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Self-reported drinking behaviour of school age children in Sunderland over a fourteen-year period

Regional variations in alcohol consumption patterns exist within England (Plant, 2009), with Northerners reportedly the heaviest drinkers (ONS, 2005; Bellis et al., 2007; Hay & Bauld, 2010). Moreover, the increases in alcohol consumption and binge drinking patterns in young people have been found to be more likely among individuals from more deprived areas (Chief Medical Officer, 2008). Young people in London are much less likely to have ever drunk alcohol than those living elsewhere in the UK. In London, 39% had drunk alcohol; compared to 63% in the North East. In London, 12% of 11- to 15-year-olds had drunk alcohol in the last week compared to 26% in the North East. The mean consumption of alcohol (units of alcohol) of those who drank in the last week also varies by region. The amount consumed is lowest in London (11.3 units) and highest in the North East (17.7 units), (The NHS Information Centre, 2008).

The Social Disadvantage Research Centre (2011) ranks Sunderland Local Authority (LA) in the top quartile of greatest deprivation, on its Indices of Deprivation scale. It can be argued that, since the advent of industrialisation, drinking and occasional heavy drinking of alcohol have become social norms in the North East of England. Sunderland is a post-industrial city with increasing rates of unemployment, deprivation and disadvantage. Overall, Sunderland includes high risk groups of binge drinkers including young women, the unemployed and those living in deprived communities (Plant & Plant, 2006).

The health, social and financial consequences of increased alcohol consumption and binge drinking behaviour are well documented. At its

most pronounced, Siegler et al. (2011) identified that alcohol-related deaths varied by social class, with higher death rates in the most disadvantaged classes. Problematic alcohol use has been cited as a prominent cause of family dysfunction and breakdown and again this is related to social deprived areas (Forrester and Harwin, 2011). The cost to health and ambulance services due to underage alcohol consumption is in the region of £19 million per annum (Alcohol Concern, 2010). In recent years, there has been a variety of health education initiatives in the UK related to alcohol use and harm reduction in young people. This has been a major part of the Public Health Strategy for Sunderland.

The focus of this study is on health-related practices in school-age children and in particular their drinking behaviours. The data used are derived from a survey carried out in Sunderland using the Health-Related Behaviour Questionnaire developed by the Schools Health Education Unit (SHEU). SHEU was founded in 1977 by John Balding in the School of Education, University of Exeter. Sunderland is one of the districts involved in this on-going project. The purpose is to derive information about pupils' lifestyles to help plan healthcare for young children. This study is based on analysis of the data set collected for Sunderland.

Methods

The questionnaire was administered by SHEU to a total of 11,173 Sunderland school-aged children over 14 years and 8 surveys. The samples comprised; in 1996 (1,476), 1998 (1,426), 2000 (1,459), 2002 (1,232), 2004 (1,059), 2006 (1,356) 2008 (892) and in 2010 (2,273), pupils.

Nine secondary schools, geographically situated across the city were sampled biennially. The catchment areas for each of these were comprised of mixed socio-economic groups, which have remained relatively stable over the 14 years.

It was administered by school teachers who were recruited and trained by SHEU. A standardised methodology was prescribed by SHEU with guidance and scrutiny undertaken by the Unit's staff. Full guidance notes for teachers were provided and training was given. This standardised procedure was consistent over time.

The SHEU questionnaire was administered to two age groups (Year 8 and Year 10) over a period of fourteen years, at two yearly intervals. The questionnaire includes questions on knowledge and experience of alcohol consumption, amongst other health related topics. The reported behaviours of different ages and genders can be elicited allowing comparisons to be made and trends identified over a defined period of time. The total respondents comprised 5,378 males and 5,795 females from Sunderland. Of these there were 2,643 males and 2,870 females in Year 8 and 2,710 males and 2,920 females in Year 10. Age ranges sampled were Year 8 including 12 and 13 year-olds and Year 10 including 14 and 15 year-olds.

It is important to note that the survey relies on self-reporting by young people. The recorded rates of alcohol consumption may therefore, represent either over or under-estimation of overall consumption (Midanik, 2006; Norman & Conner, 2006; Gill et al, 2007; Plant, 2009). However, the methodology does allow the collection of data from a relatively large sample over an extended period of time, allowing trends in behaviour to be determined. It should be noted that this is not a longitudinal study, in that the same individuals are not followed over time. It is a time-related cross-sectional study, which permits the determination of trends within a field in which large studies are relatively uncommon.

Comparisons between different age and

gender groups within the sample were carried out. From this, a variety of health and social issues related to alcohol consumption, parental knowledge and protection and the illegal purchasing of alcohol were identified. These issues have implications for the provision of services and long term health needs of young people.

Results

A variety of different characteristics associated with alcohol drinking in school-aged children from Sunderland have been derived from the data collected. These are reported below under appropriate headings, which correspond to the questions asked in the questionnaire survey.

