

The Sexual Behaviour of Young People

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Appendix 1

PREPARATION

A. THE FACE-TO-FACE INTERVIEW

The object of the research was to obtain facts, and in particular to report on the extent of sexual experience in the fifteen to nineteen age group and, if possible, to identify any factors that seemed to be associated with sexual experience. Consequently this research did not start out with any hypothesis beyond the simple assumption that some teenagers are sexually experienced and some are not, and that there may be a difference between those who are experienced, and those who are not.

The ideal situation would be for the research team to administer some psychological test which had no apparent association with sexual behaviour, and this test would reveal the extent of sexual experience in each person. Not surprisingly no such test exists, and although there are numerous personality tests from which to choose, none of them, individually or collectively, produce results which give any indication of sexual experience.

In the present state of knowledge in the social sciences, the information could be collected in only two ways:

- (a) the face-to-face interview;
- (b) the self-administered written questionnaire.

The relative advantages of either method have often been tested and discussed (Ellis, 1948). The disadvantages of both methods are magnified when the questions refer to sexual behaviour.

The great advantage of the self-administered questionnaire is that it is possible to obtain very large numbers. For example a 1 per cent sample of the age group studied in this research would require answers from 35,000 people. Obviously it would have been prohibitively expensive to have an hour-long interview with so many people, but it might have been possible to post off that number of questionnaires. But there would be a large number of refusals and the people who did answer might be a very biased sample. In fact, it is possible to over-estimate the value of large numbers and there is a tendency to make researches seem more important than they really are by obtaining results from hundreds of similar subjects.

The disadvantages of the questionnaire outweigh the chance it

gives to obtain a large sample. Difficulties with wording are a constant source of trouble in questionnaires.¹ Individuals often answer a question in different terms and at another level from that in the mind of the person who constructed the questionnaire. In the interview the research worker is able to persist until he has got the relevant answer.

In a research into sexual behaviour the actual language to be used is a big problem. In a written questionnaire it would be difficult to avoid using long words with Latin roots; it would certainly be necessary to avoid putting vernacular words into print. But in the interview situation a careful use of the vernacular often helps to make clear the meaning of a question.

Many people who can answer verbally are unable to put their thoughts down on paper. The written questionnaire would exclude a large number of people because they cannot read fluently and are not literate enough to answer the detailed questions.

It is possible to build up a friendly relationship in the early part of the interview so that by the time the questions on sex are reached, the teenager feels that he has a sympathetic and impartial listener. Sometimes the reassurances of the interviewer are better than the questionnaire as a guarantee of anonymity. The interviewer also has the opportunity to overcome an unwillingness to answer a particular question, an important advantage in researches of this kind. In an interview there is also a better chance of knowing when the teenager is covering up or avoiding the issue.

There is also the danger that the questionnaire will be filled in with others looking on, and it is obvious that this will affect the answers given and is almost sure to make them invalid. In this research there were 234 questions on an interview schedule of 16 pages. This would be a very daunting sight for a teenager if he were asked to spend time filling in a form of this length. But in the hands of an interviewer it sometimes took less than an hour. This was because not all the questions applied to all the adolescents. For example, it seemed important to ask the teenager several questions about the circumstances of and his reactions to the first experience of sexual intercourse. If a girl of fifteen had no such experience, then obviously none of these questions would be asked. But in a written questionnaire they would all have to be listed, and it is not difficult to imagine what some parents would say if they happened to see such a questionnaire.

In order to get over the embarrassment of talking to a stranger

1. In one written questionnaire given to girls the question, 'Are you a virgin?' brought the reply, 'Not yet.'

about sex, it was suggested that the questions should be recorded and the teenager left alone to record the answers. But this has the same inflexibility as the questionnaire and thus the same disadvantages, such as difficulties with vocabulary, dissimilar experiences, no chance to clear up misunderstandings, no opportunity to probe on a question, nor to gauge the extent of embarrassment or cover-up in an answer.

