

A search for behaviour trends, 1983-1988

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This section addresses the question *Can changes in behaviour levels be detected by examining consecutive annual samples?* by comparing the data for some selected questions which have remained substantially unchanged since we derived our first major representative databank in 1983-84. Results for those two years have been combined together and labelled '1984', but the rest of the data refers to the individual calendar years from 1985 to 1988.

Prompted by numerous requests to look for trends we have selected behaviours from different components of the questionnaire. The eight behaviour areas covered by the selected questions are as follows:—

1. Consumption of alcohol.
2. Smoking.
3. Weight-watching.
4. Reasons for cleaning teeth.
5. Use of paracetamol or other painkillers.
6. Having a regular paid job in term-time.
7. Visiting a disco within the past two weeks.
8. Main source of sex information.

It is, of course, both interesting and important to discover changes in behaviour, but to be sure that these apparent changes represent real changes in the age groups throughout the population one must be confident that each consecutive sample being examined does reliably represent the total population. Since our sample consists of pupils in the schools using the Health Related Behaviour Questionnaire during the year in question,

it follows that areas of the country may be over-represented or under-represented in different years.

This must be borne in mind when reflecting upon the differences described in these comments, which strictly speaking can only be regarded as differences between the behaviours of the annual samples. The question at issue is whether the non-uniform regional collection of data obscures or even misleads with respect to *trends*. Two observations may be made to support our belief that the nationwide changes of behaviour of our young people are sufficiently uniform to justify accepting our non-uniform regional data as giving a good picture of nationwide trends:

1. For the majority of behaviours recorded in the data banks the year-to-year variations are small, with no trends being apparent; however, the age and sex differences within each behaviour measured are maintained.
2. Some behaviours show a consistent 'drift' over the years, and these changes can be shown to be statistically significant.

Therefore, where changes in behaviour are suggested by the data, we can reasonably pay attention to them in the belief that future research using other sampling techniques will confirm the validity of the changes suggested from the very large consecutive annual 'opportunity' samples in our data collection at Exeter.

Consumption of alcohol, 1984-1988

Percentage of pupils consuming any alcoholic beverage during the past 7 days. (Table 1.)

The percentage of boys and girls consuming any alcoholic drink shows a steady increase with age, but with no obvious suggestion of an increasing or decreasing trend over the five-year period. For the boys there is, with increasing age, an increase in the percentage having drunk any alcohol at all during the previous 7 days: from over 50% at 11+ to over 70% at 15+. The girls' figures are from over 30% to over 60% at these two ages. The year-to-year fluctuations in the data are over a limited range and might be accounted for in that they refer to one week only.

Table 1. *Percentage of pupils consuming any alcoholic beverage during the past 7 days.*

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	57	60	50	54	54	35	39	36	38	36
Year 2	66	63	61	59	63	45	44	47	41	45
Year 3	69	72	67	64	69	54	62	58	53	56
Year 4	75	76	70	68	69	62	65	63	58	59
Year 5	72	79	73	73	77	62	71	66	65	69

Table 2. *Percentage of pupils who had smoked at least one cigarette during the past 7 days.*

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	—	3	2	3	2	—	2	2	2	2
Year 2	—	10	5	4	4	—	11	6	4	5
Year 3	—	15	12	8	9	—	17	16	13	12
Year 4	—	21	18	15	13	—	25	25	20	20
Year 5	—	30	24	25	19	—	29	25	25	25

The average consumption of those who did drink alcohol during the previous 7 days shows a very consistent and almost identical value for each age group over the five-year period, suggesting that the level of alcohol consumption by young people has not changed significantly.

The alcohol statistics are examined more fully in *We teach them how to drink!* This is available from the Unit for £2.50 post free.

Smoking, 1985-1988

Percentage who had smoked at least one cigarette during the past 7 days. (Table 2.)

It will be noticed that this data was not available for the 1983-4 sample.

Whereas the alcohol figures suggest no obvious trends across the years, the smoking data, collected from the same samples of young people, do suggest a reduction in smoking, particularly amongst boys in the 14+ and 15+ age groups. For the girls the percentages suggest a reduction at least among the younger age groups (11+ - 13+), but perhaps not in the 14+ and 15+ age

groups. The results are in line with other sources, for example the OPCS data.