Non-drinkers

The trend overall has shown a steady increase in the percentage of pupils, in both age groups and genders, who reported that they did not consume alcohol over the period of seven days before the survey. The greatest increase was for Year 10 females where the increase was from 35% in 1996, to 63% in 2010. This was a 77% increase on the 1996 figure for non-drinkers in this group. Year 10 males showed a 63% increase in reported non-drinking, rising from 36% in 1996 to 58% in 2010. Year 8 pupils showed smaller increases in non-drinking with rates in comparison with Year 10.

Year 8 female pupils showed smaller increases rising from 63% in 1996 to 82% in 2010, which is a 30% rise. Figures for Year 8 males show a 15% increase going from 65% in 1996, to 75%, 14 years later. This is a 15% per cent increase on the 1996 figure. A 10% rise was found for females of the same year group, rising from 63% to 69% over the 10 year period. However, in 2002 and 2004 the percentage of female Year 8 non-drinkers rose to a peak of 78%, which is a 24% increase on the 1996 figure.

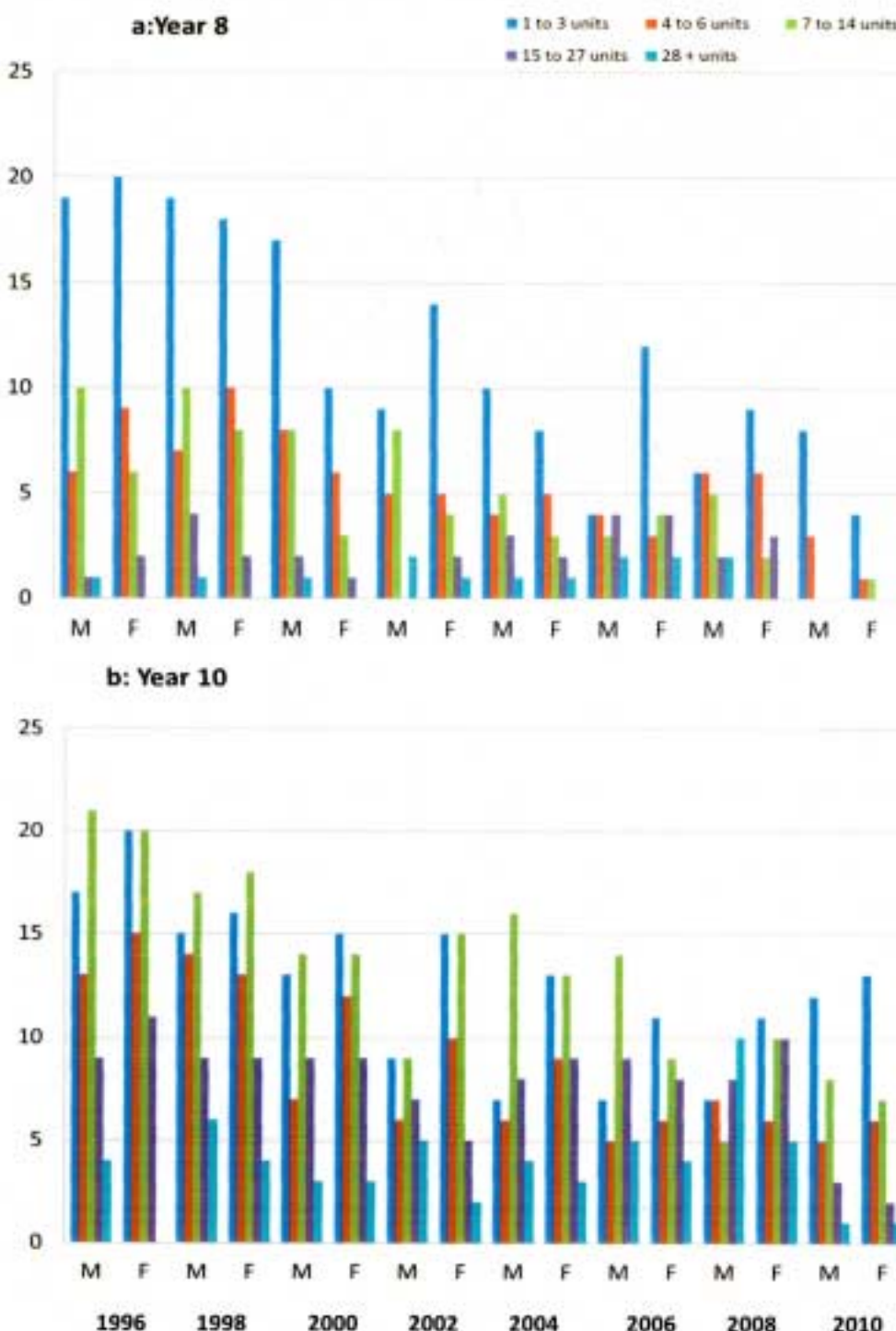
It can be seen that as expected there are more non-drinkers of alcohol in the Year 8 age group than in Year 10. For Year 10 subjects there was a greater percentage of female non-drinkers than male throughout the period although in the 2010 survey the position was reversed for the first time.

