

# Smoking and drinking among 15-16-year-old girls: do male peers have an influence?

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## Abstract

**Background** During adolescence, people tend to begin drinking alcohol and become involved in the culture that surrounds it.

**Aim** To compare the influence of peer relationships among females in mixed-sex schools versus single-sex schools on cigarette smoking and alcohol consumption.

**Methods** A cross-sectional study was carried out in four schools. The information was collected by means of a questionnaire.

**Results** Two hundred and forty-eight questionnaires were completed. Of those questioned in single-sex schools, 34% had smoked a cigarette compared with 61% in mixed-sex schools ( $p < 0.005$ ). The lifetime prevalence of alcohol consumption in mixed-sex schools was 88% compared with 73% in single-sex schools ( $p < 0.005$ ).

**Conclusion** This study suggests that females in mixed-sex schools have a tendency to have earlier exposure to smoking and alcohol consumption than girls of the same age in single-sex schools.

## Introduction

Alcohol consumption is common in Ireland<sup>1</sup> and peer relationships play a crucial role in alcohol consumption and cigarette smoking. People who begin regular drinking at an early age are more likely to develop alcohol dependence than those who begin drinking at a later age.<sup>2</sup> The Department of Health commissioned a report on smoking and drinking in young people in Ireland in 1993. The results of this report suggested a higher lifetime prevalence of smoking among boys aged 15-16 years (73%) than girls (70%). A higher rate of regular drinking was also found among boys (53%) than girls (48%).<sup>3</sup>

Parental example and family relationships are among the first and strongest influences on child behaviour. Parental influence wanes during teenage years and is supplanted by that of the peer group. It is unclear whether females aged 15-16 years are influenced by their male peers who exceed them in their weekly beer drinking.<sup>3</sup> It is also unclear whether girls who are not exposed to male peer influence in school are better off when it comes to commencing an alcohol or cigarette smoking habit.

This study compared cigarette smoking and alcohol consumption among females aged 15-16 years in mixed-sex schools with similarly aged females in single-sex schools in the Southern Health Board area.

## Methods

This was a cross-sectional study, carried out in four schools in the Southern Health Board area – two urban and two rural. The information was collected by means of a questionnaire completed between January and March 2001. The questionnaire was adapted from a previous study carried out by the Department of Health.<sup>3</sup> The measures in relation to cigarette smoking were lifetime use, current use and regular use. Lifetime use includes those who have ever smoked a cigarette. Current use is defined as those who have smoked one to two cigarettes in the past month and regular use involves smoking at least one or two cigarettes daily in the previous month.

In relation to alcohol, measures used included lifetime prevalence, current prevalence and the prevalence of having felt drunk in the past year. Lifetime prevalence accounted for those who had ever had a whole alcoholic drink, not just a sip or a taste. Current prevalence included those who had an alcoholic drink within the previous 30 days.

A total of 248 questionnaires were completed: 106 from single-sex schools and 142 from mixed-sex schools. Student's t-test was used to analyse the data gathered.

## QUESTIONNAIRE

- 1) Have you ever smoked a whole cigarette? Yes  No
  - 2) Have you smoked a whole cigarette in the last month? Yes  No
  - 3) Do you smoke on a daily basis? Yes  No
  - 4) If yes, how many do you smoke? If No, please go to number 6  
1-4  5-12  13-44  greater than 25
  - 5) How old were you when you first began to smoke?
  - 6) Have you ever had a whole alcohol drink, not just a sip or taste? Yes  No
  - 7) If yes, what did you drink? Beer  Alcopop  Wine  Shot of Liquor   
If no, please go to number 12  
Other (Please state) \_\_\_\_\_
  - 8) How old were you when you first had a whole alcohol drink?
  - 9) Did you drink alcohol in the past month? Yes  No
  - 10) How many drinks do you usually consume at one time  
Please state the type of drink and quantity consumed: \_\_\_\_\_
  - 11) How often have you 'felt drunk' in the last year? Never  Once  2-4 times  5-10 times  greater than 10 times
  - 12) What age are you? \_\_\_\_\_
- Additional Comments \_\_\_\_\_

