The Sidmouth conference, 1988: Days 1 & 2

The Health Related Behaviour surveys in schools

The Health Related Behaviour Questionnaire service to secondary schools, and the resulting national databank, formed the subject of the first two days of the conference. Attention was paid to the methodology, the databank, information about illegal drugs and diet, and a possible Health Risk Appraisal analysis.

The Health Related Behaviour Questionnaire methodology

Members of the Unit staff gave a summary of their role in the service provided to schools. The main points are summarised here.

1. Origins

The Health Related Behaviour Questionnaire had its origins in the late 1970s. It was founded on the belief that if teachers and health care professionals could be reliably informed of the behaviours of young people in their 'care', courses and curricula in Health Education could be designed or modified to make them more relevant to current needs.

The function of the questionnaire is therefore to assist curriculum planning in secondary schools and colleges. It was developed in consultation with teachers and health-care professionals and is continually being revised.

2. The Questionnaire service

A school, or (as is happening more frequently) a group of schools, enquires about the use of the questionnaire. A master is sent to the school for photocopying, with a guide to using and supervising the questionnaire. For group studies a Unit member is often able to go and introduce the questionnaire at a seminar, allowing teachers to clarify and discuss its supervision and use.

It has been found that the atmosphere in which the questionnaire is administered is the most significant factor in obtaining truthful responses. If a pupil believes that the data collected is important and will beneficially affect their school curriculum, and also that the completed questionnaire is confidential, then the responses are honest. Therefore it is vital that the teacher supervising the session fully explains the situation to the pupils and sets the right atmosphere.

The completed questionnaires are then sent to the Unit where they are coded and punched into the computer. The data is returned to the schools in tabular form, usually in 4-6 weeks. Information booklets about the data are provided in order to help teachers interpret the tables.

3. Schools' use of the results

Once the results are returned to the school, the hard work begins! The returned data has been used in schools in a variety of different ways.

Summary method Some schools have summarised the main aspects of the data in order to present the main findings to colleagues. The summary may take the form of short written comments about selected aspects of the data, or may be presented in a more visual form such as bar charts, pie charts, or graphs. Other ideas have included publishing short extracts from the data in the school staff magazine. These ideas can be good methods of dissemination while encouraging colleagues to seek further more detailed studies of the data.

Working groups These have been set up in some schools, drawing colleagues from across disciplines in order to examine the data. In some cases two printout booklets have been ordered, allowing one copy to be divided into sections (for example sports and diet), and given to the appropriate teachers. Having studied 'their' data they can meet to discuss their significance for the curriculum and possible changes.

Pupils' use Many schools have reported that the returned data has been very useful in the classroom for stimulating debate, starting lessons on particular topics, and for initiating further research work based on the results. Pupils are very interested in their own results, and therefore respond positively. At this point in the presentation a tape was played to illustrate how one school has included the data in part of its Information Technology programme, inviting the pupils to make a radio programme based on the data.

4. Validity

Our level of confidence in the validity of the data is often questioned, and throughout the ten years of evolution of the questionnaire method the issue of honesty has been continuously addressed. Several characteristics of the survey method are relevant to its validity:

1. Those carrying out the survey pay for the service, and hence in their own interests pay strict attention to the details prescribed to promote validity (for example, the importance to the school and the pupils, its confidentiality, the respondents' anonymity, etc.).

2. Each supervisor completes a form describing any difficulties that arose with individual questions or the procedure. These forms are returned, with each batch of questionnaires to which they relate, to the Exeter University Unit.

3. The completed questionnaires are not inspected at all in school but are sealed and sent to Exeter University. The scripts are processed there and summaries are returned to those collecting the data.

4. Many teachers take the data to the respondents as a component of classroom practice. Having the results scrutinised and debated by the boys and girls providing the information, or by their peers is a unique feature in the methodology. It is a powerful way of checking on the validity of the responses, particularly with respect to honesty and to the levels of comprehension of the questions posed.

5. Systematic interview work with respondents to examine answers following their completion of the questionnaire is undertaken at intervals by the Unit staff and by other experienced interviewers.

The outcome of all this extensive and painstaking work over ten years has been to generate a high level of confidence in the validity of data gathered from the use of the Questionnaire.

THE SIDMOUTH CONFERENCE

A fuller report of the conference has been prepared, and bound copies are available for £2.50 (cheques payable to the HEA Schools Health Education Unit) by writing to the address shown on page 27.

Table 1. Some details of the 1987 sample.