Units of alcohol consumed (Figure 1)

In general the units consumed are not many. In 2010, no Year 8 pupils reported drinking more than 10 units, in the last seven days. For Year 10 pupils, only 1% of males and females reported drinking 28 units or more and only 3% of Year 10 males and 2% of Year 10 females drank between 15 and 27 units. Indeed those 'binge drinking', or drinking between 7 and 14

units a week, has decreased from 21% in 1996 for Year 10 males to 8% in 2010. Likewise, for Year 10 females this has decreased from 20% in 1996 to 7% in 2010. This trend, towards a decrease in the numbers of Year 8 males drinking between 7 to 14 units, has decreased from 10% to zero in 2010. Year 8 females reported a high of 8% in 1998, decreasing to 1% in 2010. These trends have been progressively downwards for all Year 8 pupils.

Fig. 1: Units Of Alcohol Consumed

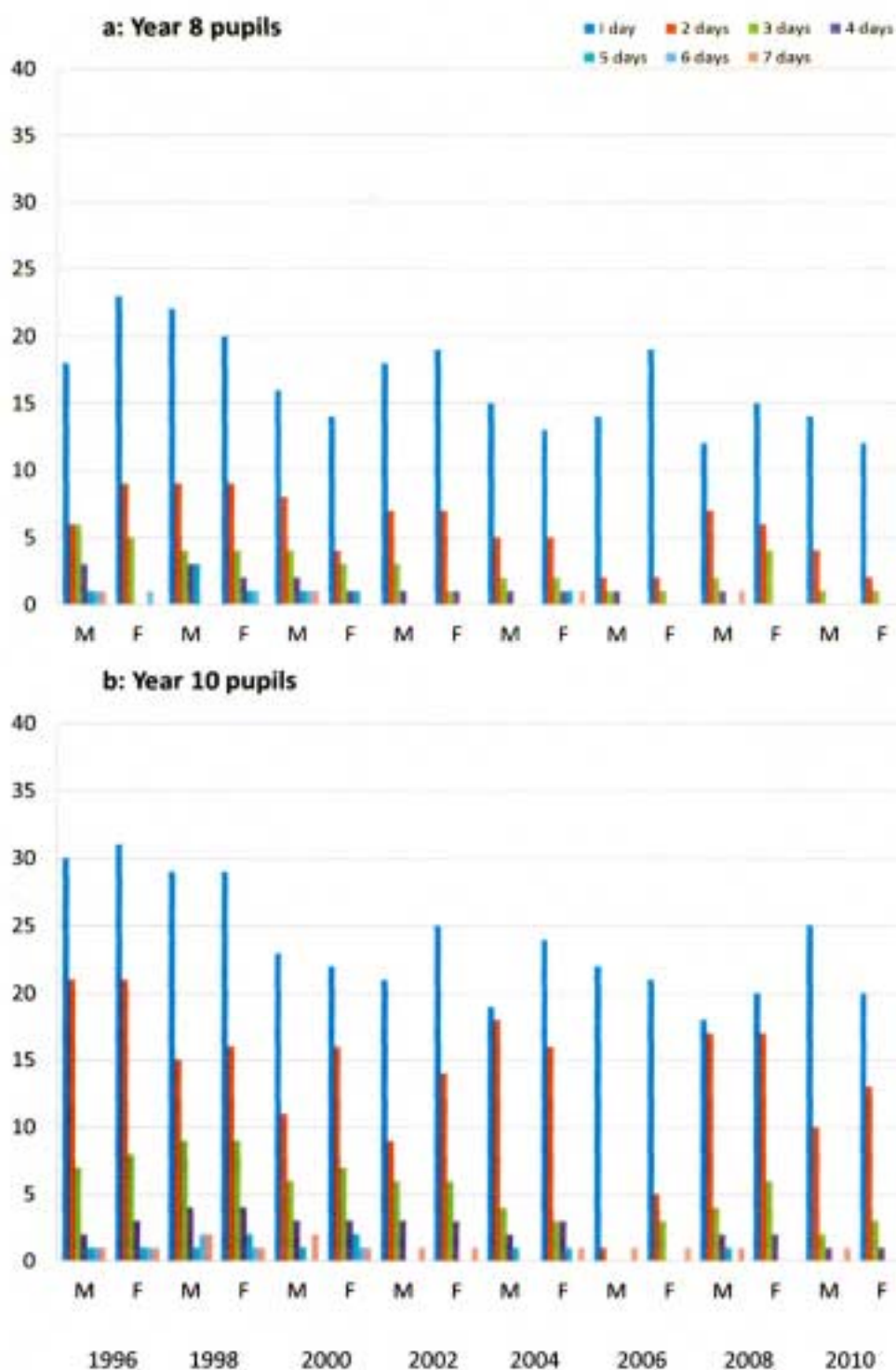


Frequency of drinking (Figure 2)

The number of pupils drinking frequently, i.e. over 5, 6 or 7 days during the week, has declined over the study period. For Year 8 pupils between 1996 and 2000, 3% of males and 2% of females were in this category. This dropped to zero in 2002 and has remained at that level. Year 10 males have shown a similar trend peaking at in 1998, but decreasing to 1% in 2010. Year 10 females reached a peak of 4% in 1998 and 2000, but by 2008 had declined to zero.

