

Teenage smoking: the levels are falling at last!

John Balding

HEA Schools Health Education Unit
University of Exeter

A study of responses to the 'smoking' questions in the Health Related Behaviour Questionnaire suggests strongly that levels of smoking among secondary schoolchildren are falling. What are the grounds for this belief, and what are the implications?

Very large annual data banks now exist from the widespread use of the General Health Related Behaviour Questionnaire survey method. In the case of questions which have remained unchanged over a long period of time, these data banks can be used as a resource to examine secular changes of behaviour.

This work has now commenced, and a most significant outcome of a recent examination of the data banks for 1983/84, 1985, 1986 and 1987 is the clear indication that there is a reduction of the percentage numbers of boys and girls who are smoking.

The sample sizes for these year groups are as follows:

| | |
|---------|--------|
| 1983/84 | 20,061 |
| 1985 | 12,488 |
| 1986 | 17,678 |
| 1987 | 16,663 |

The degree to which these very large samples represent the country needs to be judged, but there is increasing evidence from comparison with other sources of data that they are reliably representative; the 1987 sample is described in detail in *Schoolchildren and Drugs in 1987* (price £2.50 from the Unit), and extracts from this document are presented in Table 1.

The three questions relevant to this paper are shown in Fig. 1. The survey method evolves to meet the changing demands of those who make use of its services, which means that although some questions remain unchanged others become modified or redundant, while some new ones have been included. Two of the 'smoking' questions have remained unchanged since 1983 and the third was incorporated in 1985. All three remain present in the current version (11D).

Data resulting from the completion of these three questions is presented in Table 2. Those boys and girls who indicated they had smoked yesterday, those who had smoked within the past week, and those who indicated that they were 'smokers' in that they smoked and either did or did not want to give it up, (see Question 50 in Fig. 1), are contained as percentage numbers of their particular year group.

Table 2 thus contains percentages of boys and girls in five school year groups, from age 11 to 16, who provided answers indicating that they were 'smokers' or had recently smoked at the time of the questionnaire completion. The data contained in this table supports four comments:

Table 1. Some information about the 1987 sample (percentage of schools - 116 in England, Scotland, and Wales)

1. The sample sizes for each year group of boys and girls, within each data bank year, are large.
2. From 1983 to 1987 the percentage figures of involvement in smoking in all three categories (*I smoke.../I smoked yesterday/I smoked within the past week*) display a reduction in numbers in almost all instances.
3. Amongst the older groups where the higher percentages are present, around 80% or more of those who had "smoked within the past week" had also "smoked yesterday". It is likely that these represent boys and girls who smoke on most days.
4. There are some respondents who report that they have smoked within the past week but do not describe themselves as 'smokers'. The significance of this remains to be clarified.

A heartening situation?

These figures are certainly heartening, but what lies behind them?

A negative interpretation is that the pattern is a mirage caused by a different, less 'smoky' set of schools offering their pupils for the Health Related Behaviour

| | |
|---|-----|
| <i>Nature of catchment area</i> | |
| 100% rural | 19% |
| 75% rural, 25% suburban | 4% |
| 50% rural, 40% suburban, 10% urban | 16% |
| 50% suburban, 40% urban, 10% rural | 37% |
| 50% urban, 40% suburban, 10% inner urban | 19% |
| 75% inner urban, 25% urban | 2% |
| 100% inner urban | 4% |
| <i>Type of school</i> | |
| Middle | 3% |
| Comprehensive | 88% |
| Grammar | 2% |
| Other | 7% |
| <i>Percentage of ethnic-minority pupils</i> | |
| 0- 1% | 57% |
| 2- 5% | 22% |
| 6-10% | 5% |
| 11-15% | 4% |
| 16-20% | 4% |
| 21-30% | 2% |
| 31-40% | 2% |
| 41-50% | 2% |
| >50% | 2% |

survey. This cannot be categorically disproved, but comparison of sensitive indicators such as the proportion of pupils in different 'newspaper readership groups', who take free school meals, who come to school by bus, who come from rural areas, or who are from ethnic-

49a. Since this time yesterday, how many cigarettes have you smoked?

