance in the hazardous drinking status.

Table 3 here please

Discussion

In an internet-based survey of women over 30 years of age with levels of median income above the UK norm for full time employees in 2016 (£28,028) (ONS, 2017), nearly two thirds of the sample (65.7%) met the criteria for hazardous drinking as defined by AUDIT scores. Factors identified to be associated with hazardous drinking were drinking every day and purchasing alcohol as part of weekly shopping. The motivational variable that was associated with hazardous drinking was a preference for drinking at home. The factors identified explained a considerable variance (over 60%) in the hazardous drinking status of women that took part in this study.

Currently, there is a small literature on risk and home drinking. In a study on domestic drinking patterns, Holloway et al (2008) found that participants regarded home as safe place to drink, whereas in Foster and Heyman (2013) participants did not see drinking at-home as either safe or unsafe. Foster and Heyman (2013) also found that greater concern was focused on the immediate risks around drinking at home such as falling over and being sick; in contrast long-term health risks tended to be discounted.

Purchasing alcohol as part of the weekly shopping pattern was associated with hazardous drinking. This finding is in contrast to the original study which included male participants (Foster and Canfield, 2017) where only purchasing alcohol at off licence was associated with hazardous drinking. In the current study most weekly shopping was likely to take place in larger supermarkets this suggests that purchasing alcohol in supermarkets to drink at home has become normalised. Other possible indicators of normalisation in this study are the high proportion of at-risk drinkers (65.7%), that at-risk drinking was associated with drinking at home daily and the motivation associated with at-risk drinking was a preference for drinking at home. Thus, there may be a role for public health to consider nudge techniques or similar to discourage hazardous drinking at home in women (Thaler and Sunstein, 2008). These are taking small measures such as providing health education information designed to encourage behaviour change by empowering an individual to make decisions for themselves rather than being told to do so. (Department of Health 2015).

We were able to make direct comparisons between the reasons given by women for drinking at home and a mixed gender sample (Foster and Canfield, 2017). In our study (women only) the significant motivation associated with hazardous drinking at home was preferring to drink at home. In the mixed gender study, the only significant factor relating to reasons for drinking at home was drinking alcohol at home because it is cheaper than drinking out. In the women only sample the cost of alcohol was not related to hazardous drinking. This is consistent with Meier and colleagues (2009) who found that women consumed 79% of their alcohol in off-sales, the equivalent figure for men was 52%. The most common type of alcohol drunk by women over 25 was wine and spirits, which are more expensive than beer, the preferred beverage for men.

Although age was not related to hazardous drinking it is worth noting some characteristics of our sample. No difference was found between samples from study 1 and 2 in drinking status (AUDIT scores), however participants from study 1 were older and reported a greater likelihood on drinking at home alone, preloading and drinking at home almost every day of the week than participants from study 2. Whilst this could be a result of potential sampling bias, future research is required to explore specific generational characteristics that might influence adult working women to drink at home. A recent editorial (Rao and Roche, 2017) has highlighted increasing drinking in a group known as “baby boomers”, people born 1946-1964. In our sample, those individuals 50 years and over were drinking less than in the younger age groups which runs counter to the trends outlined in Rao and Roche (2017). The most likely explanation for this is related to the concept of the “sick- quitter” (Shaper et al., 1988). This hypothesises that people who have developed alcohol or other health problems will either have stopped or significantly reduced their alcohol consumption. Another possible explanation is life course transition. Neve et al (2000) found that transitions/role loss such as retirement was associated with a decrease in alcohol consumption.