For pupils reporting drinking on between 2 and 4 days of the week there has been a dramatic decline across the study period. For males in Year 8, it declined from 15 per cent in 1996 to 5% in 2010. For females of the same age group the decrease was from 14%, to 3% over the same period. For males in Year 10 the rate has dropped from 30% to 13% and the percentage for females from 32% to 17%. For the Year 8 pupils the decline has been consistently downwards. For Year 10 however, although the trend is downwards the progress has been erratic.

Fig. 2: Number of Days Alcohol Consumed



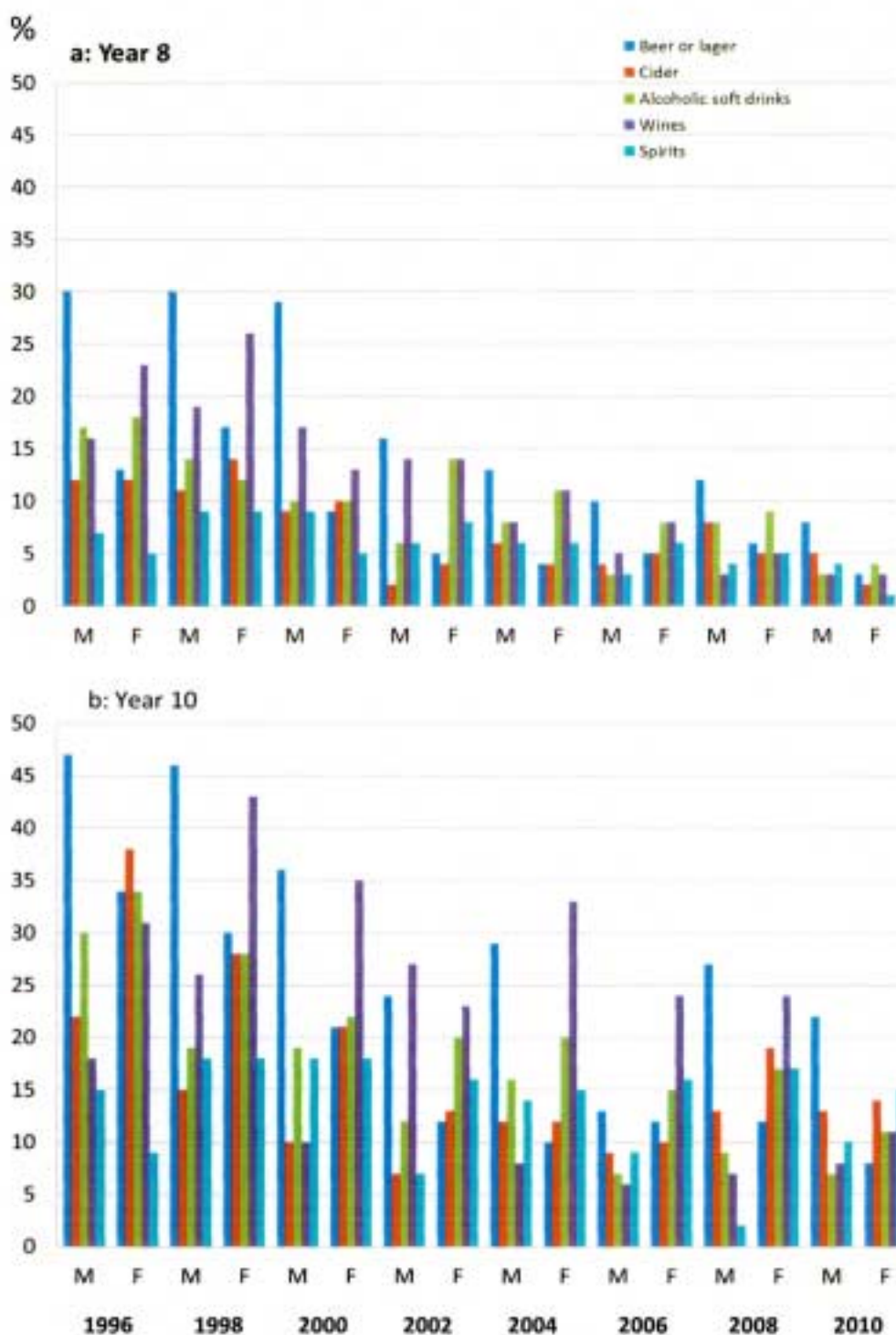
Types of drinks consumed (Figure 3)

For Year 8 females it would appear that wines and *Alcopops* have been the drinks of choice across the study period. A worrying trend is that spirit drinking by Year 10 females has risen from 9% in 1996, to 17% in 2008. This figure declined slightly to 15% in 2010 and it is now the most popular drink overtaking *Alcopops*.

