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'Into the Nineties' with 125,000 young people!

What is a 'young person'? Someone who gets up and goes to bed at a certain time, eats a certain kind of breakfast, has a certain attitude to school and homework, spends their leisure time doing certain things, spends their money in a certain way . . . and has a certain approach to dental hygiene and visits to the doctor!

The tables in *Doctor and Dentist*, the first book of our new survey entitled *Young People into the Nineties*, show that young people have a great range of approaches to dental hygiene and to doctors — there may be general differences between boys and girls, these may change with age, and they may also change with the passage of time.

These tables are a very small, but important, part of that mosaic of attitudes, beliefs, and behaviours that constitute 'lifestyle'. Although they may seem to have no obvious connection with some of the other behaviours monitored by our questionnaire, the multitude of ways in which they do all link up demonstrates how every young person in our survey is unique in the way they behave and in their reasons for behaving as they do.

Deriving the survey data

Over a period of 12 years, the series of revised versions of the Health Related Behaviour Questionnaire have been completed about a quarter of a million times. The content and methodology have evolved over this time, and the current 15th version is a robust questionnaire administered within an abundantly-used and tested method.

This questionnaire method has had continuous critical scrutiny, not only by those who devised it but by the teachers who administer it and even the pupils who answer it. We encourage questionnaire survey supervisors to note down any problems of meaning or interpretation that occur, while pupils have been consulted either directly by interview or indirectly through subsequent class work involving the returned data either as printed tables or as files for computer analysis.

The purpose of each individual survey in each school is to provide information for the school staff to assist curriculum review and planning. The information, as stated above, is often used in the classroom and in the selection and support of methods and materials used in lessons. Thus, the exploration of the meaning of the data and its interpretation is encouraged.

With this enormous amount of carefully-collected information in our data banks, extending back over most of the Eighties, we decided to undertake the major task of analysing it to produce a 'baseline' document for the Nineties. Preliminary analysis of the whole database is already finished, and the complete set of books will be as follows:

Book 1: *Doctor and Dentist*
Book 2: *Health*
Book 3: *Diet*
Book 4: *Drugs*
Book 5: *Home*
Book 6: *Money*
Book 7: *Road Use and Sport*
Book 8: *Social and Personal*
Book 9: *Into the Nineties. . .*

Table 1. *The sample*

Version	8		10		10		11		11		11		12	
Year	1984		1985		1986		1987		1988		1989		1990	
	Boys	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*
Year 7 (11–12)	711	425	958	736	1106	1067	1296	1322	2082	2118	403	350	603	621
Year 8 (12–13)	814	640	603	703	1585	1614	1516	1479	4285	4231	2588	2487	3152	3231
Year 9 (13–14)	1282	1057	1530	1545	2159	2098	2008	1842	3167	2898	1565	1436	1335	1549
Year 10 (14–15)	1851	1398	2528	2481	2119	1907	3322	3046	5945	5789	2113	2227	3948	3822
Year 11 (15–16)	390	266	651	883	2113	2234	1265	1311	1527	1417	1287	1216	338	342
Total	5048	3786	6270	6348	9082	8920	9407	9000	17006	16453	7956	7716	9376	9565

Table 2. *The percentage of respondents who visited their doctor for the stated reasons*

Year groups		BOYS (%) 7	8	9	10	11	GIRLS (%) 7	8	9	10	11
Alimentary	1987	10	8	8	7	6	8	6	6	6	6
	1988	8	8	7	6	6	9	8	7	6	6
	1989	7	10	9	7	5	5	9	9	6	5
Colds	1987	16	16	14	15	13	21	20	21	20	18
	1988	18	15	15	13	15	19	19	16	16	20
	1989	12	14	15	13	13	17	18	20	19	16
Foot	1987	7	9	9	9	7	9	8	8	7	4
	1988	9	7	8	8	8	8	8	8	7	7
	1989	8	7	7	7	8	7	6	6	4	5
Respiratory	1987	12	14	10	12	12	9	8	7	9	6
	1988	13	14	15	12	9	10	10	9	8	8
	1989	19	16	14	12	12	9	10	10	9	7
Skin	1987	7	8	8	9	9	10	9	11	13	13
	1988	8	9	8	10	9	10	11	12	12	10
	1989	5	8	8	9	10	10	14	11	11	14

Changes and trends

One reason for studying the data was to look for changes in behaviour over time. Although changes in behaviour from younger to older children are fascinating, many of these have already been revealed and published in our *Young People in . . .* series. The most exciting thing about this mass of data is surely the possibility of detecting national trends over the 7-year period from 1984–1990 across a uniquely broad range of behaviours.