Drinking at home to look after children was not associated with hazardous drinking. This is broadly in line with a general trend in England, where adults aged less than 60 who live in households with children are less likely to be drink at hazardous levels than those who live with no children (McManus et al., 2016). One possible explanation is that when individuals drink at home when looking after children they build a series of protective behaviour rituals into their drinking routine. These include not drinking in front of young children, not drinking before a certain time and until young children have been put to bed (Foster and Heyman, 2013). Nevertheless, great concerns exist in England of the scale of parental harmful drinking. It has been estimated that between 5

to 18% of all mothers in England drink at risk levels (i.e., between 15 to 35 units of alcohol per week) (Syed, Gilbert & Wolpert, 2018). Harmful use of alcohol by parents have been associated with increased risks of children neglect and abuse (Hughes et al., 2017) Further research needs to investigate the prevalence and patterns of harmful drink at home among women with dependent children to ascertain how, when and to whom parental status might be a protective to hazardous drinking.

Strengths and limitations

While the cross-sectional approach limits any causal associations, to our knowledge this is the first attempt to collect comparable quantitative data concerning home drinking in women in this age range and as such provides valuable insights. To date, there is very little work in this area and the few studies carried out had concentrated largely on younger women. Further limitations should also be acknowledged. There was a gap of four years between the two surveys and although unlikely we cannot discount the possibility that an individual may have completed both surveys, even though they were asked not to in the information sheet that accompanied the survey. A sample that predominantly consists of staff who work for a University or students may not be typical of women who drink at home however unlike Foster and Canfield (2017) this study does allow researchers to gain some insights into the impact of childcare in this area. Asking individuals about a private behaviour, which could be considered sensitive, and carrying a stigma is by its very nature problematic. Our findings indicate areas for future research and the types of materials for local and national policy makers to design so as to provide information to encourage individuals using “nudge” techniques (Thaler and Sunstein, 2008) to reflect on their own behaviours.

Conclusion

This study provides data that suggests that a significant proportion of drinking at home is potentially hazardous and may lead to latter adverse health outcomes in women aged 30 years of age or more. The variables that predicted hazardous drinking were drinking at home daily, purchasing alcohol as part of weekly shopping and preferring to drink at home. In this group, there was not a significant association between cheaper alcohol and hazardous drinking.

Conflict of Interest

Martha Canfield, Valerie Chandler and John Fosters declare that they have no conflict of interest.

Informed Consent

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000 (5). Informed consent was obtained from all participants for being included in the study.

References

Ally, K., Lovatt, M., Meier, P., Brennan, A., & Holmes J. (2016) Developing a social practice-based typology of British drinking culture in 2009-2011: Implications for alcohol policy analysis. *Addiction*, *111*, 1568–1579.

Borgonovi, F., & Heurta, M. (2010). Education, alcohol use and abuse among young adults in Britain. *Social Science and Medicine*, *71*, 143-151.

Callinan S., Livingston M., Room R., & Dietz P. (2016). Drinking contexts and alcohol consumption: How much alcohol is consumed in different Australian locations? *Journal of Studies of Alcohol and Drugs*, *77*, 612-619.

Cheng, H.G., & Anthon, J.C. (2017). A new era for drinking? Epidemiological evidence on adolescent male–female differences in drinking incidence in the United States and Europe. *Social Psychiatry and Psychiatric Epidemiology*, *52*, 117–126.

Institute of Alcohol Studies (2017). Factsheet Women and Alcohol. Retrieved 7 December, from: <http://www.ias.org.uk/Alcohol-knowledge-centre/Alcohol-and-women.aspx>

Colell, E., Sanchez-Niubo, A., & Domingo-Salvany, A. (2013). Sex differences in the cumulative incidence of substance use by birth cohort. *International Journal of Drug Policy*, *24*, 319–25.

Cunningham, C. (2017). Gin filled Christmas baubles, pink port, and glitter to pep up prosecco: How women are being cynically seduced in to drinking too much. *The Daily Mail*. Retrieved 7 December, from: <https://www.dailymail.co.uk/femail/article-5129965/women-cynically-seduced-drinking-much.html>

Department of Health (2015). Nudging in Public Health-An ethical framework. A report by the National Advisory Committee on Bioethics (Ireland). Retrieved 7 December, from: <https://health.gov.ie/wp-content/uploads/2016/04/Nudging-in-Public-Health-Ethical-Framework-Dec-2015.pdf>

Department of Health. (1995). *Sensible Drinking - The Report of an Inter-Departmental Working Group*. London, Crown Copyright.