Beer and lager have been the drink of preference for males of both age groups across the study period. For Year 10 males, beer or lager consumption dropped from 47% in 1996, to 22% in 2010. This trend was similar for Year 8

males at 30% in 1996, falling to 7% in 2010. For males of both ages, the reported consumption of beer, lager and cider has decreased every year since 1996. For both Year 8 and Year 10 males, again a steady decrease in *Alcopops* can be seen from 1996. In that year there was a high of 30% for Year 10 males. This has dropped to 7% for Year 10 males in 2010. There was a corresponding drop for Year 8 males over the same period from 17 to 3%. For Year 10 males, wine drinking reached a peak of 26% in 1998 but decreased to 8% in 2010. This is the reverse of the trend shown by Year 10 females.

Fig. 3: Types Of Drinks Consumed

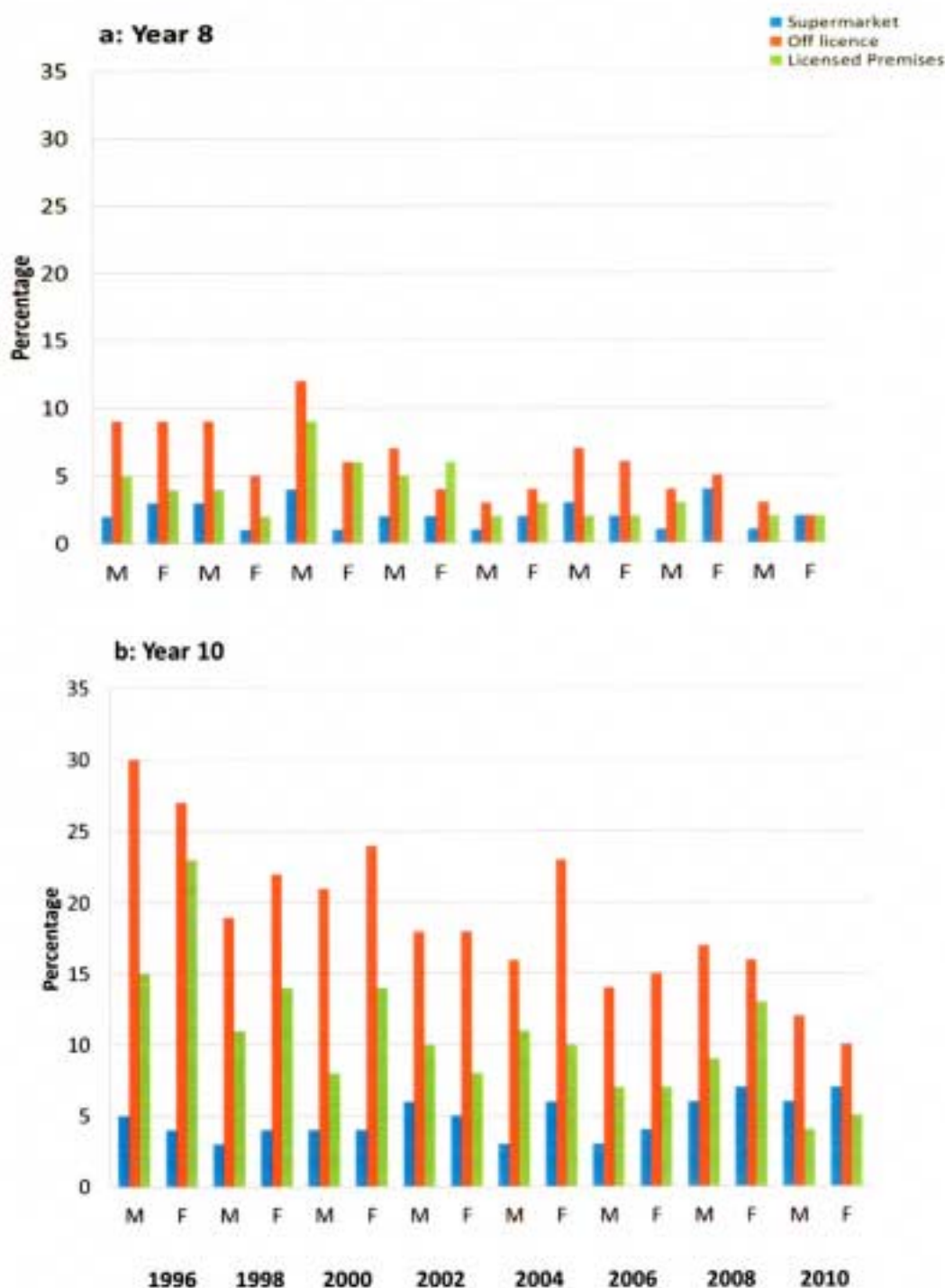


Purchasing of alcohol (Figure 4)

The percentage of pupils purchasing alcohol has declined steadily for both year groups and genders. Year 10 pupils were more likely to purchase alcohol, than those from Year 8. Over the study period the percentage of Year 10 purchasers has decreased from 38% (1996) to 18% (2010). For Year 8, the percentage of schoolchildren saying that they have purchased alcohol has dropped from 15% to 5% in the same period. The most popular place for the

purchase of alcohol was at an off-licence. In 1996, 30% of Year 10 males and 27% of females in the same year reported making purchases of alcohol in off-licences, but these declined to 12% and 10% respectively in 2010. In Year 10 in 1996, 15% of males and 23% of females reported purchasing alcohol in licensed premises. This had dropped to 4% and 5% respectively in 2010. Similar trends although with much smaller percentages were shown with Year 8 pupils. For both year groups, the least frequently reported place of purchase for alcohol were supermarkets.