Group interviews would not allow for individual variation and inevitably the stronger personalities would set the pace. Such a discussion might well be very informative and instructive for the less forward members of the group, but as a method of obtaining information about individuals it is not very useful.

Sexual activities are surrounded by strong social conventions and privacy is essential. The written questionnaire presents too great a temptation for the teenagers to mislead, understate or exaggerate. Providing careful training is given to the interviewers, and the schedule of questions is elaborately tested, the interview situation is still the best method of obtaining information about sexual behaviour.

B. THE PILOT RESEARCH

During the exploratory stage visits were made to a well-known jazz club where we expected to find sexually experienced teenagers, to a suburban youth club to find the more conforming type of adolescent, to schools so that we could interview younger boys and girls, to a Day Continuation College for a cross section of teenagers educated at secondary modern schools and to university students (some of whom were social scientists) so that we could obtain an articulate and detailed reaction to the research team's methods and techniques.

After each interview the teenager was asked to criticise the schedule of questions. Sometimes an interviewee would show quite clearly that he had not understood the questions even when he made no comment. After a series of interviews those who had volunteered were persuaded to meet together as a group with the research team. This group was then encouraged to criticise the questions on the schedule and tape-recordings of these group discussions revealed extra information on the right approach and the best wording to use. Here are a few examples of the kind of remarks made during these discussions:

Boy: 'Nearly everything you've said we don't use the same word for.'

Boy about masturbation: 'It's all right to ask but change the word.'

Boy about having the interview in a church hall: 'You couldn't say anything there.'

Girl about the interview: 'I would have felt funny at home.'

Boy on not wanting to be interviewed in a consulting room: 'I'd think the doctor was going to examine me.'

Boy: 'You want to get us where we're not interested in anything' (i.e. not in a youth club where they could be doing something else).

Boy about interviewer calling at his home: 'If you send us a letter first with the proper paper . . .'

Experience gained during the exploratory stage revealed that many of the questions on sexual behaviour would have to be restricted or altered for the younger age group. We decided to abandon our original intention of interviewing adolescents of thirteen and fourteen because the state of physical maturity is very variable at that age and in addition there would be difficulties in vocabulary and a high rate of refusal from parents. It was also clear that the leisure activities and sexual behaviour of married teenagers would be so different that comparisons with the unmarried adolescents would be meaningless. Accordingly it was decided to concentrate on unmarried adolescents between fifteen and nineteen.

Few of the researches undertaken in this country are able to spend so much time in the exploratory stage of the work. It would be satisfying to say that all possible individual reactions were anticipated and allowed for in the schedule of questions. But this was not the case. People do not fit into the preconceived ideas of researchers and teenagers do not fall nicely into groups or patterns of behaviour. After nearly every interview there were discussions and queries and modifications. Even so, the basic task of the exploratory period was achieved, and a schedule of questions was devised so that the information about teenage sexual behaviour was collected in a systematic and consistent manner.

Appendix 2

THE QUESTIONS

A. THE FIRST DRAFT

The basic purpose of the investigation was to establish the incidence of sexual activity among young people. With this aim went a hypothesis that certain types of sexual activity were concomitant with certain social and psychological variables. These two factors shaped the schedule of questions to be used at each interview. To cover social variables a large net of questions was constructed which attempted to tap all aspects of the teenager's background and leisure activities, and especially those activities where opportunities or facilities for sexual experience appeared to be a possibility. Thus reading habits were not included, but questions were asked about going to parties.

Although the questions were first compiled in sections, they were not placed in the schedule section by section. The sequence of questions was decided by a number of considerations. It was important to keep up the interest of the adolescent so the dull questions had to be kept apart; one question had to follow another without too sudden a jump from one subject to the next; sometimes it was necessary to insert waste questions in order to lead up logically and smoothly to an important question. The fact that the questions were not asked in chronological order meant that it was much more difficult for a teenager to mislead or act a fictitious role, because inconsistencies would become apparent when the questioner returned to the same subject later in the interview.