Drinkaware Monitor. (2017). *UK adults drinking behaviour and attitudes*. Retrieved from <https://www.drinkaware.co.uk/research/our-research-and-evaluation-reports/drinkaware-monitor-2017/>

Emslie, C., Hunt, K., & Lyons, A. (2015). Transformation and time-out. The role of alcohol in identity construction among Scottish women in early mid-life. *International Journal of Drug Policy*, 26, 437-455.

European Centre for Monitoring Alcohol Marketing. (2008). *EUCAM Report: Women the new market. Trends in Alcohol Marketing*. Retrieved 7 December, from: http://www.ias.org.uk/uploads/pdf/Women/women_the_new_market_final.pdf

Foster, J.H., & Canfield, M. (2017). Predictors of hazardous drinking among home drinkers. *Journal of Substance Use*, 22, 637-642.

Foster, J.H., & Ferguson, C. (2012). Home Drinking: A key challenge for Public Health. Is this Home Drinking in the UK: Trends and causes? *Alcohol and Alcoholism*, 47, 355-358.

Foster, J.H., & Ferguson, C. (2014). Alcohol Preloading a review of the literature. *Alcohol and Alcoholism*, 49, 213-226.

Foster, J.H., & Heyman, B. (2013) Drinking alcohol at Home and in public places and the time framing of risks. *Health, Risk and Society, 15*, 511-524.

Foster, J.H., Martin, C., & Patel, S. (2015). The initial measurement structure of the Home Drinking Assessment Scale (HDAS). *Drugs Education Prevention and Policy, 22*, 410-416.

Foster, J.H., Reade, D., Karunanithi, S., & Woodward V. (2010). Why do adults drink at home? *Journal of Public Health, 32*, 512-518.

Holdcraft, L., & Iacono, W. (2002). Cohort effects on gender differences in alcohol dependence. *Addiction, 97*, 1025-36.

Holloway, S., Jayne, M., & Valentine, G. (2008). Sainsburys is my local: English alcohol policy, domestic drinking practices and the meaning of home. *Transactions of the Institute of British Geographers, 33*, 532-47.

Hughes, K., Bellis, M.A., Hardcastle, K.A., Sethi, D., Butchart, A., Mikton, C., Jones, L. & Dunne, M.P. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet Public Health, 2*, e356-e366.

Institute of Alcohol Studies. (2017). Factsheet Women and Alcohol. Retrieved 7 December, from: <http://www.ias.org.uk/Alcohol-knowledge-centre/Alcohol-and-women.aspx>

Keyes, K. M., Grant, B.F., & Hasin, D.S. (2008). Evidence for a closing gender gap in alcohol use, abuse, and dependence in the United States population. *Drug Alcohol Dependence, 93*, 21-9.

Keyes, K.M., Martins, S., Blanco, C., & Hasin, D.S., (2010). Telescoping Gender differences in alcohol dependence: New Evidence from two national surveys. *American Journal of Psychiatry*, *167*, 969-76.

McManus, S., Bebbington, P., Jenkins, R., & Brugha, T. (eds.) (2016). Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014. Retrieved 7 December, from:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/556596/apms-2014-full-rpt.pdf

Meier, P., Purshouse, R., & Brennan, A. (2009). Policy options for alcohol price regulation: the importance of modelling population heterogeneity. *Addiction*, *105*, 383-393.

Neve R., Lemmens P., & Drop M. (2000). Changes in alcohol use and drinking problems in relation to role transitions in different stages of the life course. *Substance Abuse*, *21*, 163-178.