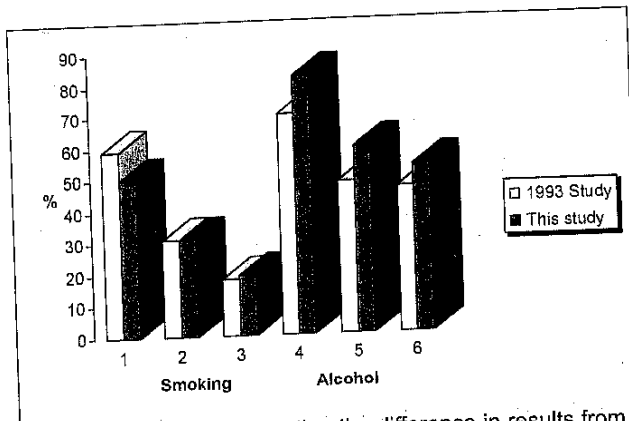


Figure 1. Bar graph illustrating the difference in results from the 1993 Department of Health study and this study. 1. Lifetime use, 2. Current use, 3. Regular use, 4. Lifetime prevalence, 5. Current prevalence, 6. Prevalence of "feeling drunk".

## Results

The average age of students surveyed in single-sex schools was 15.61 years and in mixed-sex schools was 15.56 years. Of the 248 questionnaires completed, 124 (50%) 15–16-year-old girls had tried smoking at some stage. Seventy-seven (31%) had smoked during the past month and 47 (19%) were smoking on a daily basis. The overall lifetime prevalence for alcohol was 203 (82%), the current prevalence was 146 (59%) and the prevalence of having felt drunk in the past year was 131 (53%). Up to 80% of those surveyed started drinking between the ages of 13 and 15 years. Alcopops, which include drinks that contained spirit and mixer in the same bottle, were the most common drink taken followed by beer.

Regarding lifetime smoking use, 36 (34%) of those in single-sex schools had ever smoked a cigarette. Eighty-six (61%) in mixed-sex schools said they had ever smoked a cigarette ( $p < 0.005$ ). A higher current use of cigarettes was also evident in mixed-sex schools than in single-sex schools but this was not statistically significant. Regular use of cigarettes was also higher in mixed-sex schools but, again, this was not statistically significant.

The lifetime prevalence of alcohol consumption in mixed-sex

schools was 125 (88%) and in single-sex schools was 77 (73%). This difference was statistically significant ( $p < 0.005$ ). Current alcohol prevalence rate and frequency of being drunk was higher in mixed-sex schools but these differences were not statistically significant.

Comparing this study to previous studies, in particular the 1993 study, it appears that there is no reduction in cigarette smoking among young people and an increase in consumption of alcohol among the female population of this age group<sup>3</sup> (see Figure 1).

## Discussion

This study shows that females in mixed-sex schools have a higher lifetime prevalence of smoking and alcohol consumption than single-sex schools; however, the difference is not statistically significant in current and regular smoking and alcohol consumption. This would suggest that females in mixed-sex schools are more likely to 'try' smoking and alcohol but not necessarily to continue with it.

A larger study would be required to determine if there is a statistically significant difference between the two groups with regards to current use and regular use of cigarettes and current prevalence and 'felt drunk' prevalence of alcohol. Of note, the questionnaires were completed one month after Christmas; therefore, the results may show a seasonal increase in the current prevalence rate of alcohol consumption. From this study it is concluded that segregation of males and females at secondary school level may not influence current and regular smoking and alcohol consumption but will reduce lifetime prevalence rates.

## References

1. Age of onset of alcohol use and its association with alcohol abuse and dependence. NIAAA, USA, 1997.
2. Alcohol and other drug use among students in 26 European countries. The 1995 European School Survey Project on Alcohol and other Drugs (ESPAD) report. The Swedish Council for Information on Alcohol and Other Drugs, 1997.
3. Smoking and drinking in young people in Ireland. Department of Health: Dublin Stationary Office, 1996.

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