Three different drafts of the interview schedule were tested during the exploratory period before the final list of questions was standardised for the random sample. Modifications were required because the questions did not elicit the information they were designed to obtain, because some of the words were not universally understood, and because the sequence of questions appeared to interrupt the flow of the interview. Inevitably verbal responses vary in a survey covering all educational levels. Standardised questions do not always bring standardised answers, for the same question can mean different things to different people. Yet some sort of standardisation is necessary if statistical analysis is to be used. The difficulty is to find words and phrases that are both exact and understood.

For example, a number of adolescents thought that the term 'birth control' meant controlling the delivery of a baby at birth. Some of the younger adolescents had not heard about venereal disease. When one of the grammar school boys was asked what he knew about VD he replied: 'Nothing, unless you mean vapour density.' One of the early questions in the first draft was: 'Do you think contraceptives are 100 per cent reliable?' It was hoped that this would indicate a difference in attitude between the experienced and inexperienced boys. Unfortunately the word 'contraceptive' was not always understood, and so when the answer was 'I don't know', as was usually the case, it was not clear if the answer referred to the reliability of contraceptives, or merely meant that the question had not been understood.

The object was to cover the total social and sexual experience of each adolescent besides getting basic classifying information. If this were to be achieved in a time that would not bore or fatigue the interviewee, a certain amount of speed was essential. Hence a majority of the questions were pre-coded but interviewers were instructed to write the answers in full alongside the question whenever there was any doubt about the correct code to mark. Even so, 14 open-ended questions remained, and in 18 more cases the interviewers were instructed to write in full the actual answers given. There were also more than 130 operational instructions and definitions to add to the precision of the standardised questions.

B. QUESTIONS ON SEX

The design of the schedule was planned so that comparatively impersonal information was obtained in the first part of the interview. It commenced with questions on age, place of birth, father's occupation, type of education, size of family, work and many questions on leisure interests. All questions which attempted to find out the extent of a leisure activity were asked in two ways. For example, they were first asked: 'How often do you go to the cinema?' Then they were asked: 'When did you last go?' The latter question usually gave a better record of the actual frequency of an activity (Prais and Houthakker, 1955). In this part of the interview it was possible to build up a good relationship with the teenager, especially as many of them enjoyed the chance to talk about their spare-time activities. In this way the interviewee acquired sufficient confidence to answer questions about his sexual behaviour.

Sexual behaviour was treated in the schedule as though each individual progressed through certain stages of development. This was

a reasonable assumption that was reinforced during the exploratory period. If an interviewee denied a certain activity, it had to be assumed that he had not passed through the later stages of sexual experience. In this way we avoided putting unnecessary questions about sexual behaviour to inexperienced boys and girls. This sifting approach helped particularly in the interviews with immature adolescents as it was imperative that inessential sex questions should not be asked, in case we were accused of 'putting ideas into their heads'. We had constantly to bear in mind that we might offend or shock some of the interviewees, or (more probably) their parents, if we asked questions about sexual behaviour which extended beyond their experience.

The actual form of the sex questions assumed that the interviewee had engaged in the relevant activity. So the question was phrased: 'When did you first . . . ?' This was better than: 'Have you ever . . . ?' This placed the onus of denial on the interviewee. It also helped to assure the young person that the interviewer would not be surprised or shocked if he had had such an experience. Many boys and girls said this approach helped them considerably because this assumption about their experience made them feel less embarrassed; they did not have to admit something but just give a date.

At the end of the interview the teenager had to be assessed on nine items, including appearance, clothes, response, behaviour and truthfulness. The latter was a subjective estimate by the interviewer of the validity of the young person's answers. Each interviewer also wrote a descriptive account of the interview situation. They were asked to comment on anything that had a direct bearing on the interview. For example, the interviewee might have been forced to attend the interview by his parent, or there may have been interruptions while the mother brought in coffee. Quite often the young people would continue to talk freely after the interview and much valuable information was obtained in this way.