..... cigarettes

49b. Since this time last week, how many cigarettes have you smoked?

..... cigarettes

50. Smoking. Which of the following most nearly describes you?

| | | |
|--|---|---------------------------------|
| I have never smoked a cigarette | 0 | |
| I have only ever tried smoking once or twice | 1 | Circle ONE number only |
| I used to smoke sometimes, but I don't now | 2 | |
| I smoke and I would like to give it up | 3 | |
| I do not want to give up smoking | 4 | |

Fig. 1. The three 'smoking' questions as they appear in Version 11 of the Health Related Behaviour Questionnaire.

Table 2. *The percentage of secondary-school pupils responding to three 'smoking' questions in the Health Related Behaviour Questionnaire over the past five years.*

| | Year 1 (11+) | Year 2 (12+) | Year 3 (13+) | Year 4 (14+) | Year 5 (15+) |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | 83/ 84 85 86 87 | 83/ 84 85 86 87 | 83/ 84 85 86 87 | 83/ 84 85 86 87 | 83/ 84 85 86 87 |
| Boys | | | | | |
| Had smoked in past 7 days | - 3 2 3 | - 10 5 4 | - 15 12 8 | - 21 18 15 | - 30 24 25 |
| Had smoked since yesterday | 4 2 1 2 | 5 8 3 4 | 13 12 10 6 | 21 17 16 12 | 28 25 20 20 |
| Described as 'smoker' | 6 2 2 1 | 7 8 4 4 | 13 13 11 7 | 21 18 16 12 | 24 28 22 22 |
| Girls | | | | | |
| Had smoked in past 7 days | - 2 2 2 | - 11 6 4 | - 17 16 13 | - 25 25 20 | - 29 25 25 |
| Had smoked since yesterday | 2 1 1 1 | 5 7 4 2 | 14 13 13 10 | 23 21 21 15 | 26 25 21 20 |
| Described as 'smoker' | 4 1 1 2 | 8 9 5 3 | 15 15 14 12 | 24 23 23 17 | 25 28 24 23 |

Total sample sizes: 1983/84: 20,061; 1985: 12,488; 1986: 17,678; 1987: 16,663.

minority groups, show no changes between the year samples to match the change in smoking figures.

If, therefore, the figures are to be believed, what is causing the decrease? Two explanations may need to be explored:

1. *Smoking may be becoming less fashionable.* The proportion of smokers is always a minority, so smoking was never 'fashionable' in the sense of being a required part of ordinary teenage life; but it may have become less acceptable in the same way as among some adult populations.
2. *'Smoking' education is actually working.* There has been a shift from medical-biological approaches, usually conducted in science lessons, to a social approach, with smoking as a topic in PSE lessons. A recent paper by Eisner, Morgan & Gammage (1988) suggests strongly that in those schools where smoking education takes place primarily in social education lessons, smoking is less prevalent. No intake differences could explain their results.

Conclusion

The overall conclusion from these figures is that the number of smokers amongst boys and girls at school has reduced from

1983 to 1987. This must give heart to the many workers in this field, particularly the school teachers, the project workers, and researchers. It must also be very pleasing news to those who put a major emphasis on funding this aspect of health education, such as the Health Education Authority and TACADE.

Reference

- Eisner, J. R., Morgan, M. & Gammage, P. (1988). Social education is good for health. *Educational Research*, 30, 20-25.

PLEASE USE VERSION 11!

We are still receiving copies of the obsolete Version 8 and Version 10 of the Health Related Behaviour Questionnaire. Since each version has its own data-processing routine, the appearance of either of these versions causes problems.

Therefore, if you are about to embark on a questionnaire survey, please ensure that you have the current Version 11 copy. A master will be sent to you free of charge if you write or telephone. Printed copies are also available.