The tables presented here are updated from those originally published in *Education and Health* for September 1988, where further details are presented.

(There is overwhelming evidence that for both young people and adults 'smoking types' tend also to be 'drinking types'. Therefore, even if the smoking trends presented here were not supported by other surveys, it would be hard to claim the changes in smoking habits as due to unrepresentative sample selection when the drinking behaviour of the same sample remains effectively constant.)

Weight-watching, 1984-1988

Have you ever tried to lose weight or to avoid putting on weight? (Percentage of pupils responding YES - Table 3.)


The percentage of boys and girls indicating that they have actively tried to check undue increase in weight or actually to lose weight has always been remarkably high.

For the girls it has always been over 40%, even at 11+: examination of each separate year's figures reveals that the percentage involved increases in older year groups. Scanning the figures for separate age groups across the five-year span there is a slight suggestion that more girls than boys of a given age may be becoming involved in weight-watching.

For the boys the figures are exceedingly interesting. Firstly, perhaps, in that so many boys have taken this sort of action - it would appear that at least one in five boys in any age group have counted the calories. Secondly, the percentages decrease with increasing age. Logically this seems puzzling until we remember that this is not a longitudinal sample (in other words, a study of the same cohort growing older), but a cross-sectional sample of different children reaching the same age in different years.

If, however, the percentage figures are followed diagonally across the table, from upper left to lower right (as shown in Table 4) we can tentatively simulate a longitudinal study. The group of 11+ children in 1984 become those aged

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12+ in 1985, and so on. If this is done, a very clear pattern emerges for all the pseudo-cohorts - the boys' behaviour shows little or no change, while the girls, as they grow older, show a greater likelihood of watching their weight.

It might be harder to defend this approach to the data if the results were not so uniform. They imply that (1) for girls weight-watching increases with age, and (2) it has grown more popular over the past five years for boys and girls. If this is a true interpretation, it gives still more support for the representative nature of the sample.

Reasons for cleaning teeth, 1984-1988

To avoid wearing false teeth. (Table 5.)

The percentage decreases markedly in each year group across the five-year period. The trend is striking, both in amount and uniformity. Has the stigma of 'wearing false teeth' lessened, or does the likelihood of having dentures appear to be lower?

I like my mouth to feel clean. (Table 6.)

Scanning across the table, a slight increase in popularity of this response is suggested. Scanning down each column makes it clear that this response is more likely to be given by the older children.

Other choices were also available, and for a complete picture the reader is referred to *Young People in 1988*.

Table 3. *Have you ever tried to lose weight or to avoid putting on weight? (Percentage responding YES.)*

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	27	32	31	34	32	41	48	44	52	47
Year 2	26	30	30	33	31	44	50	49	52	53
Year 3	24	26	26	31	30	49	55	56	59	58
Year 4	20	24	23	27	27	56	58	58	59	64
Year 5	19	18	21	26	26	58	61	63	68	65

Table 4. *Weight-watching 'cohorts' - percentages responding YES.*

In year	At age	BOYS	GIRLS
1984	11+	27	41
1985	12+	30	50
1986	13+	26	56
1987	14+	27	59
1988	15+	26	65

Table 5. *Percentage of pupils giving 'to avoid wearing false teeth' as their main reason for cleaning their teeth.*

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	33	30	28	24	21	27	22	23	13	14
Year 2	26	31	25	18	18	18	20	17	11	11
Year 3	25	20	19	15	11	16	15	13	9	6
Year 4	19	19	15	13	10	13	13	8	7	5
Year 5	17	16	13	8	8	12	12	8	8	4

Table 6. *Percentage of pupils giving 'I like my mouth to feel clean' as their main reason for cleaning their teeth.*

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	17	15	21	21	21	25	28	26	35	31
Year 2	18	17	23	26	24	32	30	34	38	38
Year 3	23	24	24	28	30	37	36	36	42	42
Year 4	26	25	29	30	31	43	41	44	45	47
Year 5	30	26	30	36	30	46	40	44	37	50

Use of paracetamol or other painkillers, 1985-1988

When did you last use aspirin, paracetamol, or other similar pain-killer? (Pupils responding In the last 2 weeks and Last week - Table 7.)