Although the pre-coded answers listed after nearly all the questions were necessary for statistical analysis, it was realised that the qualitative aspect was also important. For this reason the questions and pre-coded categories were printed on the left half of the page, leaving space opposite each question for the interviewer to note down the comments, queries and remarks of the teenagers.

C. SUBJECT HEADINGS

As there are plans for a follow-up to this research using the same set of questions, the Research Committee decided that the complete

schedule of questions should not be included with this report. The schedule has 261 different items of which 234 were direct questions. These were distributed throughout the schedule under the following headings:

Subject	No. of questions asked
Classifying questions	8
Education	10
Type of school	
Attainment	
Work	10
Number of jobs	
Contentment	
Earnings	
Family	35
Conditions in the home	
Parent occupations	
Parental relations	
Restrictions	
Religion	
Leisure activities	46
Youth clubs	
Sports	
Dancing	
Cinema	
Smoking	
Drinking	
Parties	
Social relations	15
Group composition	
Girl friends	
Boy friends	
Sexual relations	64
Commencement	
Frequency	
Extent	
Partners	

Subject	No. of questions asked
Sex knowledge	30
Source	
Education	
VD	
Birth control	
Marriage	10
Attitudes	
Expectations	
Delinquency	6
Trouble with police	
Court appearances	
Admitted misconduct	

D. INFERENCEAL ASSESSMENTS

Sometimes it is not possible to devise one question that will give an accurate picture of a young person's behaviour. In such cases it is necessary to use a whole battery of questions, but for the purpose of analysis these groups of questions have to be converted into a quantitative form which can be used statistically.

Ideally this can be done by allocating a score for a particular answer to each of the questions in the battery, and then plotting the resulting summation on a rating scale. But this method often gives the appearance of a mathematical neatness that is rarely justified. In any case we wanted to leave room for the subjective judgements of the interviewers. Although each question was worded with as great an emphasis as possible on objectivity, it was hoped that the 'all-round' picture of the adolescent gained at the end of the interview would add to the material obtained from the direct questions.

After each interview the research worker was required to make inferential assessments under ten headings. In practice this requirement meant that the adolescent had to be given a ranking position on ten scales. For the sake of clarity these are called rating scales in chapter 13, but the word 'scale' probably gives the appearance of a degree of accuracy that is not justified in this case. For example, the interviewer was required to assess the degree of 'intensity of family influence' and to place the teenager in one of these six categories:

1. Hardly ever goes out. All activities with family.
2. Spends most of time at home, but not always with family.

3. Member of other groups, but most often with family.
4. Spends some time at home, but active social life outside.
5. Usually out of home.
6. Living away from home.

These were known as 'anchor definitions'. It was unlikely that a teenager would fit exactly into one of these categories, but it was possible to learn enough about each teenager so as to feel that he was 'anchored' to one of these definitions.

The interviewers were instructed to read over the teenagers' answers to the questions relevant to the assessment under consideration. In the case of the 'intensity of family influence', they had to review the answers to 16 relevant questions.

After they had considered the answers to these questions, the interviewers took into account any other extra information obtained during the interview, and from this overall impression made their assessment.

Although these inferential assessments are not free from subjective bias, they have been used successfully by Robb (1954), Westwood (1960) and others as a convenient method of summarising a range of questions on similar subjects.

Appendix 3

THE ATTITUDE INVENTORY

A. THE ASSESSMENT OF PERSONALITY

Although it was decided that the information about sexual behaviour could only be obtained by direct questions at a face-to-face interview, it was hoped that an objective picture of the personality of each individual could be obtained by some other method. Ideally what was required was a personality test:

- (a) which was suitable for the age range fifteen to nineteen;
- (b) which had been standardised for use in this country;
- (c) which had gained a large measure of acceptance; and
- (d) which could be easily administered and take less than twenty minutes.

Several pencil-and-paper tests for the assessment of personality have been constructed by clinical and social psychologists both here and in America. Most of these require the subject to indicate his agreement or disagreement with a number of statements which could be related to himself. The aim of the test is usually to give the subjects a score on a number of personality factors or traits. These factors tend to have names derived from the particular theory of personality which the test constructor supports. The total score is designed to give a 'profile' of the subject's personality.