Fig. 4: Place Of Purchase Of Alcohol

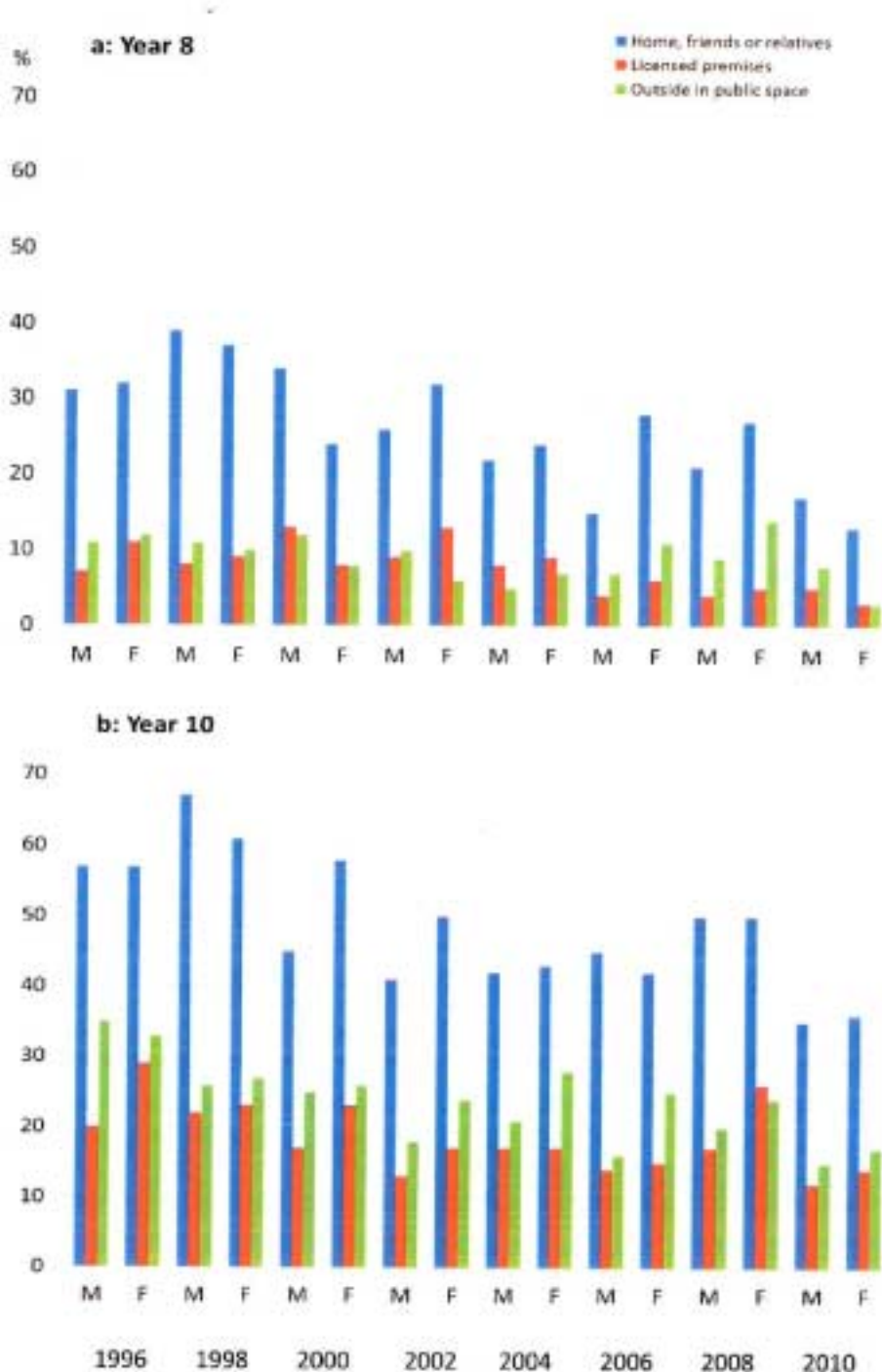


Location of alcohol consumption (Figure 5)

The most frequently reported place for the consumption of alcohol was at home, or at the home of a friend, or relative. For Year 10 males this was 35% in 2010 and for females of the same age group it was 36 per cent. This is a decrease from highs of 67% of males and 61% of females in 1998. Year 8 pupils drinking at home have also decreased from highs of 39% for males and 37% for females in 1998, to 17% and 13% respectively in 2010. Consuming alcohol in

a public place was reported by 15% of Year 10 males and 17% of females in 2010, compared with 35% and 33% respectively in 1996. For Year 8 pupils in 2010, 8% of males and 3% of females stated that they consumed alcohol in a public place, compared with 11% and 12% respectively in 1996. Year 10 pupils, including 11% of males and 13% of females, stated that they consumed alcohol on licensed premises in 2010, which was a significant decrease for the 1996 reported percentages of 20% for males and 29% for females.