NHS Digital. (2016). Health Survey for England 2015 Adult Alcohol Consumption. Table 3. Retrieved 7 December, from:

<https://files.digital.nhs.uk/publicationimport/pub22xxx/pub22610/hse2015-adult-alc.pdf>

Office of National Statistics. (2011). Mothers in the Labour Market. Retrieved 7 December, from:

https://webarchive.nationalarchives.gov.uk/20160109015748/http://www.ons.gov.uk/ons/dcp171776_234036.pdf

Office of National Statistics. (2016). Adult drinking habits in Great Britain: 2014, Figure 1. Retrieved 7 December, from:

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/drugusealcoholandsmoking/bulletins/opinionsandlifestylesurveyadultdrinkinghabitsingreatbritain/2014>

Office for National Statistics. (2017). Adult drinking habits in Great Britain, 2017 dataset, Table 2a. Retrieved 7 December, from:

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/drugusealcoholandsmoking/datasets/adultdrinkinghabits>

Office for National Statistics. (2017). Annual Survey of Hours and Earnings: 2017 provisional and 2016 revised results. Retrieved 7 December, from:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2017provisionaland2016revisedresults>

Oxford English Dictionary. (2018). Oxford English Dictionary The definitive record of the English language. Retrieved 7 December, from: <http://www.oed.com/>

Patterson, C., Emslie, C., Mason, O., Fergie, G., & Hilton, S. (2016). Content analysis of UK newspaper and online news representations of women's and men's "binge drinking" a challenge for communicating evidence-based messages about single-episodic drinking? *BMJ Open*, 6, e013124.

Quora. (2019). It seems like women prefer wine more than men? Is this true, and if yes - why? Retrieved 7 December from:

<https://www.quora.com/It-seems-like-women-prefer-wine-more-than-men-Is-this-true-and-if-yes-why>

Rao, R., & Roche, A. (2017). Substance misuse in older people- Baby boomers are the population at highest risk. *BMJ*, 358, j3885.

Reinert, D., & Allen, J. (2007). The Alcohol Use Disorders Identification Test (AUDIT): An update of research findings. *Alcoholism Clinical and Experimental Research*, 31, 185-199.

Roche, A.M., & Deehan, A. (2002). Women's alcohol consumption: emerging patterns, problems and public health implications. *Drug and Alcohol Review*, 21, 169-178.

Saunders, J., Aasland, O., Babor, T., de la Fuente, J., & Grant, M. (1993) Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption--II. *Addiction*, 88,791-804.

Seedat, S., Scott, K.M., Angermeyer, M.C., Berglund, P., Bromet, E.J., Brugha, T.S., Demyttenaere, K., de Girolamo, G., Haro, J.M., Jin, R., Karam, E.G., Kovess-Masfety, V., Levinson, D., Medina Mora, M.E., Ono, Y., Ormel, J., Pennell B.E., Posada-Villa, J., Sampson, N.A., Williams, D., & Kessler, R.C. (2009). Cross-national associations between gender and mental disorders in the World Health Organization World Mental Health Surveys. *Archives of General Psychiatry*, 66, 785–795.

Syed, S., Gilbert, R., & Wolpert, M. (2018). Parental alcohol misuse and the impact on children: A rapid evidence review of service presentations and interventions. Retrieved 8 December, from: <https://www.ucl.ac.uk/children-policy-research/sites/children-policy-research/files/parental-alcohol-misuse-and-impact-on-children.pdf>

Shaper, A.G., Wannamethee, G. & Walker, M. (1998). Alcohol and mortality in British men: explaining the U-shaped curve. *Lancet*, 2, 1267–1273.

Slade, T., Chapman, C., Swift, W., Keyes, K., Tonks, Z., & Teesson, M. (2016). Birth cohort trends in the global epidemiology of alcohol use and alcohol-related harms in men and women: systematic review and metaregression. *BMJ Open*, 6, e011827.

Smith, L., & Foxcroft, D., (2009). Drinking in the UK: an exploration of trends.