Sex by year group:	*Boys*	*Girls*	*Total*
1st year (11-12)	1483	1253	2736
2nd year (12-13)	1611	1551	3162
3rd year (13-14)	2284	1864	4148
4th year (14-15)	3116	2831	5947
5th year (15-16)	1059	904	1963
All years	9611	8403	17956

Type of school:	*Percentage of pupils*	*Sex of school population:*	*Percentage of pupils*
Middle	3	Male only	8
Comprehensive	88	Female only	4
Grammar	2	Mixed	88
Other	7		

Nature of catchment area (approx.):	*Percentage of pupils*
100% rural	19
75% rural, 25% suburban	4
50% rural, 40% suburban, 10% urban	16
50% urban, 40% suburban, 10% inner urban	19
50% urban, 40% inner urban, 10% suburban	37
75% inner urban, 25% urban	2
100% inner urban	4

The 1987 databank

The conference delegates were also shown unpublished results from the 1987 databank, some details of which are given in Table 1. These were from the newest version of the Health Related Behaviour Questionnaire, Version 11D, which was adopted in the summer of 1987. The data of particular interest was from the use of new questions introduced in its creation from Version 10 in connection with:

1. Illegal drugs
2. Diet
3. Health Risk Appraisal

Before considering these, however, the statistics on the use of alcohol were inspected to look for any changes in pattern from the previous years reported in the paper *Alcohol Consumption and Alcohol Related Behaviour in Young People: What should be the focus in Health Education?* (available from the Unit at £2.50). No obvious differences were detected, but it was noted that the consumption of spirits amongst the 5th formers (age 15-16) was again higher amongst the girls than the boys, for the second year running (see Fig. 1).

Attention was drawn to the fact that the level of confidence in the validity of answers to questions throughout the questionnaire is variable. The confidence would be least to answers to the newest questions. This variation is related to:

1. *Is the question attitudinal or behavioural?*
2. *On what span of memory does the question depend?*
3. *For how long has the question been present in the series of questionnaires?* (Hence, how much information have we