A typical example of such a test is Cattell's High School Personality Inventory which gives an American high-school child a score on sixteen personality factors ranging from 'tough-sensitive' to 'dull-bright'. These tests can be criticised on a number of grounds but the most serious disadvantage from the point of view of this research was that they have been standardised largely in the United States. In many cases the language and subject matter of some of the test items require modification for use with an English sample and at the time when this research started, no norms for English teenagers were available for any of the established tests.¹

One of the well-standardised English tests is the Maudsley Personality Inventory (Eysenck, 1954), but it was decided not to

1. The results of Dr Warburton's work on the Cattell 16 P.F. test at Manchester University were not available at that time.

use this because it has been primarily developed as a clinical instrument. One of the two factors it measures is 'neuroticism', and this would not be expected to reveal very interesting results in the context of this research.

It was planned to give the test immediately after the interview which took over an hour on its own. Therefore it was imperative that the test should not be of such a length as to tax the patience of the adolescents.¹ Most of the teenagers had much better things to do than stay in to help out our interviewers. There was a very good chance that if the total time exceeded an hour and a half, the deterioration in response would seriously affect the results. Accordingly it was decided that any pencil-and-paper test must not exceed twenty minutes.

For these reasons it was decided not to use a personality test but to limit our assessment of personality to a study of the adolescent's attitude on a number of topics. This served a dual purpose. It made it possible to obtain the responses of the teenagers on single items and therefore provided useful information on individual attitudes (chapter 7). At the same time the tendency of certain attitudes to lie in particular directions could be revealed by the use of factor analysis (chapter 12). Both sides of this study of attitudes can be usefully related to the material obtained from the personal interviews.

Answers to most of the simpler attitude questions could be obtained more efficiently by using the inventory, thus making it possible to shorten the already long interview. In other cases the questions on the interview schedule were complementary to the attitude inventory. More important still, it was expected that correlations between the results of the factor analysis and sexual experience would show a relationship between aspects of personality and sexual behaviour.

Therefore with some reluctance it was decided not to use any of the existing tests and to design a new social attitude inventory consisting of fifty opinion statements relating to a large number of topics. Each of these topics was one in which teenagers could be expected to have a strong interest and they were asked to indicate their agreement or disagreement with each statement.

1. This ruled out many of the best-known American tests such as the Minnesota Multiphasic Personality Inventory which requires ninety minutes to administer in its complete form.

B. THE CONSTRUCTION OF THE INVENTORY

The first draft of the social attitude inventory was tested in London C. At the end of each interview the teenager was asked to give his opinions about these statements. He was encouraged to ask questions and make comments, and the interviewer made a note of all cases where there was some doubt about the meaning of the statement. Analyses were made of the responses throughout this period and a study was made of inventories which contained responses which were inconsistent to see if this was because the statements had not been understood. As the statements were being continually modified during the interviews in London C, none of the inventories filled in by adolescents from this area are included in the results. The final draft of the inventory was not completed until the research team had moved on to the second area (South A).

Several other sources were used before the final draft of the inventory was completed. The aim was to produce a list of statements covering the important areas in a teenager's life, such as attitudes to the family and its restraints, other teenagers, marriage, the moral code, sex, crime, etc. For some months the research unit had employed a press-cutting agency to send them all the newspaper clippings about teenagers, including the oft-expressed opinions of adults about young people. In a short time a large number of press cuttings was collected. This included quotations from adults of varying sympathies and outlooks about teenagers and their behaviour. There were also other quotations from teenagers themselves, about each other and how they behave or should behave. Other press cuttings were from parents about their teenage children. Still others were statements from the representatives of official bodies. A content analysis was made of this large collection and the most frequent items were rewritten as a series of attitude statements.

In addition other statements were listed from the questionnaire circulated by the BMA Committee on the problem of venereal disease; from Eysenck's Social Attitude Inventory (Eysenck, 1954), and from an earlier personality test (Terman and Miles, 1936) which contained a number of statements about teenagers.