Retrieved 7 December, from: <https://www.jrf.org.uk/report/drinking-uk-exploration-trends>

Spencer, B. (2015). Empty nest mums are Britain's worst problem drinkers: Two fifths admit consuming more than their grown-up children. Retrieved 7 December, from:

<http://www.dailymail.co.uk/news/article-3338828/Empty-nest-mums-Britain-s-worst-problem-drinkers-Two-fifths-admit-consuming-grown-children.html>

Thaler, R.H., & Sunstein, C.R. (2008). *Nudge: Improving Decisions about Health, Wealth and Happiness*. New Haven, Yale University Press.

Table 1. Sample characteristics: demographics, drinking patterns, home drinking motives

VARIABLES	Total study (N=411)	Study 1 (N=141)	Study 2 (N=270)	p (study 1 vs. study 2)
Demographic characteristics				
Age, <i>mode</i> (%)	40 – 49 (32.6%)	40-49 (38.3%)	30 – 39 (36.7%)	<.001
Age groups, <i>N</i> (%)				
30 – 39	118 (28.7%)	19 (13.5%)		
40 – 49	134 (32.6%)	54 (38.3%)	99 (36.7%)	
50 – 59	121 (29.4%)	52 (36.9%)	80 (29.6%)	
60 or over	38 (9.2%)	16 (11.3%)	69 (25.6%) 22 (8.1%)	
Living situation, <i>N</i> (%)				
Alone	61 (14.9%)	26 (18.6%)	35 (13.0%)	.130
Partner only	167 (40.6%)	75 (53.2%)	62 (23.0%)	<.001
Partner/other adult with children	170 (41.4%)	57 (40.4%)	113 (41.9%)	.780
Parents	14 (3.5%)	4 (3.0%)	5 (3.7%)	.696
Friends	13 (3.2%)	6 (4.3%)	7 (2.6%)	.354
Annual income, <i>mean</i> (<i>SD</i>)	30,809 (20,126)	29,054 (15,599)	30,993 (20,538)	.668
Drinking patterns				
AUDIT total score, <i>mean</i> (<i>SD</i>)	6.32 (4.20)	6.37 (3.42)	6.28 (4.57)	.836
Hazardous drinking, <i>N</i> (%)*	270 (65.7%)	123 (65.4%)	147 (65.7%)	.916
Home drinking context, <i>N</i> (%)				
Drinking alone	50 (15.1%)	43 (38.4%)	7 (3.2%)	<.001
With family members/housemates	88 (27%)	34 (27.6%)	54 (26.6%)	.837
With Meals	259 (71.3%)	47 (38.2%)	212 (88.3%)	<.001
With Entertainment ¹	251 (75.6%)	81 (73.6%)	170 (76.6%)	.557
Preloading ²	166 (48.7%)	83 (62.9%)	83 (39.7%)	<.001
Number of days alcohol consumed at home (per week), <i>N</i> (%)				
Less than 1 day	100 (25.0%)	14 (3.5%)	86 (21.5%)	<.001
1 day	75 (18.8%)	34 (8.5%)	41 (10.3%)	.016
2-3 days	103 (25.8%)	27 (6.8%)	76 (19.0%)	.069
Almost every day	96 (24.0%)	53 (13.3%)	43 (10.8%)	<.001
Alcohol purchasing, <i>N</i> (%)				
Off licence	48 (12.8%)	5 (1.3%)	43 (11.5%)	<.001
Part of weekly shopping	230 (63.7%)	82 (66.7%)	148 (62.2%)	.401
For home parties	331 (91.9%)	122 (95.3%)	209 (58.1%)	.081
Reasons for home drinking				