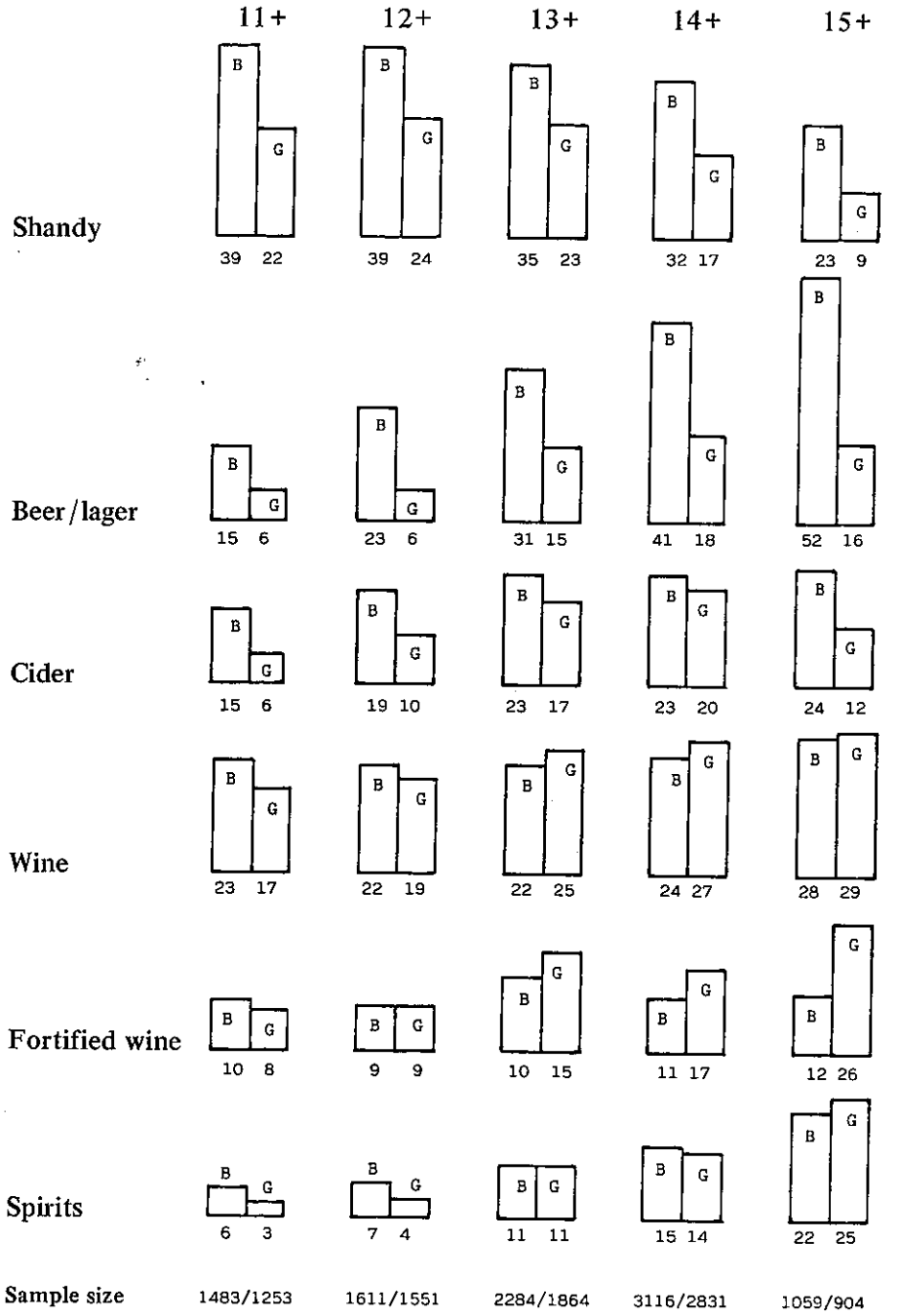

Fig. 1. The percentage of boys (B) and girls (G) in each year group consuming different named beverages. (1987 data.)

gained from interview work and reported evidence from teachers who are responsible for collecting the data and using it in the classroom after it has been returned to the school? Returning data to the respondents who provided it is a unique feature of this survey work, and must have considerable significance in the overall validity of the methodology.)

4. *How do the summarised data from responses to the question compare with information derived from similar questions in such surveys as the OPCS?*

5. *How much evidence have we from the previous use of the question in the annual data banks from 1982 onwards?*

The evidence that the alcohol statistics are reliable and valid is strong. Similarly the data on smoking behaviour stands up to scrutiny and comparison with other survey work. The reported levels of use of self-medication and prescribed medicines stand up to the tests we apply.

1. Illegal drugs

The summarised data to the newly-incorporated questions on illegal drugs was interpreted with due respect to the levels of experience we have in the categories outlined above. The conference was particularly fortunate to have researchers present from related fields, together with nine ESG Drugs Advisory Teachers to examine and reflect upon the quality of the data presented.

Summarised data from the responses of almost 18,000 boys and girls aged 11 to 16 years in 1987 was examined to three of the newly-incorporated drugs questions, namely:

1. *Do you think any of these better-known drugs dangerous to the user?*
2. *How many of your friends do you think take any of these drugs?*
3. *Have you ever been offered any of these drugs?*

The list of drugs to which they were referred included amphetamines, barbiturates, cannabis leaf, cannabis oil, cocaine, natural hallucinogens, synthetic hallucinogens, heroin, solvents, and tranquillisers. The data analysis is published elsewhere in this issue.

The value of the researchers present in pointing up these issues was appreciated. Additionally, the ESG Drugs Advisory Teachers attended to the detailed content of the 'drugs' questions and their revision for Version 12 of the Questionnaire (planned to be available from January 1989) for the whole of one group session on Day 2.

2. Diet

Within the check-list of common dietary foods, examples have been identified as being rich in certain identifiable components to which importance is currently attached: for example fat, fibre, and iron. A weighting has also been given to each food where a variation in the level of content of the component was expected – an example of this is fibre content, bran cereals being weighted at 3 compared with a weighting of 1 for jacket potatoes.

In this way a derived index for the intake of every individual for each dietary component may be calculated, and every respondent can be represented on a scale from 0 to 10, where the highest level was decided by those with the greatest intake. The dietary components are:

Dairy products	Starch
Fat	Sugar
Fibre	Vitamin C
Iron	

Time did not allow the conference to consider individual views of the validity of the list of foods or the weightings, but it was clear that agreement on the best way to do it was not likely to occur quickly!

3. Health Risk Appraisal

A tentative scale of 'sportive involvement' has also been created, allowing a score to be calculated for each respondent as their index of sporting activity. Once again the continuum is spread from a score of 0 to a score of 10 for those with greatest involvement.

Four more questions must then be inspected in connection with:

1. Frequency of seatbelt use
2. Frequency of taking painkillers
3. Level of alcohol consumption
4. Level of cigarette use

By combining scores from dietary indices, the sportive index, and scores derived from the four questions immediately above, the Exeter team proposes producing a Health Risk Appraisal score (HRA). The Health Risk Appraisal concept is explained by R. Petosa, G. Hyner, and S. Melby in the *Journal of School Health* for February 1986 (Vol. 56, No. 2, pages 52-55).

The proposed calculation is as follows:

Positive Indices:	*Negative Indices:*
Iron	Painkillers
Fibre	Smoking (x 3) *
Vitamin C	Alcohol intake
Starch	Sugar
Dairy products	Fat
Sport (x 3) *	

* *Extra weighting is proposed for these values, as they are seen to be of relatively greater significance.*

The declared purpose of this innovation is that children could be invited to be supplied with a measure of their 'health risk'. Those requesting it could examine their score within the overall range for their age and sex, and this would prompt the teacher supporting the enquiry to examine with the children concerned the components within the composite factor. Through this process the child would learn to appreciate his or her own position and become more health-conscious.