It will be noticed that this data was not available for the 1983-4 sample.

For the boys, very little change is visible either in one age group across the five-year span, or across the different age groups. The same may be said for the girls in Year 3 (13+) and above, but below this age a smaller percentage of users is recognisable.

The figures for Years 4 and 5 for both sexes are quite consistent over the whole five-year period. This is further evidence that the year groups represented by these samples are similar with respect to this health-related behaviour as well as to others already referred to.

Having a regular paid job in term-time, 1984-1988

Do you do a regular paid job during term-time? (Pupils responding YES - Table 8.) Scanning the figures for boys and girls in Years 1 and 2 (11+ and 12+) across the table, the percentage involved in paid work appears to be decreasing. For Years 3 and above the figures are less clear: in Year 5 (15+) it would appear that about 50% of boys and girls earn money from term-time jobs.

Elsewhere in our data it is found that boys and girls tend to choose different jobs, and may be paid at different rates, but here we note that similar percentages find employment.

Table 7. Percentage of pupils who had used a painkiller during the last 2 weeks.

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	-	46	49	38	40	-	52	51	44	47
Year 2	-	43	43	41	42	-	56	54	48	52
Year 3	-	46	46	38	43	-	60	59	54	57
Year 4	-	41	40	41	41	-	60	60	58	61
Year 5	-	39	38	40	43	-	64	61	61	64

Visiting a disco within the past two weeks, 1984-1988

When did you last go to a disco or dance in school or outside school? (Pupils responding Last week and Last two weeks - Table 9.)

There are fluctuations in percentage levels over the five-year period, but no overall change is suggested by the table. The older boys and girls are more involved with discos, which is to be expected: girls are more frequently involved for a given age group, but it is a significant dimension of social activity for most young people.

Main source of sex information, 1984-1988

Who or what is your main source of information about sex? (Tables 10 & 11.)

Pupils responding 'friends' - Table 10. The percentages for boys and girls in each year group are remarkably constant over the five-year period. The population represented by the very large 'opportunity' samples were clearly very similar with respect to this dimension of the enquiry.

Pupils responding 'teachers' - Table 11. Providing adequate commentary on this array of percentages is challenging! Overall, the lowest percentages selected *Teachers* at the beginning and end of the five-year period, but a reasonable explanation for this is hard to find. One possible cause is that the 1986 Education Act has required governors to approve of the sex education programme in a school and for it to be carried out in a family context. Perhaps the application of this process has reduced the level of teacher participation.

Table 8. Percentage of pupils doing a regular paid job during term-time.

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	29	26	29	20	19	20	21	20	11	12
Year 2	32	33	35	26	27	21	23	28	15	16
Year 3	39	48	47	37	42	26	36	32	26	29
Year 4	43	51	51	45	43	31	41	43	38	36
Year 5	45	55	47	52	52	42	50	50	50	52

Table 9. Percentage of pupils who visited a disco within the past 2 weeks.

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	21	24	15	23	20	30	27	33	38	26
Year 2	25	27	26	30	23	36	29	37	38	31
Year 3	23	28	25	25	23	37	39	36	36	35
Year 4	28	28	26	23	25	43	41	43	37	36
Year 5	33	37	36	35	34	45	47	45	47	43

Table 10. Percentage of pupils giving 'friends' as their main source of information about sex.

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	25	29	27	26	26	13	14	15	17	17
Year 2	30	29	32	29	30	22	23	24	22	24
Year 3	33	37	32	34	35	28	29	29	32	31
Year 4	36	39	37	38	39	35	33	34	33	37
Year 5	43	40	40	38	41	40	34	36	35	38

Table 11. Percentage of pupils giving 'teachers' as their main source of information about sex.

	BOYS					GIRLS				
	84	85	86	87	88	84	85	86	87	88
Year 1	12	18	9	16	13	7	12	5	8	9
Year 2	12	17	15	16	13	7	11	11	10	7
Year 3	10	14	13	12	10	7	11	10	8	7
Year 4	10	12	12	13	10	6	13	10	10	8
Year 5	8	18	13	12	10	8	16	12	10	9