However, some questions have shown a very *constant* picture, which is itself interesting and important, especially if a persistent minority of young people record behaviours that give cause for concern.

The sample

Young People into the Nineties begins with a careful description of the method of data collection, its history and its unique features, and then proceeds to a discussion of the sample, whose representative quality is fundamental to the validity of the results. After this, the data is presented in tabular and histogram form.

The total number of young people represented in this survey is 125,933, and the total 7-year sample is divided for analysis into calendar year, year group, and sex of respondent, making a total of 70 smaller samples or subsets (see Table 1). The size of these subsets ranges from the lowest (266 year 11 girls, 1984) to the highest (5,945 year 10 boys, 1988).

The average subset size is 1,800. Of the total sample, 18 subsets or 26% are under 1,000, of which 14 are in years 7 or 11. These two year groups tend to receive the least attention in school surveys — in three-tier educational systems, children may not enter secondary school until year 8, and exams have priority in year 11.

The average size of subset in years 8, 9 and 10 is 2,300, and, as explained in the introduction to the books, the sampling method in the communities involved draws from school populations of at least twice that size.

The book contains analyses of the sample as follows: day and month of survey, type of school, ethnic-minority, free-meal and bussed pupils in each school; type of lunch provision and type of catchment area.

Doctor and Dentist

Not every child goes into hospital, but visits to the doctor and dentist are bound to take place. Questions about visits to these health-care professionals have always been included in the questionnaire, and this article previews some of the material presented in the first book of the series.

The following aspects are studied in the book:

DOCTOR:
Frequency of visiting
Confidence during consultation
Alone or accompanied
Sex of the doctor
Reason for the visit

DENTIST:
Frequency of visiting
Having teeth filled
Toothbrushing frequency

We shall examine two of these items in some detail, and then present a summary of the more important findings from the other data.

Doctor: Reason for visit

In Version 11 of the questionnaire (1987–89), respondents were invited to state the reason for their visit if they wished to do so. About two-thirds of them did. One may speculate that those who did not were more sensitive about the reason than those who did, and that therefore the list displays a bias towards 'comfortable' complaints. However, some may have interpreted the instruction as meaning that the answer was unimportant, while others may have considered the matter confidential regardless of the problem.

Table 2 presents a detailed breakdown of the percentages of pupils reporting on five of the most frequent reasons stated for visiting the doctor. The object of this table is not to seek trends but to indicate the internal consistency of the data. The greatest variation is seen for years 7 and 11, which examination of Table 1 will show contain much smaller sample numbers than the other year groups.

The high level of visits to doctors with coughs and colds — up to 20% for some of the girls' groups — is regarded by some as a waste of the GP's time. If this is a trivial use of time, and so many of this three-year sample of almost 50,000 youngsters went for this reason, then let us hope that the effect of seeing the GP was more useful than just dealing with the cold.

In this connection, are doctors missing an opportunity to influence the young population? If so many youngsters are visiting the GP, should not each doctor have two or three specific health messages prepared for each patient according to their age, sex, and general condition?

Dentist: Teeth feel clean

Increasing numbers of boys and girls have selected this reason for brushing their teeth over the seven years presented in the data. The older children also tend to select this option more often than do the younger ones.

More girls than boys select this answer, reaching 50% of the oldest girls most recently surveyed.

Combining these two trends, as is done in the highlighted diagonal series of figures, suggests that among a cohort of children born in, say, 1973, about twice as many would have given this answer in 1990 as in 1984.