The proposed calculation of the HRA aroused a lot of requests for greater clarification and justification of the meanings of separate indices. Beyond this, one teacher had reservations concerning the effects of the activity on return to the respondent. The issue of confidentiality was also raised, and many conference members felt the need to resolve this before they would be persuaded to take the idea further.

A further very legitimate objection to its validity concerned its completeness; for example, no detail of conditions in which the children lived was available within the total HRA score unless it were connected with the dietary scores.

Comments from readers regarding the issues raised here would be very welcome.

Group work by delegates

Later on Day 2 the groups deliberated the Health Related Behaviour Questionnaire service to schools. Many points were recorded, but limited space does not permit them all to be reproduced here. For convenience they have been collected under the following headings:

1. Initiating the survey
2. Data presentation and support materials
3. Presening the results to colleagues
4. Taking the data into the classroom
5. Influencing curriculum planning
6. Other points

These comments are the reflections of individual groups and do not necessarily represent consensus views, but in our judgment they are relevant and should be pondered.

1. Initiating the survey

The chains of communication between different levels appear tenuous. There is a need to examine the links between Health Authority officers and individuals in schools.

It is most important in all initiatives to identify school co-ordinators *by name*, and to ensure distribution of relevant materials to specific audiences.

To generate enthusiasm for the survey, not only among staff but with governors and parents, was regarded as very important. Resistance to the concept of 'health education' has been overcome by selling it as 'sex education'. Focussing on governors as a result of the 1986 Act seems to have been productive.

The Questionnaire may be a way of opening the eyes of Headteachers to the need for health education. An in-service day for governors and Heads to sell the material would be useful.

The status of the health education co-ordinator within the school is vital. 'Clout' is often based on salary – a Scale 1 post signals low status for health education.

Where does the Questionnaire fit in with the school's objectives? Perceptions of health education vary widely (for example, police vs. teachers), and the Questionnaire's content could illuminate this. The Questionnaire will illuminate the appropriateness of staffs' expectations.

2. Possible improvements in data presentation, and support materials

Some felt that the present format of the tables was complicated. There was support for the use of graphics (for example, bar charts).

Ways of sorting the results into groups of common topics of special interest (e.g., P.E., Home Economics) should be explored. An index for Heads of Department, from which they could select results they wished to see, would be useful.

It would help to have a fuller User's Guide to help people in different situations find their way forward. Case studies could be used – the needs of an isolated teacher, a new co-ordinator, and an experienced co-ordinator are all different, and they will have different opportunities to promote planning and development.

3. Presenting the results to colleagues

An in-service day to feed back results to selected members of staff would be most useful. Schools may need outside help from the Exeter project, HEOs, or LEA staff. However, room should be left for teachers to 'own' their particular part of the work – presentations must avoid being slick, superficial, or daunting.

The data is wasted if it is not used generally to raise levels of awareness among governors and Heads, co-ordinators, and staff.

Rather than overwhelming colleagues with a mass of material, staff representing individual departments can be invited at the initial meeting to examine a few tables in depth, with more tables available to suit different departments on request.

4. Taking the data into the classroom

Selected information could be published in the school magazine or newsletter – precautions being taken against unscrupulous 'media' people.

The material has been made available for various GCSE courses; for media studies; as a stimulus for English work; in Humanities; in Home Economics work, etc.

5. Influencing curriculum planning

Care needs to be taken to avoid only following up the more 'sensational' results.

The danger of the school making inferential judgments about 'home health' must be borne in mind.

Comparisons between groups, either within the school or between schools, must be handled carefully. In the case of a group survey the health education support group can examine ways of using overall and individual results.

6. Other points

The need for a proposed Primary Health Related Behaviour Questionnaire became obvious after looking at some of the behaviour levels of pupils starting secondary school. An oral method of enquiry, perhaps spread over a week, might be appropriate.

The establishment of a national professional body to promote links across boundaries is relevant not just to the Health Related Behaviour enquiry but to health education generally.

In default of this, it was suggested that the HEA Schools Health Education Unit had a role to play in communication and integration between teaching staff and health-care professionals.

Summary

The discussion and attention paid to the Health Related Behaviour Questionnaire over the first two days of the conference proved extremely helpful to Unit staff. Not all of the conclusions were novel, since much of the groundwork has been explored over many years; however, having such a fund of experience and expertise concentrated on the enquiry instrument was a unique event in the Questionnaire's development.