I prefer drinking at home, <i>mean (SD)</i>	2.82 (.94)	2.89 (.99)	2.78 (.91)	.246
Emotional motivational reasons, <i>mean (SD)</i>				
Helps to relax	3.43 (1.10)	3.06 (1.08)	3.62 (1.06)	<.001
It is convenient	2.68 (1.07)	3.19 (1.10)	2.41 (.94)	<.001
It is safer than going out	2.97 (1.06)	2.88 (1.08)	3.01 (1.05)	.255
Practical motivational reasons, <i>mean (SD)</i>				
Cheaper than drinking out	2.54 (1.10)	2.92 (1.19)	2.34 (1.01)	3.44
Childcare issues	2.50 (.88)	2.44 (.81)	2.56 (.91)	.184
Difficult to smoke in licensed premises	3.17 (.74)	3.08 (.79)	3.23 (1.19)	.051
Do not have to drink and drive	2.69 (1.12)	3.18 (.99)	2.43 (1.09)	<.001
Not comfortable drinking out	3.18 (1.32)	2.38 (1.21)	3.60 (1.18)	<.001

Note: * Hazardous drinking = AUDIT scores ≥ 6 .

Table 2. Univariate logistical regression of factors associated with Hazardous drinking (AUDIT Scores > 6)

Variables	Hazardous drinking (N=270)		
	OR	95% CIs	p
Age	1.04	.88-1.06	.485
Living situation (no=0)			
Alone	.78	.45-1.35	.377
Partner Only	1.30	.87-1.93	.200
Partner/Other adult with children	.88	.59-1.31	.524
Parents	.84	.29-2.44	.748
Friends	1.92	.58-3.35	.283
Annual Income	1.01	.98-1.02	.539
Home drinking context (no=0)			
Drinking alone	4.04	1.80-9.09	<.001
With family members/housemates	.84	.52-1.38	.502
With Meals	1.07	.68-1.69	.762
With Entertainment ¹	2.02	1.22-3.35	.007
Preloading ²	1.52	.98-2.35	.058
Number of Days Alcohol Consumed at Home (per week) (no=0)			
Less than 1 day	.14	.08-.24	<.001
1 day	.40	.23-.67	.001
2-3 days	5.50	3.14-9.23	<.001
Almost every day	6.32	3.62-11.04	<.001
Alcohol Purchasing Patterns (no=0)			
Off Licence	2.84	1.42-5.65	.003
Part of Weekly Shopping	6.49	4.03-10.44	<.001
For home parties	2.44	1.10-5.40	.028
I prefer drinking at home	1.87	1.70-2.07	.008
Emotional Reasons for drinking at home			
Helps to relax	1.32	1.10-1.58	.003
It is convenient	1.05	.88-1.26	.573
It is safer than going out	1.16	.96-1.39	.118
Practical Reasons for drinking at home			
Cheaper than drinking out	.98	.80-1.20	.979
Childcare issues	1.22	.98-1.53	.080
Difficult to smoke in licensed premises	1.14	.88-1.50	.327
Do not have to drink and drive	1.26	1.06-1.51	.010
Not comfortable drinking out	1.04	.90-1.20	.597

Table 3. Multivariate logistical regression of factors associated with hazardous drinking (AUDIT Scores > 6)

Variables	Hazardous drinking (N=270)		
	OR	95% CIs	p
Home drinking context (no=0)			
Drinking alone	28	.05-1.51	.139
With Entertainment	1.35	.49-3.74	.564
Preloading	1.45	.59-3.60	.413
Number of Days Alcohol Consumed at Home (per week) (no=0)			
Less than 1 day	.40	.02-9.19	.567
Once	1.39	.06-9.99	.835
2-3 days	2.61	.27-26.22	.121
Almost every day	4.95	1.27-8.56	.016
Alcohol Purchasing Patterns (no=0)			
Off Licence	2.25	.64-7.79	.211
Part of Weekly Shopping	3.01	1.08-8.42	.036
For home parties	1.34	.19-9.66	.772
Prefer drink at home	1.86	1.14-3.02	.012
Emotional Reasons for drinking at home			
Helps to relax	1.01	.68-1.47	.985

It is safer	1.35	.88-2.07	.165
Practical Reasons for drinking at home			
Childcare issues	1.43	.93-2.20	.104
Do not have to drink and drive	.85	.57-1.28	.448
Model R ^{2*}	.61		

Note: *R² Nagelkerk R Square