After further testing and discussion this list was eventually reduced to fifty statements. Items were rejected because they were too topical for a research extending over three years, because the idea or vocabulary would have been clear only to middle-class teenagers, and because the statements might have caused embarrassment or resentment.

This attitude inventory was used in six of the seven areas. The time it took the adolescent to complete the inventory varied considerably, but the average time was less than ten minutes. Most of the teenagers found it interesting and only a very few regarded it as an imposition. In all 780 boys and 761 girls completed the inventory.

G. FACTOR ANALYSIS

In order to make the fifty statements on the attitude inventory more manageable, a factor analysis was made of the responses. This method of analysis was developed primarily through the work of Spearman and later Burt, Thurstone and Thompson to explain the intercorrelations between psychological tests of ability (Holzinger and Harman, 1941). Since then its application has extended over a much wider field of psychological interest and it has proved particularly valuable in the study of social attitudes (Eysenck, 1954). It permits the explanation of the correlations between a large number of attitude statements in terms of a much smaller number of fundamental attitude components. This is done by factor analysing the intercorrelations between the scores on the statements (Osgood, 1957). Responses to each of the statements in our attitude inventory were scored as follows: strongly agree = 1; agree on the whole = 2; can't decide = 3; disagree on the whole = 4; strongly disagree = 5.

A factor analysis takes place in two stages. The primary aim is first to reduce the number of variables (statements) to a smaller number of uncorrelated components or factors. Having discovered these factors, the loading¹ of each factor on each variable is calculated. At this stage it is often difficult to interpret adequately the various factors and in order to facilitate this, the next step is to rotate them. Rotation to oblique simple structure (Thurstone, 1949) has the effect of maximising the weightings of a factor on some variables and minimising the loading of the same factor on others. Thus the factor can be identified and labelled in terms of the statements which have the highest loadings on it.

When factors are rotated to oblique simple structure they are themselves correlated. The matrix of correlation between the factors can itself be factor analysed and a smaller number of 'second order' factors is produced. This process can be repeated until no higher-order factors can be extracted, i.e. until the matrix consists of two or three factors only.

1. This is a measure of the association between the factor and the statement, but in the method employed here it is not identical with the correlation coefficient between these two variables (Cattell, 1962).

Having extracted all the factors, a 'factor score' can be calculated for each individual on each factor. This score can be produced in standard form, with a mean value of 0 for each factor and a unit variance. The individual scores on any factor will be negative or positive, with 68 per cent falling between $+1$ and -1 ; 95 per cent between $+2$ and -2 ; and 99.7 per cent between $+3$ and -3 . Factor score is a measure of the extent to which the individual shows the factor in the attitudes he expresses. A high negative or high positive score makes his or her opinions predictable on the statements with high loadings. A positive score means agreement on statements with a negative loading on the factor and disagreement on statements with a positive loading. A negative score means disagreement on statements with a negative loading on the factor and agreement on statements with a positive loading. For simplicity the scores are always referred to in a positive sense in chapter 12. Thus a high positive score will be referred to as a high score and a high negative score will be referred to as a low score.

The actual method used was developed by Hendrickson and White (1964). Product moment correlations were calculated between the scores on each pair of statements. Thus a fifty-fifty correlation matrix was produced for each sex. The matrix was analysed by the principle component method. For the boys fifteen first-order factors were discovered (latent roots > 1) and sixteen first-order factors were discovered for the girls. The first-order factors were rotated to oblique simple structure using the Promax method developed by Hendrickson and White for the IBM 7090 Computer and the loadings of the factors on each statement were calculated. The process was repeated on the correlation matrixes of the first-order factors to produce five second-order factors for the boys and six second-order factors for the girls. These were also rotated to oblique simple structure. Finally two third-order factors were produced for the boys and three for the girls. No further factors could be extracted from the matrix. Loadings were obtained for each statement on each factor and standard scores for each individual were also calculated.