A further investigation has shown links between reasons for brushing teeth and various other behaviours, especially the more 'social' ones. For example:

- *Those year 10 boys in 1990 whose main reason for brushing their teeth was to make them feel clean or look nice, were more at ease when first meeting members of the opposite sex than were those choosing one of the other reasons.*
- *Those year 10 boys in 1990 who had a regular girlfriend were more likely to give 'looking nice' or 'teeth feeling clean' as their main reason for brushing their teeth.*

Table 3. *The percentage of respondents whose main reason for cleaning their teeth and mouth feel clean*

	BOYS (%)							GIRLS (%)						
Version	8	10	10	11	11	11	12	8	10	10	11	11	11	12
Year	84	85	86	87	88	89	90	84	85	86	87	88	89	90
Year 7 (11–12)	17	16	21	22	21	26	24	25	28	26	35	31	33	38
Year 8 (12–13)	18	17	23	26	24	28	28	32	30	34	38	38	40	37
Year 9 (13–14)	23	24	24	28	30	31	32	37	36	36	42	42	47	45
Year 10 (14–15)	26	25	29	30	31	32	32	43	41	44	45	46	50	48
Year 11 (15–16)	30	26	30	37	33	34	36	46	40	44	55	50	50	54

The other main findings: a summary

These summaries are taken from the commentary and analysis attached to each table.

Doctor: *Last visit*

- Just over 20% visited the doctor in the last month, around 70% at least once in the last 6 months, and 90% in the previous 12 months.
- No noticeable trends with time, no differences between boys and girls, or differences with age, have been detected.
- Doctors may need reminding that they are in an excellent position to pass on health education messages to young people.

Doctor: *At ease or uneasy?*

- Boys tend to be more 'at ease' than girls.
- No obvious trends with time, or differences between older and younger children, have been detected.
- More young people of both sexes were 'at ease' if the doctor was a woman.

Doctor: *Alone or accompanied?*

- At all ages, about 10% more boys than girls went to the doctor on their own.
- There was no noticeable trend with time.
- The older children were more likely to visit the doctor on their own (about 20% of 11–12 year old boys, over 50% of 15–16 year old boys).

Doctor: *Male or female?*

- The percentage of women GPs seeing young patients has risen from about 16% in 1984 to over 20% in 1990.
- Slightly more girls than boys saw a woman GP (in 1989 the figures were 24.4% for girls and 21.5% for boys in year 10).
- There is not much difference in the values for younger and older children.

Dentist: *Last visit*

- The frequency of visiting the dentist fell with increasing age. About 60% of 11–12 year olds had been to the dentist within the previous 3 months, but only about 50% of 15–16 year olds.
- Girls were slightly more frequent visitors than boys.
- No clear trend between 1984 and 1990 was detected.

Dentist: *Fillings*

- Slightly more boys than girls had fillings on their last visit.
- There is some evidence that young people who brush their teeth more frequently are less likely to need fillings.
- Regular consumption of fizzy drinks is likely to lead to fillings being needed.
- There was no sign of a trend with time.

Dentist: *Toothbrushing frequency*

- More girls than boys brushed their teeth at least twice a day — about 75% of girls compared with about 60% of boys.
- The older children tended to brush their teeth slightly more frequently than the younger ones.
- There is some evidence that the figures up to 1989 may be too low, by as much as 10%.
- Toothbrushing is seen to have links with social behaviours. A study of 14–15 year old children in 1990 shows the following characteristics of the 'frequent toothbrusher':

(*a*) Boys were more likely to spend money on clothes and footwear, and had confidence in their ability to manage their health.

(*b*) Girls were more likely to be 'at ease' with boys.

Dentist: *Why clean your teeth?*

- Dental hygiene was not necessarily the most important reason. The more popular main reason, for boys and girls, was to make their teeth and mouth feel clean, and this became more popular over the period 1984–1990.
- About 27% of all age groups selected the 'hygiene' area: to avoid toothache and dental treatment.
- There are 'social' links with reasons for toothbrushing. For example, as mentioned earlier, of the 14–15 year old boys surveyed in 1990, the ones who were most at ease when meeting girls for the first time or who had a regular girlfriend brushed their teeth primarily for cosmetic reasons.

Postscript: Bias in responses

To individual questions Over the years, questions are 'improved' in response to feedback from those supervising the classroom collection of data, from young people interviewed, from data processors, and from discoveries of inconsistencies during analysis.

Overall The atmosphere in which information is gathered is crucial in affecting the quality of the data. Every method has its bias. In this method the atmosphere that is generated is one of high importance, confidentiality, and honesty. The outcome may be that under these conditions young people view themselves as more co-operative and responsible than they are, and questions on seemingly naughty or unhygienic practices may move them, unconsciously, to select more 'responsible' options.