Fig. 5: Place Of Alcohol Consumption



Parental knowledge and protection

In 2006, for Year 10 schoolchildren, 73% of males and 71% of females stated that their parents had knowledge of their drinking at home. For Year 8, the percentages were 53% of males and 56% of females. Only 6% of Year 8 and 5% of Year 10 pupils stated that their parents never knew about their drinking at home. This has dramatically changed over the subsequent four years. In 2010, only 32% of Year 8 males and females stated that their parents had knowledge of their drinking at home and 41% of Year 10 males and 49% of females of the same age group reported that their parents knew when they consumed alcohol at home.

Discussion

Alcohol consumption

These findings support other research and commentators' contentions that young peoples' alcohol consumption is decreasing (Fuller and Sanchez, 2009; Dajani, 2012; Fuller, 2012). Over the period of this study, smaller proportions of Sunderland pupils reported 'ever drinking' and they reported drinking less. This was consistent for both the genders and age groups surveyed. This study shows a progressive decline in the number of young people who state that they do not consume alcohol. This corresponds with recent findings by UNICEF (2013) that in more than three quarters of 21 countries, declines in alcohol use by young people were found. The second largest fall was in the UK which showed a decline from 30% to just under 20% (UNICEF, 2013). Although some research suggests that the trend in decreasing alcohol consumption is a recent phenomenon since 2008 (Fuller and Sanchez, 2009), our findings identify a progressively decreasing trend over the last 14 years.

Drinks consumed

The findings of this study confirm males' preference for beer or lager, reported in other surveys (Boreham & McManus, 2003; DCSF, 2008). Spirit consumption for Year 10 females has risen dramatically over the latter part of the Sunderland survey, which could be due to the increasing popularity of vodka based drinks. It may be that *Alcopops* consumption was the precursor for this trend.

Illegal purchasing of alcohol

The fact that under-age young people are able to purchase alcohol and the percentages involved in doing so seem to suggest that this is not problematic. Surprisingly in Sunderland the two most popular places of purchase are off-licences and licensed premises. Supermarket purchases are markedly behind the other premises which are contrary to the findings of Balding and Regis (2011) who suggest that one of the main areas of alcohol purchase was supermarkets. These findings have been supported by Dajani (2012) and Alcohol Concern (2011) who also highlight the harmful risks to health associated with supermarket alcohol availability. The percentage of pupils stating that they had bought alcohol has declined significantly in both age groups over the survey period.

Location of consumption

The most frequently reported place for consuming alcohol for all age groups is the home, in keeping with previous studies (HM Govt. 2007; The NHS Information Centre, 2008). Consumption in licenced premises was found to be relatively low. The percentage of young people stating that they drank in public places was surprisingly low in comparison to the results from other studies (see Roberts et al, 2012).

Parental knowledge and protection

HM Government (2007, p.1) states that 'most under 16s have their first taste of alcohol with parents, at home'. This can be viewed in a positive light in that parents are 'policing' responsible use, thus reducing harm and thereby encouraging more accountable behaviour amongst young people. Until recently our findings showed that this was indeed happening in the sample population. Unfortunately in the last two survey periods there has been a reported drop in the level of parental knowledge of children's drinking at home, which is a worrying new trend in Sunderland. It could be that the increase in those who drink covertly from their parents raises a methodological issue. If those who drink are less likely to tell their parents then they may also be less likely to report alcohol consumption in surveys. Furthermore, if

drinking becomes more covert, then results of surveys by various agencies will be erroneous and policies may not change.

Conclusions

Overall, the findings in Sunderland can be viewed in an optimistic light, in that they agree with the trend of decreased drinking reported for young people in the rest of the UK. Figures from Fuller (2012), show a downward trend from 2001 of pupils who had drunk alcohol in the past week. Specific measures have been put into place in Sunderland including the setting up of a health promotion project specifically aimed at young people. This initiative was taken in response to the perception of the North East being a problematic area where heavy drinking was common (Cabinet Office, 2004). This is in line with McInnes and Barrett (2007) who recommend that this should begin as early as primary school reception level, if good habits are to be built up across the lifespan. It could be argued that the sensible drinking message related to alcohol consumption has had an impact in Sunderland. Although there appears to be a correlation between the implementation of these interventions and the decrease in alcohol consumption this study cannot verify whether a causal relationship between the two exists. Our findings show that in Sunderland, alcohol consumption by schoolchildren is reducing. However, a small proportion of pupils in Sunderland still consume alcohol, often at home and with their parents' knowledge. This study has also identified that this parental knowledge is decreasing. This is a worrying trend that appears to have happened recently. It is uncertain whether this is an unwanted consequence of the increasing awareness of alcohol related problems. It may be that children are becoming more clandestine at home in their drinking behaviour for fear of parental disapproval.

The results of the study depend upon self-reporting of alcohol related behaviour as the basis of the data collected. However, the completion of the survey was independently supervised and assurances of complete confidentiality and anonymity were given to respondents, at the time of completion. This study provides an insight into the reported drinking behaviours of young people in terms

of the 'what', 'where', 'how' and 'when' of alcohol consumption. Since it is reporting data over a period of 14 years, it has been possible to identify trends over that period. The results of the analysis of the data in this study are most encouraging in terms of the degree of reduction in the amount of alcohol consumed. The findings appear to support those in recently published literature. Figures from the NHS (2009); Dajani (2012) and Fuller (2012) show a downward trend from 2001 of pupils who had drunk alcohol in the past week. They also support those reported in the previous study by McInnes and Blackwell (2009, 2010), with some notable recent changes i.e. parental knowledge.

References

- Alcohol Concern (2011). *One on every corner: The relationship between off-licence density and alcohol harms in young people*. London: Alcohol Concern.
- Alcohol Concern (2010). *Right time, right place. Alcohol-harm reduction strategies with children and young people*. London: Alcohol Concern.
- Balding, A., Regis D. (2011). *Young People into 2011*. SHEU
- Bellis, M.A., Hughes, K., Morleo, M., Tocque, K., Hughes, S., Allen, T., Harrison, D., Fe-Rodriguez, E. (2007). Predictors of risky alcohol consumption in schoolchildren and their implications for preventing alcohol-related harm. *Substance Abuse. Treatment, Prevention, Policy*. 10, (2), 15.
- Boreham, R., McManus, S. (eds) (2003). *Smoking, drinking and drug use among young teenagers in 2002: A survey carried out on behalf of the Department of Health by the National Centre for Social Research and the National Foundations for Educational Research*. London: The Stationary Office.
- Cabinet Office (2004). *Alcohol Harm Reduction Strategy for England*. London: HMSO.
- Chief Medical Officer (2008). *2007 Annual Report of the Chief Medical Officer on the State of Public Health: Tackling the health of the teenage nation*. London: Department of Health.
- Dajani, B. (2012). *Review Young People and Alcohol Misuse*. Merseyside: Champs.
- Department for Children, Schools and Families (2008). *Youth Alcohol Action Plan*. London: Department for Children, Schools and Families.
- Forrester, D., Harwin, J. (2011). *Parents who misuse drugs or alcohol. Effective interventions in social work and child protection*. Wileys: Chichester.
- Fuller, E. (2012). *Smoking, drinking and drug use among young people in England in 2011*. London: NHS Health and Social Care Information Centre.
- Fuller, E., Sanchez, M. (2009). *Smoking, Drinking and Drug Use Among Young People in England in 2009*. London: NHS Information Centre.
- Gill, J.S., Donaghy, M., Guise, J., Warner, P. (2007). Descriptions and accounts of alcohol consumption: methodological issues piloted with female undergraduate drinkers in Scotland. *Health Education Research*. 22, (1), 27-36.
- Hay, G., Bauld, L. (2010). *Population estimates of alcohol misusers who access DWP benefits*. Working Paper No.94. London: Department of Work and Pensions.
- HM Government (2007). *Safe. Sensible. Social. The next steps in the National Alcohol Strategy*. London: DoH.

McInnes, A., Barrett, A. (2007). 'Drugs Education', in: M. Simpson, T. Shildrick & R. MacDonald. *Drugs in Britain: Supply, Consumption and Control*. Hampshire: Palgrave.

McInnes, A., Blackwell, D. (2009). Saints not sinners? Young people bucking the trend of binge drinking. An analysis of the drinking trends of school age children in Sunderland. *Drugs: education, prevention and policy*. 17, (6), 776–794.

McInnes, A., Blackwell, D. (2010). An analysis of the drinking trends of school children in Sunderland. *Education and Health*. Vol. 28, No. 2.

Midanik, L. (2006). Validity of self-reported alcohol use: a literature review and assessment. *Addiction*. 9, 1019-1029.

Norman, P., Conner, M. (2006). The theory of planned behaviour and binge drinking: assessing the moderating role of past behaviour within the theory of planned behaviour. *British Journal of Health Psychology*. 11, 55-70.

Plant, M., Plant, M. (2006). *Binge Britain: Alcohol and the National Response*. Oxford: Oxford University Press.

Plant, M. (2009). *Alcohol Concern Drinking Patterns Factsheet*. London: Alcohol Concern.

Roberts, M., Townshend, T., Pappalepore, I., Eldridge, A., Mulyawan, B. (2012). *Local Variations in Youth Drinking Cultures*. Joseph Rowntree Foundation Report, York: Joseph Rowntree Foundation.

Social Disadvantage Research Centre (2011). *The English Indices of Deprivation 2010: Local Authority District Summaries*. University of Oxford: Social Disadvantage Research Centre.

The NHS Information Centre (2008). *Smoking, drinking and drug use among young people in England 2008*. London: The NHS Information Centre.

UNICEF (2013). *Child well-being in rich countries. A comparative overview*. Italy: UNICEF

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